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ADRISTA SANGHARSAHARU, STHANIYA SABALTA:
EXPLORING RECOVERY FROM SMALL-SCALE
DISASTERS

Examples from Remote Nepal

SUSHMA SHRESTHA

A THESIS SUBMITTED IN FULFILMENT OF THE REQUIREMENTS FOR
THE DEGREE OF DOCTOR OF PHILOSOPHY IN ENVIRONMENTAL
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*ADRISTA SANGHARSAHARU, STHANIYA SABALTA: (Unseen
Struggles, Local Strength)*

*ADRISTA SANGHARSAHARU, STHANIYA SABALTA: EXPLORING
RECOVERY FROM SMALL-SCALE DISASTERS*

Examples from Remote Nepal

This thesis is lovingly dedicated to

“my mother”- *Gyani Shrestha*

for always giving me the strength to choose and follow my
own path

Abstract

This thesis aims to better understand recurrent, small-scale disasters and the recovery process following such disasters, particularly as perceived and experienced by those directly affected. The research used an ethnographic approach. This involved living with the communities concerned for an extended period of time, observing and participating in their daily lives, asking questions, using exploratory themes and using prompts directly or indirectly to encourage discussion. This was extended using a number of other research tools including semi-structured interviews and mapping. The case studies involved nine small, remote, hill communities in Nepal. The field work was conducted in two phases. A scoping phase was conducted in November, December 2012-Januray 2013, and the main block of field work was conducted between October 2013 and March 2014. The study reveals that the scale of disaster experienced does not determine the significance of an event for those affected. Rather, this is more dependent on its long-term effect and the possibility of recovery. This highlights the frequency of disaster recurrence as a key criterion to understand disasters, whether large or small. One-off, small disasters possess similar characteristics to large disasters in terms of their origin, frequency and the recovery process, but vary significantly in most other respects. Recurrent disasters are most commonly not the result of an exceptional event and recovery is frequently interrupted by a further event. This leads to a dynamic interplay between the changing degree of resilience of those impacted by repeat disasters, and their simultaneous cumulative vulnerability in the face of repeat events. Added complexities are associated with people's changing response to repeat disasters.

External recovery support in small-scale disasters, while demonstrably important, is slight compared to large disasters. Such support is concentrated in short-term actions rather than long term recovery. This makes recovery heavily dependent on a community's own resources. This thesis highlights the importance of people's pre-existing, living conditions in supporting (or hindering) disaster recovery. It demonstrates that recovery is not a unique, isolated event or process, and that both disaster and recovery are deeply embedded in the social system in which they occur.

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List of Acronyms

CRED	Centre for Research on the Epidemiology of Disasters
DHM	Department of Hydrology and Metrology (Nepal)
DRR	Disaster Risk Reduction
DWIDP	Department of Water Induced Disaster Prevention
ECHO	European Commission's Humanitarian Aid and Civil Protection department
EM-DAT	Emergency Events Database
GFDRR	Global Facility for Disaster Reduction and Recovery
GIS	Geographic Information System
GNDR	Global Network of Civil Society Organisations for Disaster Reduction
HFA	Hyogo Framework for Action
ICIMOD	International Centre for Integrated Mountain Development
IFAD	International Fund for Agricultural Development
IFRC	International Federation of Red Cross and Red Crescent Societies
INGO	International Non-Governmental Organization
IPCC	Intergovernmental Panel on Climate Change
LA RED	the Latin American Social Science Faculty and the Network for the Social Study of Disaster Prevention in Latin America
MoFALD	Ministry of Federal Affairs and Local Development (Nepal)
MoHA	Ministry of Home Affairs (Nepal)
NRCS	Nepal Red Cross Society
NRRC	Nepal Risk Reduction Consortium
OCHA	Office for the Coordination of Humanitarian Affairs

SFDRR	Sendai Framework of Disaster Risk Reduction
UNISDR	United Nations Office for Disaster Risk Reduction
UNDP	United Nations Development Programme
UN-HABITAT	United Nations Human Settlement Programme
VDC	Village Development Committee
WHO	World Health Organization

Chapter One:

Setting the Scene: An Introduction to (Small-Scale) Disasters and the Recovery Process

The harsh realities of the devastation that occurred in the aftermath of the April 2015 Nepalese earthquake vividly demonstrate the ability of natural hazards to wreak destruction. The earthquake caused 8,702 deaths, wiped-out whole communities, destroyed over 500,000 houses, destroyed jobs, infrastructure, and shattered world heritage sites and destroyed iconic buildings of immense religious and cultural significance, ultimately placing Nepalese society at a heightened level of increased disaster risk (OCHA, 2015). While significant locally and globally, what is less self-evident or accepted is the comparable impact of small-scale disasters that in fact occur much more frequently, if on a lesser scale. The year 2011, for example, was a typical year in Nepal. That year alone, despite the fact that there was no large-scale disaster, small disasters - mainly small-scale floods and landslides, windstorms, and fires resulted in 509 deaths, destroyed almost 10,000 homes, and affected over 11,000 households across the country. These mainly occurred in rural Nepal (Government of Nepal, 2012).

Regardless of the scale of disaster, what follows is a process of healing, when people attempt to repair and rebuild their homes and infrastructure, regenerate lost land, crops, and forest, seek access to alternative resources, work and employment and strive to re-build their lives. This process of struggle and recovery takes time, and is commonly described and understood as disaster recovery.

The process of recovery is of significant research interest and there is growing acceptance that a fuller understanding would better support an effective response to the human suffering, economic loss, environmental damage and the broader social implications of disaster. However, existing research and knowledge of the disaster recovery process is scant and incomplete. This is particularly so with respect to small-scale, localised disasters. Perhaps predictably, such disasters,

particularly with respect to relief and emergency support, gain less attention from mass media and governments, national and international donors, relief agencies and research scholars (Cuny, 1983; IFRC, 2001; Rubin, 2009; Wisner, Gaillard, & Kelman, 2012). At least partly in consequence, established recovery models, such as those developed by Kates and Pijawka (1977), Cuny (1983) and Alexander (2002) are based on the sequence and impact of external intervention on community recovery rather than on the process of recovery as directly experienced by the communities directly affected. Such limitations are fully acknowledged (Cuny, 1983). At the same time, much of the research that has focused on the experience of community recovery and community members' own perspectives is in the context of large scale disasters (Bolin & Patricia, 1978; Oliver-Smith, 1986; Dyer, 2009; Chamlee Wright & Storr, 2011; Wisner et al., 2012). As a result, the recovery process is again framed within a context where external aid and support are key components. This contrasts abruptly with the relative lack of support commonly provided to small communities in isolated areas.

Disasters are not always mega-scale events. Small-scale disasters occur and are in fact common-place; they impact thousands of families every year, particularly those who live in poor, isolated communities. Indeed, small-scale disasters are now known to be as catastrophic for the people affected as large-scale events, and there is accumulating evidence of their serious socio-economic impact which includes death, economic loss and serious social disruption (Lewis, 1984; Maskrey, 1989; Lavell, 2000; Wisner & Gaillard, 2009; Marulanda, Cardona, & Barbat, 2010, 2011). Though the impact of small-scale disasters has been known for many years (see, Lewis, 1984; LA RED, 2002), such disasters remain largely neglected in research and policy (IFRC, 2006; Wisner & Gaillard, 2009; Marulanda et al., 2010, 2011). In recent decades, however, with the development of alternative databases such as DesInventar, the significant impact of small-scale disasters has become increasingly evident. As a result, there has now been some effort to highlight the urgent need to address small-scale disasters and to understand the risk involved in such disasters (Wisner & Gaillard, 2009; ECHO, 2013; GNDR, 2013; UNISDR, 2015). However, such efforts are limited to a small number of scholars and organizations, and more importantly, are limited to

increasing awareness about small-scale disasters, highlighting their „neglect“ in research and policy rather than seeking to understand them. For example, one of the major initiatives is by the UNISDR (2009) where in order to highlight (and perhaps better understand) the risks involved in small-scale disasters, a team of researchers developed a new classification of risk that differentiated between „intensive“ and „extensive“ risk. Extensive risk includes risks associated with that resulting from smaller disasters. In order to include smaller disasters, they defined a specific threshold that is lower than that previously used by established databases to define a disaster. While this allowed for the inclusion of smaller scale disasters than excluded, it did not develop any new understanding of what these small-scale disasters actually entailed. Instead, the newly defined threshold still excludes thousands of small disasters that fall below the defined threshold, but nevertheless have been shown to have severe impacts on people and communities. Initiatives to understand small-scale disasters, therefore, have so far remained slight and shallow. Additionally, in contexts where there is a blurry understanding of small-scale disasters, it remains unknown whether or not, and to what extent, recovery from such disasters is explained by existing theories of recovery.

1.1 Disasters and why they occur

Annually, huge numbers of people are killed or significantly affected by disasters every year. From 1991 to 2000, an average of 211 million people a year were affected by disasters related to natural hazards; this is seven times more than those killed or affected by human conflict over the same period (IFRC, 2001, pp. 11, 165), and many fewer than those who die annually from diseases such as malaria, tuberculosis and HIV (WHO, 2015). These numbers have grown significantly in recent years, explained in large part by the increasing impact of hydro-metrological disasters including floods, wind storms and drought (see, IFRC, 2001; Guha-Sapir, Vos, Below, & Ponserre, 2011). This further heightens the need to better understand disasters and address their impacts to improve recovery.

Disasters have emerged as a well-established research focus over the last hundred years. Knowledge from this forms the basis of our present understanding of disasters. Formerly considered as an „Act of God or of Nature“, particularly since the 1940s, numerous studies have revealed strong links between disaster occurrence and human-environment relationships, shifting understandings about

disaster in a fundamental way (White, 1945; Susman, O'Keefe, & Wisner, 1983). Deforestation, overgrazing, over-cultivation of land, excessive use of fertilizers, air and water pollution, and haphazardly planned settlements are now common phenomena that directly and indirectly cause disasters. At the same time, an increasing body of research has emerged showing that disasters are not neutral in their impact, but most severely impact the poor and the marginalized. This was the case, for example, with respect to the Guatemala earthquake of 1976 (Susman et al., 1983; Blaikie, Cannon, Davis, & Wisner, 1994), the Mexican earthquake of 1985, the Sudan famine of 1984 (Blaikie et al., 1994), the drought in the Sahel from 1971- 976 (Copans, 1983), the Honduras hurricane (known as Hurricane Fifi) of 1974 (Susman et al., 1983), the Bangladesh cyclone of 1991 (UNDP, 2011), the Asian tsunami 2004, and the Kashmir earthquake 2005 (Picciotto, Clarke, & Olonisakin, 2009). Indeed, disasters are now recognized as impacting those who live in hazardous areas, who often out of necessity, are caught-up in unsustainable economic and environmental practices. People live and work in such areas because social inequalities restrict their access to resources. These people have no viable alternative. It is this combination of circumstances which make them particularly vulnerable. Susman et al. (1983) define this as the *process of marginalization*, which requires people to compromise their safety over the day to day issues of hunger and survival (O'keefe, Westgate, & Wisner, 1976; Susman et al., 1983; Blaikie et al., 1994; Cannon, 1994). Such evidence has introduced the concept of *vulnerability* into the literature and this concept now occupies a central stage in disaster studies (Blaikie et al., 1994; Cannon, 1994). A substantial body of work now exists which explores how vulnerability is generated, how it leads to disasters, and how vulnerability shifts and changes as a disaster unfolds. Research has also demonstrated that vulnerability in the aftermath of a disaster is also associated with a community's *resilience* or capacity to absorb and recover from disaster. The introduction of this concept into disaster discourse has prompted a new perspective on disaster response and recovery, and a shift from regarding affected communities as simply „a vulnerable population“ or as „victims“, to recognizing them as potential actors with skills and understanding (and potentially experience) that support their own response to adversity. In effect, community members may play an active role in the face of disasters and in their own recovery (Timmerman, 1981; Blaikie et al., 1994; Klein, Nicholls, & Thomalla, 2003;

Manyena, 2006). Today, community resilience is widely accepted as central to understanding recovery, and jointly the concepts of vulnerability, resilience and marginalization are accepted as central to understanding both the impact of disasters and the recovery process.

1.2 Recovering from disaster: what does it mean?

Disaster recovery is generally understood as a process that starts immediately after a disaster and continues until the affected community returns to “normal” function. Many scholars (such as, Dynes et al., 1987; Brynat, 1991; Alexander, 1993; Oliver-Smith, 1996; Tobin and Montz, 1997; Platt et al., 1999; Smith, 2001) assume that disasters are a departure from “normal” social functioning, and that recovery means a return to “normal” (as cited in Wisner et al, 2003, pp. 10). Such a perspective has been questioned (IFRC, 2001; Wisner, Blaikie, Cannon, & Davis, 2003; Clinton, 2006). The validity of viewing disasters as a departure from normal social functioning aligns badly with the idea inherent in the concept of vulnerability used to demonstrate that in much of the world, normal daily life is often difficult to distinguish from disaster (O’Keefe & Westgate, 1976; O’Keefe et al., 1976; Susman et al., 1983, Wisner et al., 2003) and to argue that disasters occur because people are vulnerable even prior to a hazardous event. On this basis, the pre-disaster situation is not accepted as one of normal social functioning. It follows that if recovery in the aftermath of a disaster aims only to reinstate the pre-disaster state, the affected population remains at least as vulnerable to further disasters as before (IFRC, 2001; Wisner et al., 2003) and cannot be described as having recovered from disasters. Recovery, as used in this thesis, is understood not as the process of returning a community to its pre-existing status quo, (which embeds the original risk) but as moving forward, involving addressing and reducing the vulnerabilities that led to the initial disaster.

As noted earlier, resilience is increasingly considered as an important feature in disaster recovery. However, there is no clear and common understanding of resilience in the disaster discourse (Klein et al., 2003; Manyena, 2006; Alexander, 2013). In consequence, resilience has become a popular subject of on-going discussion among academics and practitioners working in the field (such as, Twigg, 2007; Manyena, Geoff, Keefe, & Rose, 2011; Mitchell & Harris, 2012; Alexander, 2013; Sudmeier-Rieux, 2014). To avoid confusion, this thesis uses

resilience as it is now generally understood in the context of natural hazards, and also across different disciplines. As such, resilience as used here is best defined as the ability to cope, with or adapt to, the stress associated with hazards (Klein et al., 2003; Wisner et al., 2003; Manyena, 2006; Kafle, 2011; Pelling, 2012).

Many scholars have made significant efforts to better understand the recovery process through an examination of the actions undertaken by communities to recover in the aftermath of large disasters. Early definitions and models of the recovery process such as that of Kates and Pijawka (1977) explain the process as a number of sequential periods, each characterized by particular, dominant activities. Such understandings, however, have been argued as too predictable and simplistic (Alexander, 2002; National Research Council, 2006; Rubin, 2009). Many scholars believe that in practice recovery is messy and uncertain (Smith & Wegner, 2007). Following Kates and Pijawka (1977) other scholars and practitioners such as Cuny (1983) and Alexander (2002) have worked to understand the process and classify recovery over time. These different approaches involve different terminology but are fundamentally similar with respect to the characteristics and sequence described. According to Cuny (1983) the standard classification that has emerged is: an *emergency phase*, a *transitional phase* (or rehabilitation phase) and a *reconstruction phase*. The emergency phase is characterized by the actions necessary to save lives, the transitional phase includes people's return to work, and the permanent repair of infrastructure and damaged buildings and those other actions necessary to help the population rebuild its way of life as quickly as possible. The final, reconstruction phase, is characterized by building new houses, the repair of roads and other community facilities, and the re-establishment of the economy (Cuny, 1983, p. 40). Such classifications and defined phases, however, have mostly been identified on the basis of external recovery provided to the affected community and the impact of those interventions on the community's recovery in the aftermath of disaster.

1.3 People and communities in disaster recovery

In the past, local communities affected by disaster were typically portrayed as "victims" and entirely reliant on external support for recovery (Wisner et al., 1977; Wisner et al., 2012). Subsequently there has been a gradual shift in understanding, although external support remains a dominant theme. There is now

a greater realization of the key role of local people and communities in disaster in terms of preparedness, relief and recovery (Bankoff, 2007; Gaillard, Maceda, Stasiak, Berre, & Espaldon, 2009; Davis, 2011).

It is important from the first to clarify what is meant by a “community” in this thesis. Within social theory, to which the subject matter of the research is most closely related, understanding and use of the term community is variously explained. Many scholars, such as Cohen (1982), Willmott (1986), and Crow and Allan (1994) point out that community can be approached as a descriptive category or set of variables. Community is “place” where people share something in common and that shared element is understood geographically.

A community of “interest” is where people share common characteristics other than place. They are linked together by factors such as religious beliefs, sexual orientation, occupation or ethnic origin. Yet a further approach is “communion”, described as a sense of attachment to a place, group or idea. These researchers note that there is a strong possibility that these different ways of approaching community may often overlap. More importantly, many highlight the key importance of emphasizing the nature of the relationship between people and the social network of which they are a part, and this is often seen as one of the more significant aspects of „community“ (Cohen, 1982; Wenger, 1995).

In practice, it is often difficult to define community by any single theoretical approach; substantial overlap among many approaches exists. The classical work of Guijt and Shah (1998) provides conceptual clarity on “the community” with discourse on local complexity and conflict, particularly with respect to power relations. Similarly, Cannon’s work (see, IFRC, 2014), highlights the importance of culture in understanding people and communities, which he relates to “belonging” and being part of a shared experience of life. Cannon further points out that “social capital” (social resources), which are crucial to all other aspects of life, play a key role in forming and maintaining this belongingness and bonding. Understanding of community in this thesis fits well around these understandings by Guijt and Shah (1998) and Cannon (see, IFRC, 2014). In this study a community primarily refers to a group of families living in a certain geographical territory which may be ethnically (or in terms of caste) homogenous or heterogeneous. In the case of an ethnically homogenous group the families often

share a common ancestor and therefore are strongly attached by social duties and responsibilities that are culturally defined by these kinship ties. In a heterogeneous group the families often have different ancestors, but have to settle in the same place for a purpose often related to livelihood opportunities, trade and business. While these families may not share the same religious and cultural beliefs, similarities among them still exist as they may, for example, have migrated from a common area. Even within a community, particularly in ethnically heterogeneous communities, some families may share common characteristics and common interests, whereas others do not. They may be linked together by factors such as occupation, ethnic origin, or religious belief. In any case (whether a homogeneous group or a heterogeneous group) sharing a locality often involves other forms of sharing (IFRC, 2014). Such groups commonly share resources such as water, forests and pasture land, and infrastructure and services such as roads, schools, health centres, and the like. In effect, these families have common interests—common issues, needs and problems which they try to address through joint actions and practices, for example, exchange of agricultural labour, or formation of a committee for community development work. In effect, mutual relationships are inevitable. Though not based on kinship ties the relationships among different groups in heterogeneous communities are strong and defined by norms and beliefs rooted in their religion and culture, as explained by Cannon in the World Disaster Report 2014 (IFRC, 2014).

In the context of the study area, each community is not self-sufficient in its own right. There is a wider network of communities. This network has strong ties with other communities in the surrounding hills and these ties are primarily established through marriage, labour exchange practices in farming, joint religious and cultural celebrations, the trade and sharing resources such as forests, and shared administrative, educational, health and other services (Savada, 1993). Due to the nature of the physical environment and the steep hills, as well as the low levels of development in the area, resources are very limited. In effect, these hilly communities necessarily strongly depend on each other to access needed resources (Seddon, 1985; 1987). Communities on steep slopes own farmlands in the river valleys, and those in the valleys have land and cowsheds on the slopes to ensure

all year round fodder supplies. In the following chapters, communities that fall within this wider network are referred to as neighbouring communities.

The importance of „culture“ is identified and acknowledged as an important component in the recovery process. Scholars such as Bolin and Patricia (1978), Quarantelli (1978), Oliver-Smith (1986), Chamlee Wright and Storr (2011) and Wisner et al. (2011) all identify factors such as power, race, class, gender, past disaster experience, the extent of social networks and access to resources, including information, as playing a role in recovery whether at the scale of individual households, social groups, or communities as a whole. Such factors are important because they determine people’s access to these resources necessary to recover from disasters. They are also believed to have a major influence on people’s perception and behavior, crucial components in determining their recovery.

More recently, Dyer (2009) developed a model called the *Culture of Response* in which he attempts to recognize a community’s inherent (or cultural) understanding and skills and its associated response to disaster. In this model, Dyer shows how the interplay of factors, such as an affected community’s local knowledge, the availability of local resources to support a socio-economic response, and the political agenda which contributes to the nature of disaster. Aid can either help communities recover from disaster, or push them towards further decline, even to their total demise (pp. 313-337).

1.4 On Small-Scale Disasters and Recovery: Situating the Research

While there are a growing number of studies concerning issues of vulnerability and their influence on disaster occurrence and impact, there is comparatively less understanding of how people recover in the aftermath of a disaster. Moreover, recovery is mostly discussed in terms of emergency and relief rather than long-term recovery. Thus the emergency and relief phase which represents only a small part of the total recovery experience, captures most attention by concerned agencies, policy-makers and scholars. On the other hand, long-term recovery, which is as important as the emergency phase, is often less prioritised in science, policy and practice (Smith & Wenger, 2007; Rubin, 2009).

Moreover, whatever understanding as has been accumulated on recovery and disasters in general, is almost solely with respect to those disasters which occur unexpectedly and suddenly as a result of some massive physical or environmental event, and results in the death of hundreds or thousands of people and commonly affects many, many more. Such disasters attract significant resources and generate huge attention from the media, governments and development agencies. Whatever theories have been established and whatever recovery processes are recognized, they are largely drawn from experience of large-scale disasters. In such cases, powerful external forces, including national and international politics and international aid, influence recovery. As a result, whatever part in the recovery process is played by the affected community itself, it is largely overshadowed by the influence of external relief support. The inherent, localised response remains neglected.

In the face of various high profile disasters, such as the 2004 Asian Tsunami, the 2005 Kashmir earthquake, the 2008 cyclone that affected Burma, and the 2010 Haiti earthquake, small-scale disasters have been overshadowed and their impacts remain less understood. However, small-scale disasters have been shown to be as catastrophic for those affected as large-scale events (IFRC, 2006; Wisner & Gaillard, 2009; Marulanda et al., 2011; UNISDR, 2011; GNDR, 2013). Every year people around the world face numerous disasters, some reported, others not. They may be too small to make headlines, but their effects are as significant for those directly affected as for those impacted by large-scale events (IFRC, 2006; Wisner & Gaillard, 2009; ECHO, 2013). There is accumulating evidence of their impact particularly in terms of death, loss of economic opportunities, and social and economic harm. Evidence from the DesInventar database suggests that worldwide, small-scale disasters have a major impact on the daily lives of millions of people. The DesInventar database was developed by the *Social Network for Disaster Prevention in Latin America* (LA RED) and includes information at a more detailed local level than was previously available. Significantly, however, it does not offer a useful definition of what it considers a *small-scale* disaster. It does, however, allow greater opportunities for disaster research than existed before. In the case of Colombia, for example, information from DesInventar shows that between 1971 and 2002, the total cost of small and medium scale

disasters was greater than the combined impact of all the high profile disasters that affected the country over the same period, including the deadly eruption of Nevado del Ruiz in 1985 (Wisner & Gaillard, 2009; Marulanda et al., 2010). Unfortunately, as yet, no other part of the world has been similarly analysed. There is however no reason to suspect that the findings would differ greatly, particularly for countries with similar levels of poverty and socio-economic conditions.

Although little detail is known about small-scale disasters, it is commonly accepted that they differ in some essential ways from large-scale disasters: they are confined to small areas, localities and communities; they tend to be recurrent, so their impact is most likely to be chronic; and they less frequently receive substantial external aid (LA RED, 2002; Wisner & Gaillard, 2009; Marulanda et al., 2010). There is therefore no reason to assume that recovery in the aftermath of such disasters occurs in the same way as those following large-scale disasters. The extent to which existing recovery theories and understandings, based as they are on the experience of large scale disasters, explain recovery in the aftermath of small-scale disasters is unknown. Despite this, established recovery models remain the basis of practice and policy, and no theoretical framework is available to explain or support specific recovery interventions in the context of small disasters. This is a gap that needs to be filled.

Objectives of the Research

This thesis is designed to help understand small scale disasters and in particular, explore the processes of disaster recovery subsequent to such disasters. The underlying thesis is that understanding the recovery process, particularly as experienced by those affected, would give a fuller and deeper understanding of small disasters, help untangle the complexities of the recovery process, and in the longer-run, serve to support that process.

The aim of this thesis is to better understand small-scale disasters and the recovery process from the perspectives and experiences of those directly affected, and to understand why these events are neglected by outside stakeholders. The concepts of vulnerability, marginalization and resilience provide the theoretical foundations for this thesis.

Empirical evidence is drawn from poor, remote, hilly communities in the Far and Mid-Western Region of Nepal. The communities concerned have all been impacted by small-scale disasters. Emphasis is on understanding the communities' perspectives and their recovery experiences. The methodology centres on an ethnographic approach. This involved the researcher living in these communities for three months to closely observe the people, their lives, and their experience of disasters; she listened to their stories of struggle, of experience and effort, and their aspirations for recovery. These observations and stories form the basis of this thesis. These observations and stories are extended and complemented by the findings from semi-structured interviews and participatory tools.

The thesis tests the applicability of established recovery models in the context of small disasters to develop an appropriate recovery framework specifically applicable to small-scale disasters. This framework should provide both academic insight, and practical support to local as well as external actors, and help better prepare recovery strategies, plans and policies.

This thesis aims to understand how poor remote communities recover in the aftermath of small-scale disasters. The objectives are four-fold. Firstly, to address how small-scale disasters can be conceptualized and defined. This includes taking into account the definition of small-scale disasters from the perspective of a range of key stakeholders, including, for example, local communities and government. Secondly, to identify those actions or steps (recovery activities) affected communities take to secure recovery. Thirdly, it identifies socio-economic factors (such as income, access to land, and power), cultural factors (such as disaster sub-culture, caste, cultural relationships, and gender) and other factors (such as external support) that influence the recovery process. Lastly, it addresses how the actions or steps for recovery taken by affected communities, and other concerned actors contribute to recovery. This includes examining whether the response actions taken by these groups facilitate or delay (or obstruct) recovery, and elaborates on whether or not (and how) these actions address community vulnerability and resilience in the face of future disasters.

1.5 Thesis Structure

This thesis has three sections, composed of nine chapters. *Section One* (Chapters 1-2) explores and reviews the theories and ideas that are used to ground the thesis. *Section Two* (Chapter 3-4) describes the thesis methodology, and *Section Three* (Chapter 5-9), presents the thesis findings, and associated discussion.

Chapter One provides an overview of the study. It introduces the research problem, identifies the research objectives, and identifies the key questions that this research will address. Chapter Two presents a review of the literature, with a particular focus on disasters and disaster recovery. Current understandings of vulnerability, marginalization, and resilience are also explained, as is the current knowledge and understanding of disaster recovery.

Chapter Three starts by presenting the conceptual framework for the thesis. This framework summarizes the key themes and ideas behind the thesis and traces their connection or links to the literature. These themes are used as the basis for the data analysis and discussion in subsequent sections. Following the conceptual framework, the chapter describes and explains the research methods and associated strategies. It identifies the case study areas and describes how and why these areas were selected. This chapter discusses the efforts of the researcher to take an appropriate ethical stance in her work, and discusses the anticipated and unanticipated challenges encountered during the field work and their practical implications. Chapter Four tells the stories collected in the field. It includes a discussion of the positionality of the researcher and how her personal experience helped direct (and modify) the choices she made in regard to the research design and strategies employed during fieldwork. It details the field dynamics, including how initial contacts were made, who these people were, how the researcher approached the communities, how she found a homestay, how she lived within the communities and how she interacted with community members. This chapter also elaborates how the field work was conducted, in particular with respect to the practical implementation of the pre-designed strategies presented in Chapter Three. It discusses the challenges encountered, the solutions adopted, and the choices made to overcome those challenges. It also describes the respondents,

language issues, and data recording. The chapter also offers some reflections on the inquiry strategies used in the field work, particularly the researcher's role as a participant observer.

Chapter Five describes the geography, socio-cultural and economic setting of Nepal, particularly the study area. In particular, it describes the context prior to disaster and attempts to identify the underlying root causes of pre-existing vulnerabilities. Chapter Six is a case-by-case narrative exploring the recovery experience of the disaster affected population and communities in the aftermath of a disaster or series of disasters. The chapter draws on ethnographic notes written by the researcher in the study areas, and presents and discusses the disaster recovery process as was experienced by the people in these communities. This is done in the form of descriptive interpretations of the narrative data collected in the field. This allows identification of the key factors, processes and themes involved in the recovery process following small-scale disasters, and frames the debate presented in Chapters Seven and Eight. Chapter Seven identifies, elaborates and discusses the key themes that influence people's recovery after small-scale disasters and discusses these in a broader context and within the literature. Chapter Eight, identifies the contribution of the thesis to existing knowledge. It locates the study findings in relation to the existing knowledge on disasters and disaster recovery process and therefore attempts to address gaps that were previously identified in the start of the thesis. Based on these, a disaster recovery framework in the context of small-scale disasters is proposed.

The final chapter includes reflections on the thesis findings. Recommendations for effective recovery measures in the context of small-scale disasters are made, and suggestions for future research are presented.

Chapter Two:

Venturing into the Unknown: Small-Scale Disasters and Disaster Recovery in the Literature

The study of disasters is a long established theme in academic research, but one that has now reached major prominence. This interest has generated a large number of disciplinary and interdisciplinary studies that transcend the social and biophysical sciences, and humanities. Perhaps inevitably, perspectives have varied over time and across different disciplines. This thesis attempts to look at the process of disaster recovery from the standpoint of the communities involved, and so requires the exploration of a diverse range of social, environmental, economic and cultural issues, and consideration of a wide range of literature.

This chapter examines the literature on disasters and disaster recovery using a series of key concepts or themes. It starts with a review of the changing academic perception of disasters. Next, the literature related to the concepts of vulnerability and the process of marginalization is explored. Knowledge regarding small-scale disasters is also examined. This is followed by an examination of the literature on disaster recovery, including common perceptions of the process and concept of resilience. A discussion of the established models and frameworks developed to explain recovery concludes the chapter.

2.1 Natural, Social, or Both? Shifting Perceptions of Disaster

Once considered as supernatural phenomena, scholars such as Quarantelli (2001) and O'Keefe et al. (1976; p. 575) note that disasters were originally characterized as „Acts of God“, with the implication that nothing could be done to influence their impact or occurrence. Later, perceptions changed and they came to be understood as a consequence of extreme physical events relating to topography and geography, including climate and weather conditions. Despite the fact that disasters were recognized as events that specifically impacted people, such perceptions still ignored people themselves and the social conditions around them

(McLukie, 1970). Consequently, the most commonly accepted understanding then became as put forward by White (1945), who defined disasters as extreme events that arise when a hazard agent intersects with a social system.

During the 1960s and 1970s, other foci of research generated a number of different insights. For example, Cisin and Clark (1962) identified disasters as events (or series of events) that seriously disrupts normal activities, stating that: “a narrow interpretation of disasters may lead the unwary to conclude that only destructive events can be considered disastrous. But a potential disaster may be just as disruptive of individual and community behaviour as the actual event. The responses generated by hoaxes and false alarms clearly demonstrate that disaster behaviour can and does occur in the absence of objective danger. It is the perception of threat and not its actual existence that is important” (Cisin & Clark, 1962, p. 30).

O’Keefe and Westgate (1976) argue that Cisin and Clark’s (1962) perspective largely reflects an acceptance of „potential disaster“ as a means to express disasters dynamically, viewing disasters as “one small part within the whole spectrum of man-environment relations” (p. 55). They equally argue that Cisin and Clark’s (1962) idea of „normalcy“ highlights the need to recognize disasters as an extension of everyday life, with the implication that an understanding of the threat of disaster is as important to the comprehension of disaster as the disaster event itself. Hewitt and Burton (1971) extend the notion of potential threat and accentuate the fact that a disaster is a function both of “the physical event itself and the state of human society” (p. 5). This introduced the concept of human-environment interactions in daily life as a major theme in disaster research.

However, such perspectives, while they remain highly relevant, are relatively inadequate, particularly in explaining the disproportional impact of disasters on poorer countries. Research identified an increase in the frequency and severity of disasters over the period 1947-1970, and that throughout this period, the greatest loss of life consistently occurred in poor countries (O’Keefe et al., 1976). According to O’Keefe and Westgate (1976) the majority of research on disasters prior to the 1970s focused on American examples and consequently had an inherent pro-Western, pro-technology, pro-capitalist bias that limited understanding and may have discouraged a full and correct summation of the

conditions and circumstances associated with disasters, particularly in poorer countries. In response, scientists, development practitioners, and scholars from the late 1970s and '80s tried to further expose the generic causes of disasters and better explain such events (O'Keefe & Westgate, 1976; O'Keefe et al., 1976; Susman et al., 1983).

Consequently, disasters started to be perceived in the context of the day-to-day interactions of people and their surrounding environments. O'Keefe and Westgate (1976) emphasize this saying that "disasters should be viewed as an extreme within a series of non-extreme events- an extension of everyday life, where the latter is as important to an understanding of disaster as the disaster manifestation itself" (p. 61). Considering disasters as a „deviation from the optimum“, O'Keefe et al. (1976) relate drought, for example, to having too little water and floods as having too much water. Others shared similar views (see, for example, Wisner et al., 1977). Such views gradually shifted the focus from the manifestation of the disaster itself to the everyday conditions of a population that may have shaped the event. This heightened the need to consider the socio-economic conditions of a population in relation to its physical environment. Ultimately, this led to the development and use of the concept of vulnerability as an explanation for the occurrence of disasters and the severity of their impact.

2.2 Understanding the Concept of Vulnerability in Disaster Discourse

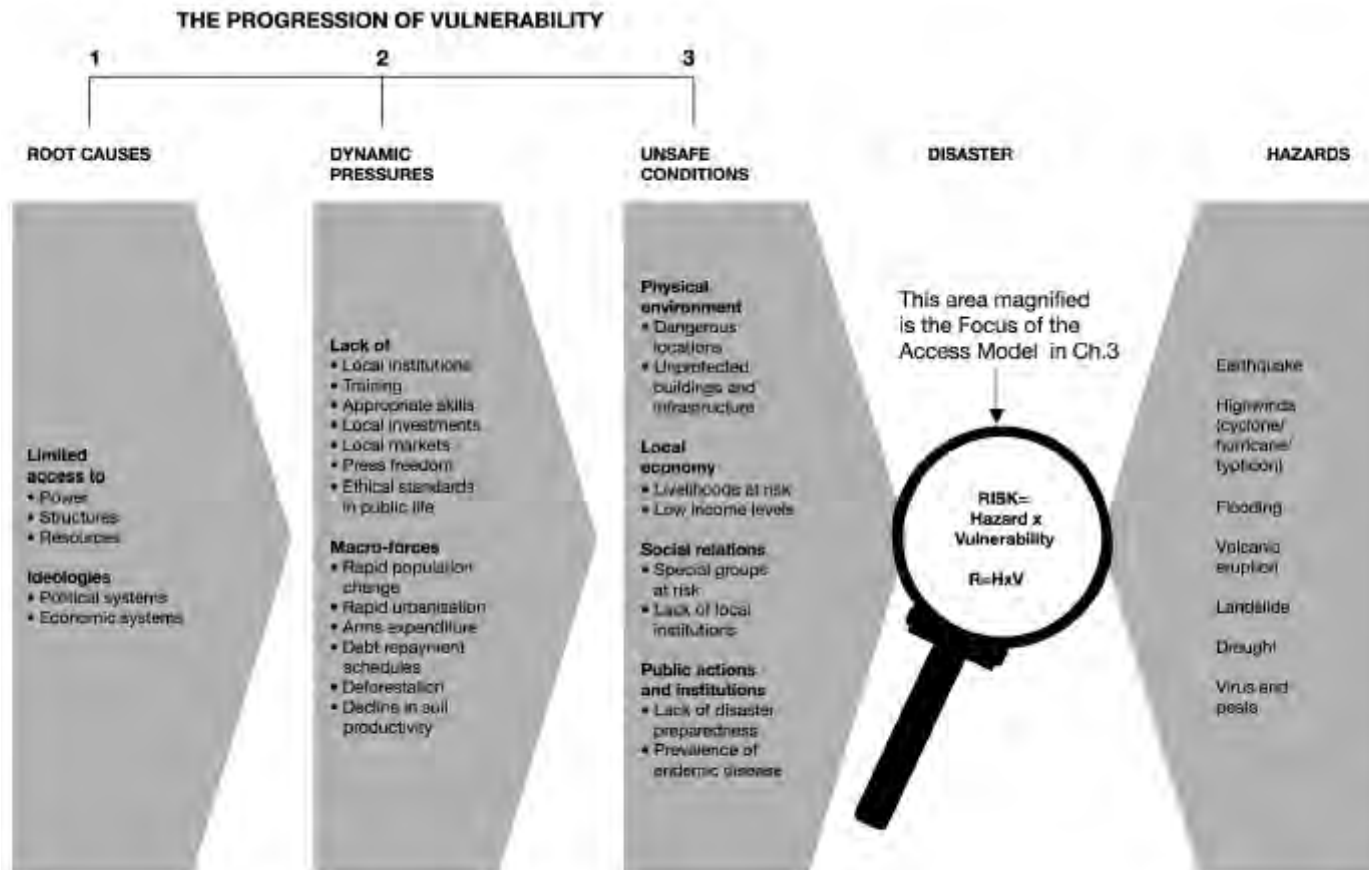
Susman et al. (1983) define vulnerability as the degree to which different classes in society are differentially at risk, both in terms of the probability of the occurrence of an extreme event and the degree to which a community absorbs the effects of such events and helps different classes recover (p. 264). They stress that a recognition of both an „extreme event“ and „the vulnerability of a population“ is a prerequisite to understanding disasters. They further state that without people there can be no disaster and that the poor are generally more vulnerable than the rich. Other scholars, notably Cannon (1974), O'Keefe and Westgate (1976) and Blaikie et al. (1994) present similar views. In effect, the vulnerability of a population is contextual and variable, and this concept is now accepted as of paramount importance in understanding disasters. Using the concept of vulnerability, Susman et al. (1983) define a disaster as the interface between an

extreme physical event and a vulnerable population. O'Keefe & Westgate (1976) assert that this broadens the perspective on disasters, and that, arguably, this has global applicability.

As previously discussed, the period between 1947-1970 saw a global increase in the number of disasters and their severity. Their greatest impact was on poor countries (O'Keefe et al., 1976). The trend continues. O'Keefe et al., 1976; Guha-Sapir, Vos, Below, & Ponserre, 2011 argue that when viewed using the concept of vulnerability, the reason becomes clearer. As they demonstrate, poverty is particularly widespread in poor countries, leaving these countries particularly vulnerable to disasters compared to those in more affluent countries. The frequency and severity of disasters is consequently most pronounced in poorer countries. This early work by O'Keefe and others resulted in vulnerability emerging as a major theme in disaster studies and it continues to be viewed as a vital component to understanding all aspects of disasters.

By the late 1990s, vulnerability was the dominant theme used to explain the impact of disasters. In the mid-1990s, Blaikie et al. (1994) developed and applied the concept to develop comprehensive theoretical frameworks, the Pressure and Release (PAR) Model (Figure 1) and the Access Model. The PAR framework rests on the principle that the explanation of disasters requires tracing the connections that link the impact of a hazard with the socio-political factors and processes that generate vulnerability.

Figure 1: The Pressure and Release Model



(Source: Blaikie et al., 1994, pp. 23)

Figure 1 illustrates three sets of components: 1. Root Causes, 2. Dynamic Pressures, and 3. Unsafe Conditions. As described by Blaikie et al. (1994) economic, and political processes are the root causes which affect the allocation and distribution of resources among different groups, differentially limiting their access to power, capital and land. Dynamic pressures are those processes and activities that „translate“ the effects of those root causes both temporally and spatially into unsafe conditions. These dynamic pressures include epidemic diseases, rapid urbanisation, rural-urban migrations, current (as opposed to past) wars and other violent conflicts, foreign debt and global change. These pressures, it is argued, affect households and individual household members (e.g. children, the elderly, and women) differentially. Consequently different groups experience differential levels of safety or risk. Wealthy groups, for example, are impacted or respond to these pressures differently than those who lack access to basic resources.

In the Pressure and Release framework, unsafe conditions are defined as the differential risk faced by people over time and space. Examples include people who live in hazardous locations, those unable to afford safe homes, lack effective protection from the state (for instance, in terms of effective building codes), have to engage in dangerous forms of employment (such as ocean fishing in small boats, wildlife poaching, prostitution, small-scale gold mining or small-scale forestry), or have minimal food entitlements that are prone to rapid and severe disruption. As shown in Figure 1, when the vulnerability that arises from unsafe conditions intersects with a physical hazard then disaster occurs. Blaikie et al. (1994) go on to argue that any disaster can therefore only be explained by an analysis of the dynamic processes and root causes which generate unsafe conditions. This framework has subsequently been revised and strengthened by Wisner et al. (2004).

The second model, the Access Model, is an expanded analysis of the principal factors in the PAR model that relate to human vulnerability and exposure to physical hazard, and focuses on the process by which the natural event impacts upon people and their responses. Access, as explained by Wisner et al. (2004) involves the ability of an individual, family, group, class or community to use those resources required to secure a livelihood in normal (pre-disaster times) and

people's ability to adapt to new and threatening situations (p. 48). Wisner et al. (2004) further recognize that access to resources is unequal within nations, regions, societies and households. This is explained by the socio-economic and political power relations that evolve over time. The uneven distribution of resources creates social groups, and depending upon their access to resources, promotes different social hierarchies. These groups in turn have different degrees of vulnerability to hazards and different levels of ability to recover in the aftermath of a disaster. Wisner et al. (2004) view „access to livelihood resources“ as a major determinant of vulnerability. Based on this, they argue, the rich are least affected by disaster and because of their access to resources, recover most quickly.

Both the PAR framework and the Access Model illustrate how vulnerability evolves, and aligns vulnerability within the broader context of the process of marginalization.

2.3 The Margins and Marginality: The Concept of Marginalization

The concept of marginalisation was originally used to describe people who, under economic pressure, left rural areas to find employment in cities and towns (Kuitenbrouwer, 1973). In this context, Kuitenbrouwer (1973) suggests that the concept of vulnerability refers to the general lack of facilities and socio-political access available to such migrants. He identifies the process of urban migration as often being induced by a lack of employment opportunities in rural areas. This was, he assumed, the result of a lack of social integration. Pearlman (1976) argues that such views lead to the conclusion that if a marginalised population is helped to organize, it would help them to adjust and better adapt within society as a whole.

Another very different interpretation of marginalization was put forward by scholars such as Meillassoux (1972), Wolpe (1972), Brandley (1975), and LeClair (1977) who emphasize the assumption that the fact that marginalised people were not integrated into broader society was incorrect and they were fully integrated and used as a „reserve army“ to produce cheap food (as cited in Susman et al., 1983, pp. 270). This shifted the perception of marginality from a condition or state inherent in the relationship between the segregated poor and other classes and

interest groups to recognition of their inherent role within society. For these authors „marginals“ (the marginalized population) were either forced off the land or pushed onto very poor or insufficient land, and who could not find permanent work. Consequently, the marginalised were forced to work as cheap casual labour, producing cheap food for industrial workers.

Ideas surrounding the concept of marginalization are linked back to a variety of different, although related, uses in different bodies of literature. Blaikie and Brookfield (1987) identify three key concepts of marginality: economic, ecological, and political-economic. They attempt to summarize some of the postulated and demonstrated relationships between these concepts, and to relate them to land degradation. They state:

....Extreme marginalization, often involving a whole number of readjustments particularly a loss of labour power (through war, conscription or emigration) (relates to the political-economic concept of marginality), has frequently led to changes in land use and the inability of land managers to keep up longer-term investments in soil and water conservation. The land then becomes economically marginal (relates to economic concepts of marginality) and the result is a decline in capability and marginality (relates to ecological concept of marginality) of the agro-ecosystem (p. 22).

Blaikie and Brookfield (1987) further say that spatial marginalization caused by the political-economy may accompany these changes. In effect, dominant classes may gain control and use more fertile land and force others to use more marginal land. The attempts of the latter to make a living with reduced resources have often led to land degradation. They finally conclude that land degradation is both a result of and a cause of social marginalization, often triggered by changes in the political-economy. Social marginalisation can accentuate the physical marginality of land (which relates to the concept of ecological marginalization) by reducing its current capability, and marginalizing it (related in turn to the concept of economic marginalization) necessitating its alternative use (p. 23).

Building on such interpretations, Susman et al., (1983) argue that marginalized populations are the outcome of the process of mal-development (then referred to

as „underdevelopment“), which can be traced back many centuries. The authors link this process to the control and exploitation of indigenous resources by a governing elite and outside interests. They draw on past ideas such as those of Rhodes, Rodney, Seidman, and Amin (as cited in Susman et al., 1983, p. 270). In effect, the process of „underdevelopment“ is explained in terms of both external and internal factors. External factors include the relationship between capitalist (or market-based) economies and those of the „Third World“. The consequence of this, they argue, is overwhelmingly negative for poorer countries, creating, in particular, technological dependency and an unequal exchange between the rich and poor. Internal factors include the socio-economic structure within poor countries themselves. These reflect the ravages of colonial history and internal power relations, commonly expressed in terms of unequal land distribution and socio-cultural discrimination, which pushed marginalised and politically weak groups (including cultural and ethnic minorities) to the limits of subsistence (Susman et al., 1983). This is now described and accepted as the process of marginalization.

Wisner (1993) refers to the process of marginalization (grounded in social theory) as the simplest and most useful framework to explain the occurrence of disasters. Marginalized populations are forced into situations that require them to find a source of income and live in areas where security may be even less and hazards more severe. Alternatively, they may have to change their resource use in ways which exacerbate their pre-existing vulnerability (Wisner, 1993). Susman et al. (1983) illustrate how marginalization heightens peoples“ exposure to natural hazards:

It is no accident that a major slum in San Juan (Puerto Rico) is frequently inundated by high tide; that Rio’s infamous favelas climb slopes of alpine difficulty; that the poorest urban squatters in much of Asia live on hazardous flood plains; that those people crowded in Recife in north-east Brazil live in, and on, the mud of the tidal estuary, living off the crabs that also inhabit the mud or that a quarter of Kenya’s population (including many of the poorest) live in that country’s drought- prone ‘marginal’ lands (p. 277).

These same authors equally highlight how the poor and marginalized are forced to respond to potential and actual disaster in ways that often may appear irrational:

They overstock the land with livestock, especially goats. They clear vegetation on steep Honduran hillsides in order to farm, removing the same vegetation that holds the soil in place. They stream back to the chars of the Bay of Bengal only weeks after wind and water has swept away all signs of human life” (p. 278).

In summary, the marginalized are typically identified as cultural and ethnic minorities in poor countries who commonly have little political power and a low standard of living. They often live in dangerous and unhealthy places (such as steep eroded slopes, slums, and flood plains) or/and practice unsafe and unsustainable ways of life (involving, for example, deforestation, over-cultivation of steep slopes or excessive fertilization). For them, disaster is not by chance but a product of necessity. The global expansion of slums and squatter camps, particularly in poor countries and the rapidly increasing population in the flood plains of South Asia (see, for example, UN-HABITAT, 2003; Marx, Stoker, & Suri, 2013; UNDP, 2011), are all examples of how people are currently marginalized and left unsafe.

Recognition of the concepts of vulnerability and marginalization shifted perceptions, and as an outcome, disasters are no longer perceived as „natural“. Society itself is seen as putting various groups (classes) of people into different degrees of vulnerability, a result of skewed economic and political processes. Some of such processes are themselves viewed as the impact of continued impoverishment based on a global economy that perpetuates technology dependency and unequal exchange (Susman et al., 1983), social discrimination, and unequal power relations based on gender, class, and many other factors that limit people’s access to resources (Blaikie et al., 1994). As a result, natural events are now recognised as triggers, rather than as the fundamental causes of disasters.

2.4 Small yet Significant: The Concept of Small-Scale Disasters

The significance of small-scale disasters was highlighted by scholars as far back as the 1980s (Lewis, 1984; Maskrey, 1989). They noted that although the impact of small-scale disasters was seemingly insignificant in comparison to major global

disasters, their impact on those affected was similar. The topic of small scale disasters, however, has engendered limited further attention until more recently and it is only now again generating renewed interest especially among organizations working in the area of disaster and risk reduction (Lavell, 1998; IFRC, 2006; Wisner & Gaillard, 2009; GNDR, 2009, 2013; ECHO, 2013). This recent increase in momentum is primarily explained by the creation of alternative data bases such as DesInventar¹ which presents further evidence of the significant impact that small disasters had on people's everyday lives and livelihoods (Marulanda et al., 2010, 2011; GNDR, 2013; Velasquez, Bonapace, & Srivastava, 2012).

Small-scale disasters remain variously described as „neglected disasters“ or „neglected crises“ (Wisner & Gaillard, 2009), „invisible disasters“ (Marulanda et al, 2011), „silent disasters“ (ECHO, 2013) or „everyday disasters“ (GNDR, 2009, 2011, 2013). Though variously named, these small-scale disasters are amongst those commonly less recognized by international donors, national governments and scholars. These same authors describe them as neglected because, in comparison to large-scale disasters, not only are they are small in terms of deaths and costs, but may not create political interest from international or national authorities, are less dramatic or not sensational enough to capture media attention, less prioritized by donors because they are less visible, or simply ignored as unimportant because they are less understood or misunderstood in terms of their impact on the lives of those affected.

Small-scale disasters are associated with physical, social, technological or political factors, which impact people's lives and livelihoods at a localized scale. They include heavy rain events, long term drought, landslides, water pollution, and may involve the collapse of buildings, injury and death. Most studies of such events have pointed out that they are often recurrent, and this potentially makes them particularly dangerous because it can result in a chronic impact on people and communities (Wisner & Gaillard, 2009; Marulanda et al, 2010, 2011; GNDR, 2011). There is accumulating evidence of their impact in terms of death, economic loss and other socio-economic harm (IFRC, 2006; Wisner & Gaillard, 2009;

¹ Desinventar is a program of work to gather local level data on disasters. <http://desinventar.org/>

ECHO, 2013). This is supported by evidence from the DesInventar database (see, Marulanda et al., 2010) which offers information at a detailed local level. Data are drawn from a range of official sources, including institutions concerned with specific resource sectors, relief and aid agencies, emergency management agencies, and local press coverage. Though the database again fails to provide a clear definition of small-scale disasters, it does allow greater opportunities for disaster research. For example, Marulanda et al. (2010) using the example of Colombia, show that between 1971-2002, the number of events, the number of people affected and the total financial loss from small and medium-scale disasters were greater than the combined impact of all the high profile disasters that affected the country over the same period, including the deadly eruption of Nevado del Ruiz in 1985. In effect, as these authors have shown, while isolated small-scale disasters may have a less visible, instant impact in terms of death and destruction, in terms of their accumulated effect is often huge.

In another study of Colombia, Marulanda et al. (2011) attempted to reveal the impact of small-scale disasters on social and economic development. This work demonstrated how frequent, small disasters increase the difficulties for local development and entail a serious problem for national development. The authors found that small disasters usually affect the livelihoods of the most vulnerable, lowering their capacity to adapt and thus perpetuating their vulnerability and poverty (Marulanda et al., 2011). Parallel views are presented by Wisner and Gaillard (2009) who suggest that small-scale disasters can chronically damage the lives of those affected and decrease their access to resources, ultimately leaving them more exposed and increasingly less capable of recovering from disaster.

Recognizing the importance of including the risks associated with smaller disasters, the United Nations Office for Disaster Risk Reduction (UNISDR) has classified disaster risk into: „intensive“ disaster risk and „extensive“ disaster risk. Extensive risk is defined as the widespread risk associated with the exposure of dispersed populations to repeated or persistent hazard conditions of low or moderate intensity, often of a highly localized nature, and which can lead to debilitating cumulative disaster impacts (UNISDR, 2009). In contrast, intensive risk is used to describe something that is infrequently occurring and highly concentrated in its losses, in effect intensive disaster risk involves the risk posed

by large-scale disasters, and extensive risk is associated with that resulting from smaller disasters (UNISDR, 2009).

Despite growing recognition of the importance of smaller disasters and the increasing platforms that emphasize the urgency of addressing such disasters, there remains a lack of any common, clear understanding of what is meant by small-scale disasters. Different studies and organizations have variously explained small disasters in terms of scale. For the Global Network of Civil Society Organisations for Disaster Reduction (GNDR), small disasters include all disasters, irrespective of scale, that impact the everyday lives of people (GNDR, 2009, 2013). On the other hand, others, such as Marulanda et al. (2010), say that small-scale disasters are those included in the DesInventar, but excluded from the EM-DAT².

The arguments about small-scale disasters as described, rest on a comparison of the two databases. EM-DAT records disasters where any one of the criteria is met: 10 or more people are reported killed, and/or 100 or more people are reported affected, and/or the declaration of a state of emergency, and/or a call for international assistance. This compares to DesInventar, which offers information at a detailed local level. Data are drawn from a range of official sources, including institutions concerned with specific resource sectors, relief and aid agencies, emergency management agencies, and local press coverage. Basically, in DesInventar, small-scale disasters refer to small and moderate disasters that are not included in the EM-DAT database. UNISDR has a different understanding of the scale of small-scale disasters. UNISDR has a threshold of “30 people dead, and (or) 600 houses destroyed” as a threshold for a small-scale disaster (UNISDR, 2011). This means that any damage recorded in the DesInventar databases that include 30 or more people killed or 600 or more houses destroyed is categorised as a large disaster, and below that is recorded as a small disaster.

The International Federation of Red Cross and Red Crescent Societies (IFRC) and the European Commission's Humanitarian Aid and Civil Protection department (ECHO) have their own definition. They define small disasters as those that are

² EM-DAT is the widely recognised Emergency Events Database maintained by the Centre for Research on the Epidemiology of Disasters (CREED)

less important and go unreported in the international media, thus remaining out of the public eye (IFRC, 2006; ECHO, 2013). They therefore fail to attract sufficient funding and resources to provide vital humanitarian aid. Consequently while there is some common concern about small-scale disasters, the lack of any one accepted definition blurs understanding and potentially thwarts or at least discourages academic investigation, and hinders effective response.

2.5 Back to ‘Normal’?: Questioning the Concept and Process of Disaster Recovery

Recovery has emerged as a commonly used term in the disaster literature. It refers to the period or process in the aftermath of a disaster when the affected population works to recover from the losses and damage they have experienced (see, for example, Kates & Pijawka, 1977; Bolin & Patricia, 1978; Davis, 1978; Cuny, 1983; Oliver-Smith, 1986; Ingram et al., 2006; Lizarralde et al., 2009; Amaratunga & Haigh, 2011). It is recognized that people recover in many different ways depending on what aspect of their livelihood is affected where livelihood is understood to comprise people their capabilities and their means of living, including food, income and assets. Tangible assets are viewed as resources and stores, and intangible assets such as claims and access (Chambers & Conway, 1992). Thus, if a communal bridge is destroyed, recovery may involve efforts to rebuild, whereas if productive land is destroyed, recovery may involve obtaining an alternative resource to meet essential social and economic needs. In effect, recovery is recognized as contextual and dependent on the scale and impact of the disaster, the investment in recovery, and the capacity and motivation of those impacted (Collins, 2009). Commonly discussed recovery measures include the reconstruction of housing and other built necessities (and amenities), the restoration of jobs and businesses, resettlement, and psychological and physical support (Cuny, 1983; Oliver-Smith, 1986; Ingram et al., 2006; Smith & Wegner, 2007; Lizarralde et al., 2009; Amaratunga & Haigh, 2011; Duyne & Leemann, 2012).

Despite the common use of the term in the literature, there is no one commonly accepted or simple definition of recovery, nor does there seem to be any common understanding. Recovery, in literal terms, associates normalcy with the situation before a disaster. Thus *The Oxford English Dictionary* defines it as a return to a

normal state of health, mind, or strength. Normalcy, however, is itself subjective, particularly in the context of a disaster. Conventional views (such as, Brynt, 1991; Lindell & Perry, 1992; Alexander, 1993; Oliver-Smith, 1996; Tobin and Montz, 1997) assume that disasters are a departure from „normal“ social functioning, and recovery therefore means a return to „normal“ (as cited in Wisner et al., 2003, p. 10). Such views have been questioned.

The validity of viewing disasters as a departure from normal social functioning aligns badly with the idea inherent in the concept of vulnerability based on the idea that normal daily life is often difficult to distinguish from disaster. This is well-illustrated in both the Pressure and Release Framework and Access Model (see, Blaikie et al., 1994; Wisner et al., 2004) discussed previously (Section 2.2), which present disasters as occurring because people are vulnerable prior to a hazardous event. The pre-disaster situation is, therefore, not accepted as one of normal social functioning. It follows that if recovery in the aftermath of a disaster aims only to reinstate the pre-disaster state, the affected population remains at least as vulnerable to further disasters as before. This is false recovery (IFRC, 2001).

In practice, false recovery remains a common phenomenon, especially for the poor and marginalized, because they do not have the resources to achieve more, nor can they afford to wait for the potential benefits of any longer-term government sponsored development. They are therefore obliged to rebuild their communities to a level just as vulnerable as before (IFRC, 2001). The IFRC (2001) describe this as „reconstructing the risk“. One example of this is the Erasma area of Orissa, India. A year after the cyclone of 1999, the region hadn“t recovered in any way. Indeed, the population was even more vulnerable than before despite a huge influx of humanitarian aid. The IFRC (2001) describes the situation: “uprooted trees littered the landscape. Everywhere people were rebuilding, in many cases literally reconstructing the risk. While villagers were aware that at least community buildings should be cyclone-proof, there simply weren“t the resources to achieve this goal” (p. 14). This is not an unusual case (see, also, Susman et al., 1983; Gaillard & Cadag, 2009; Davis, 2011).

The case of the Payatas trash slide in the Philippines (2000) studied by (Gaillard & Cadag, 2009) is particularly poignant. It shows how the inability to recover in

the aftermath of a disaster may result in a worsening of the living conditions of the poor and the marginalized who, prior to disaster, were already living in deprived conditions on risk prone lowlands, on the largest dumpsite in the country. Gaillard and Cadag (2009) label this example as „from marginalization to further marginalization“.

That a return to the pre-disaster situation is false recovery and that reverting to a worse position than before is failed recovery is well-explained by Rahmato (1991): “It’s in the years of recovery that the seeds of famine are actually sown” (Rahmato, 1991, para 3). By this, Rahmato (1991) suggests that the failure of an affected population to respond (or to be able to respond) appropriately to a disaster may be the starting point for further hardships. In effect, hardships, if not addressed, can create and increase the vulnerability of those affected and may even expose them to greater risk. Blaikie et al. (1994) explain such failed recovery using the ratchet effect ³, a phenomenon well established in the theoretical and empirical literature of development studies. In a disaster situation, the ratchet effect is understood to occur as part of the process of marginalization, which links the increasing vulnerability of disaster affected people with decreasing access to resources. Less access or no access to those resources necessary to recover from disaster results in further marginalization and a higher degree of deprivation.

All the research involving discussion of recovery and the ratchet effect suggests a strong connection between vulnerability and recovery. It highlights the fact that recovery does not equate with a return to the pre-disaster situation. Rather, it demonstrates that a community’s recovery from disaster is determined by the extent to which the vulnerabilities that led to disaster are themselves addressed and reduced.

³ Chambers (1983) was the first to introduce the concept of the ratchet effect to explain rural poverty. Lack of access to various kinds of resources makes it difficult for marginalized communities to recover, this can make them more vulnerable to subsequent hazards. It is this cumulative nature of vulnerability due to the decreasing capacity of communities to recover in the aftermath of disaster that is known as the ratchet effect (Blaikie et al., 1994).

2.5.1 Bouncing Back?: The Concept of Resilience

„Resilience“ is derived from the Latin work *resilio*, to „jump back“ (Klein et al., 2003). The concept is now widely used although its disciplinary origins remain contested. Some suggest that it was first used in Ecology (Batabyal, 1998), others in Physics (Van der Leeuw & Leygonie, 2000). Manyena (2006) cites the fact that most commentators claim that the study of resilience evolved from the disciplines of psychology and psychiatry in the 1940s (Waller, 2001) and was used by Masten (1999) and Rolf (1999) in the context of children „at risk“ of psychopathological disorders due to various causes.

Resilience is now conceptualized in many different ways in different disciplines and not within any one discipline (Klein et al., 2003; Manyena, 2006). A common theme, however, is its applicability to all systems that experience stress (material, human, or environmental) and that have the ability to recover and return to their original state.

Since the late 1970s (see, Torry, 1979), the concept of resilience has been extensively used in disaster discourse. In pre-disaster situations, it is commonly used to help explain a community’s exposure to risk and disaster in association with unsafe living conditions (Blaikie et al., 1994; Cannon, 1994; O’Keefe et al., 1976). In a post-disaster situation it is linked to a community’s ability „to cope, with or adapt to, the stress associated with hazards“ (Klein et al., 2003; Manyena, 2006; Kafle, 2011; Pelling, 2012). It is in this context that the concept of resilience is now most commonly applied.

An early definition of resilience, developed with respect to climate change, is provided by Timmerman (1981), who explains it as the measure of a system’s capacity (or some part of it) to absorb and recover from a hazardous event. Dovers and Handmer (1992) distinguish between reactive and proactive resilience, arguing that a society that relies on reactive resilience approaches the future by strengthening the status quo and increasing its resistance to change, whereas a society that promotes proactive resilience accepts the inevitability of change and tries to create a system capable of adapting to new conditions and imperatives. Extending this line of thought, Timmerman (1981) and Adger (1997, 2000) define resilience as the ability of communities to withstand external shocks or

perturbations, such as environmental variability or social, economic, or political upheaval. Blaikie et al. (1994) and Pelling (2003) describe resilience more specifically as the ability to cope with, or adapt to, the stress associated with hazards. In this sense, it is at least arguably a product or measure of the extent of preparations undertaken in light of potential hazards (including relief and rescue plans) (Klein et al., 2003). On the basis of this understanding, the Resilience Alliance⁴ has developed a consolidated definition that characterizes resilience in three dimensions: the amount of disturbance a system can absorb and still remain in the same state or domain of attraction; the degree to which a system is capable of self-organisation; and the degree to which that system can build and increase its capacity for learning and adaptation (Folke et al., 2002).

The UNISDR has also adopted the term resilience, defining it, with particular reference to natural hazards, as the capacity of a system, community or society to resist or change in order to obtain an acceptable level of function and structure. This is determined by “the degree to which a social system is capable of organizing itself and increasing its capacity for learning and adaptation, including its capacity to recover from a disaster” (UNISDR, 2004, p. 6).

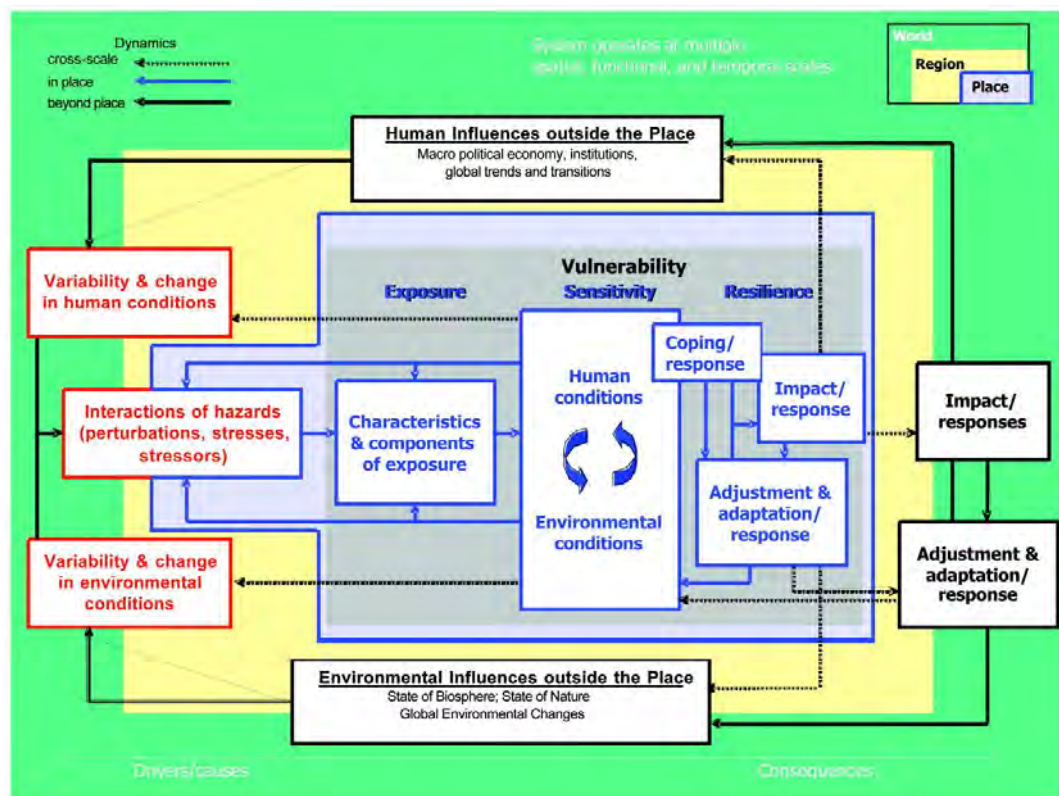
Studies have linked vulnerability and resilience in different ways (see, for example, Renaud, Birkmann, Damm, & Gallopín, 2010). Some argue that vulnerability is the opposite of resilience. A social ecological system that loses resilience is seen to become more vulnerable to change that previously could be handled (IPCC, 2001). More generally, resilience and vulnerability can be interpreted as “the two ends of a spectrum. High levels of vulnerability imply low resilience, and vice versa” (Cannon, 2008). According to the flip-side approach, risk mitigation strategies that decrease vulnerability would directly contribute to the improvement of resilience in a given system.

Gallopín (2006) argues that resilience is not the opposite of vulnerability. Few others have attempted to understand the relationship between resilience and vulnerability. Folke et al. (2002), in a background paper for the 2002 World Summit on Sustainable Development in Johannesburg, list resilience, along with

⁴ The Resilience Alliance: a network of scientists with roots mainly in ecology and ecological economics, aims to stimulate academic research on resilience and inform the global policy process on sustainable development (Klein et al., 2003).

exposure to events and stresses, and sensitivity to such exposure, as one of the three determinants of vulnerability. This view is analogous to that in recent work by Pelling (2003) and the IPCC (2001) who view adaptive capacity as one of the key determinants of vulnerability, together with exposure and sensitivity (as cited in Klein et al., 2003, p. 40). Subsequently, Turner et al. (2003) have developed a framework that identifies exposure, sensitivity and resilience as the three major interacting components of vulnerability (Figure 2). This perspective views exposure as an external dimension of vulnerability, typically a product of physical location and the characteristics of the surrounding built and natural environment. Sensitivity refers to the internal components of vulnerability, which are its root causes (for example: socio-economic disparities, and land tenure).

Figure 2: Vulnerability framework. Components of vulnerability identified and linked to factors beyond the system of study and operating at various scales.



Source: (Turner et al, 2003, p. 8076)

The framework presented by Turner et al. (2003) shows how these three components interact and influence each other in the human-environment system, and where effective actions can be taken to reduce vulnerability. As conceptualized by the IPCC (2001), Pelling (2003), Turner et al. (2003) and

others, the vulnerability of a system can be reduced by addressing its three interacting components: exposure, sensitivity and resilience. According to Turner et al. (2003), the human-environment conditions of the system determine its sensitivity to any set of exposures. These conditions include both the social and biophysical resources that influence the existing coping mechanisms which come into play, or are modified, when the impacts of exposure are felt. Also included are those coping mechanisms inherent in the social system developed in response to any previous experience. These mechanisms may work independently at an individual or household level or be generated by the policy system. They influence each other, so that a response in the human subsystem can make a biophysical subsystem more or less able to cope, and vice versa (Turner et al., 2003).

In the international discourse of disaster risk reduction and climate change, resilience has quickly gained international recognition. The outcome of the 2005 World Conference on Disaster Reduction, particularly the Hyogo Framework for Action (HFA) 2005-2015, confirmed that the concept of resilience has gradually, in both theoretical and practical terms, been adopted in “the disaster risk reduction discourse and as part of many practical interventions”. The HFA 2005-2015 and its successor instrument, the Sendai Framework of Disaster Risk Reduction (SFDRR) 2015-2030 are considered as the international and national evaluation frameworks for disaster risk reduction . HFA 2005-2015 is the first plan to explain, describe and detail the work required from all different sectors and actors to reduce disaster losses. It was developed and agreed with the many partners needed to reduce disaster risk - governments, international agencies, disaster experts and many others - bringing them into a common system of coordination. The HFA outlines five priorities for action, and offers guiding principles and practical means for achieving resilience to disaster. Its goal is to substantially reduce disaster losses by building the resilience of nations and communities to disaster. This means reducing loss of lives and social, economic, and environmental assets when hazards strike (see, UNISDR, 2004, UNISDR, 2005; UNISDR, 2015b). These frameworks are adopted as guidelines by many countries across the globe (including Nepal) to achieve the expected outcome of substantially reducing disaster losses, in lives and in the social, economic and

environmental assets of communities and societies. As a result, humanitarian and development organizations, both national and international, pay increased attention to the resilience building of communities.

Because of the international recognition of the urgency of climate change on the world stage, a paradigm shift is occurring in international development, as measured by shifting allocation of overseas development assistance and new institutional arrangements for investing in „resilience“ (Mitchell & Harris, 2012). It is even believed that „resilience“ would seem to offer the promise of hope that „sustainable development“ once did. Indeed, with resilience as a binding force it links development, humanitarian efforts, Climate Change Adaptation (CCA) and Disaster Risk Reduction (DRR) (Bahadur, Ibrahim, & Tanner, 2010). The attractiveness of resilience lies in its more positive focus on local capacities than the negative connotations attributed to vulnerability, and the difficulties in effecting vulnerability reduction when root causes are so entrenched and difficult to target (Mitchell & Harris, 2012). However, critics are concerned that this shift to resilience is dangerous especially as it tends to shift the focus away from actions to address vulnerability and root causes. Many (such as, Lewis & Kelman, 2010; Levine, Pain, Bailey, & Fan, 2012) argue that increased resilience does not necessarily decrease vulnerability or risk. Furthermore, a society could conceivably be highly resilient while at the same time highly corrupt, unsustainable or inequitable (Levine et al., 2012). Critics, such as Wisner (2003), Cannon and Müller-Mahn (2010) and Lewis and Kelman (2010) are concerned that a focus on resilience tends to promote short-term actions and focus on short-term recovery rather than address the root causes of risk and vulnerability.

Yet, despite its increased popularity in international discourse, there is limited theoretical understanding, and multiple, often contradictory definitions of resilience (Klein et al., 2003; Manyena, 2006). Resilience still lacks specificity and there remains no common understanding. Despite the widespread use of the concept in academic journals and in development programs, its precise nature remains the subject of debate. Indeed, scholars such as Handmer and Dovers (1996) and Adger (2000) argue that the concept has been unquestionably accepted and massively promoted without anyone having a clear idea of whether or not it is good or bad for society (as cited in Klein et al., 2003, p. 41). Equally, the concept

of resilience has been criticised for its limited scope for measurement, testing, and formalisation (Klein et al., 2003).

In response to such criticisms on its limitations, there have been few attempts to operationalize resilience—such as the „Multi-Hazard Disaster Risk Assessment“ by Department of International Development (DFID), „Characteristics of a Disaster-Resilient Community“ by Twigg (2007), and „A Multidimensional Approach for Measuring Resilience“ by Oxfam GB. One of the most comprehensive and widely-cited frameworks is that of Twigg (2007), which defines the characteristics of what disaster resilient communities „might look like“ by setting out the many different elements and indicators of resilience. These are based on a meta-analysis of experience and good practice. These characteristics are meant to be used mostly to frame the project review process. This can be done either by selecting the relevant characteristics as indicators of activity or achievement in the areas of Disaster Risk Reduction (DRR) that the project addresses, or by mapping all the project’s activities and accomplishments against the framework, seeking not only a measure of success but also an understanding of the gaps and limitations in its DRR coverage. The framework outlines five thematic areas based on the HFA, each of which contains a number of „components of resilience“ (Table 1). In turn, each component of resilience contains more detailed and specific „characteristics of a disaster-resilient community“ (not shown in the table below).

Table 1: Components of resilience

Thematic Areas	Components of Resilience
Governance	<ul style="list-style-type: none"> - Policy, planning, priorities and political commitment - Legal and regulatory systems - Integration with development policies and planning - Integration with emergency response and recovery - Institutional mechanisms, capacities and structures; allocation of responsibilities - Partnerships - Accountability and community participation
Risk Assessment	<ul style="list-style-type: none"> - Hazards/risk data and assessment - Vulnerability/capacity and impact data and assessment - Scientific and technical capacities and innovation

Knowledge and Education	<ul style="list-style-type: none"> - Public awareness, knowledge and skills - Information management and sharing - Education and training - Cultures, attitudes, motivation - Learning and research
Risk Management and Vulnerability Reduction	<ul style="list-style-type: none"> - Environmental and natural resource management - Health and well being - Sustainable livelihoods - Social protection - Financial instruments - Physical protection; structural and technical measures - Planning régimes
Disaster Preparedness and Response	<ul style="list-style-type: none"> Organizational capacities and coordination • Early warning systems • Preparedness and contingency planning • Emergency resources and infrastructure • Emergency response and recovery • Participation, voluntarism, accountability

Source: (Twigg, 2007, p. 10)

The framework provides a total of 28 components and 167 characteristics, and has proven popular with humanitarian and development actors. This is because it is a bottom-up and experience-based derivation of „resilience“ that measures risk management as a context-based promising avenue, although measures of resilience more broadly have their own critics. Villanueva (2011) for example, raises three concerns about popular measures including Twigg’s „characteristics of a disaster-resilient community“, stating that their deterministic approaches focus on inputs and outputs rather than processes, and capture a static rather than a dynamic picture of variables such as „vulnerability“. It also has a narrow focus on measuring effectiveness (achievement of results) and efficiency (in monetary value) rather than issues related to equity and sustainability, which Villanueva (2011) views as key to successful interventions in achieving resilience (pp. 31-33).

Apart from the criticisms of resilience and growing efforts to understand it, Klein et al. (2003) argues that the introduction of resilience into disaster discourse can be seen as the birth of a new culture of disaster response and recovery (Klein et

al., 2003). Over the last fifteen years, it has significantly changed perspectives about disaster affected communities. While in the past such communities were narrowly recognized only as vulnerable, or as „victims“, a greater emphasis is now put on their ability to recover, rather than their level of need or vulnerability (Manyena, 2006). This has kept affected communities at the centre of disaster risk reduction and management initiatives.

There is a growing number of scholars and practitioners such as (Manyena, 2006; Practical Action & IFRC, 2010; Manyena et al., 2011; Sudmeier-Rieux, 2014) that conceptualize resilience in the context of vulnerability. They view resilience as the ability to „bounce forward“ i.e. change in a positive manner when faced with adversity. These scholars view resilience not as a capacity to return to the original state or return to the status quo, (which embeds fostering risk) but moving forward, involving addressing and reducing the vulnerability that led to the initial disaster. In the context of recovery, this means that communities ideally become less vulnerable through the process of recovery, and more resilient than they were before. In line with these understanding, scholars such as Christoplos (2006), Kennedy, Ashmore, Babister, & Kelman (2008) and Amaratunga & Haigh (2011) view disasters optimistically and as an opportunity to reduce any future risk of disaster, to „build back better“ and rectify past mistakes in planning, land use and transportation.

Unfortunately, approaches to reduce vulnerability and the notions of „building back better“ are less evident in practice. Short-term recovery interventions are often prioritized over longer-term actions. In effect, these provide no contribution to address the underlying root causes of vulnerability, which often require a comprehensive and long term plan (Cannon & Müller-Mahn, 2010; Lewis & Kelman, 2010; Levine et al., 2012). As noted earlier in this section, false recovery is common-place. The previously described examples of a cyclone in the Erasma area of Orissa in India and the Payatus trash slide in the Philippines provide excellent examples. In both cases people were living in unsafe areas not because of choice but because of socio-economic and political causes that resulted in poverty and the marginalization of these groups. In both cases, recovery support was provided, but restricted to short-term relief. There wasn“t any help to address the underlying causes of the vulnerabilities that exposed the population to disaster

risk. As a result, despite short-term support and their own efforts to recover, the people were pushed into greater poverty and marginalization, and were made more vulnerable to future disasters. The notion of „building back better“ is seen nowhere in these examples.

Similarly, a disproportional amount of attention by governments, media, humanitarian aid agencies, and non-governmental organizations (NGOs) remain focused on covering up the damage by physical mitigation measures, the repair and reconstruction of buildings and other physical structures (IFRC, 2001; Wisner et al., 2003; Rubin, 2009). These agencies are often criticized by others for viewing recovery as a synonym for infrastructure reconstruction. The IFRC (2001) points out that governments, media and non-governmental organizations (NGOs) tend to worry most about what can be easily measured, such as how many bridges were destroyed, or how many people were killed. Little attention is paid to restoring the less measurable aspects of livelihood, such as people’s access to those resources, which would help them to sustain and recover in the long run, when the external help ends. This is an important omission. The IFRC illustrates this with the example of Mozambique. After the severe floods of 2000, numerous statistics emerged on the damage to infrastructure, loss of life and injury, but no information was available about the loss of sources of income or income opportunities. Subsequent estimates were close to 350,000 lost jobs, which affected up to 1.5 million people (IFRC, 2001).

A similar situation was recorded by Oliver-Smith (1986) in the city of Yungay, Peru. In the aftermath of the devastating earthquake of 1970, a huge volume of aid was provided by both national and international agencies for the heavily affected city. The aid mainly took the form of clothing, household equipment, and furniture. In spite of this, Yungainos believed that they had been given nothing (Oliver-Smith, 1986). By this, they meant that they were given nothing of use; nothing which allowed them to return to a state of self- sufficiency. Survivors of Yungay, particularly the poor, almost unanimously complained that what they had needed was help to get back to work. As explained by Oliver- Smith, „beds and blankets, stoves and pots are all very well, but they do little to earn one a living, and earning a living became a crucial issue quite quickly after the emergency period had ended“ (Oliver-Smith, 1986, p. 159).

A further example is provided by Ingram et al. (2006) from Sri Lanka in the aftermath of the 2004 Asian Tsunami. The Government established a coastal buffer zone including a resettlement plan aimed to relocate the population further inland. Almost immediately the new policy was decreed, the construction of semi-permanent and permanent homes began at government-designated resettlement sites outside the coastal buffer zone. Many people from the affected fishing communities did not want to leave the coastal zone and refused to move to the designated safer areas. Based on this study, Ingram et al. (2006) conclude that people were unwilling to change their way of living and were willing to compromise their safety rather than face the more immediate challenge of poverty and hunger which to them was even worse than the threat of another tsunami (p. 611).

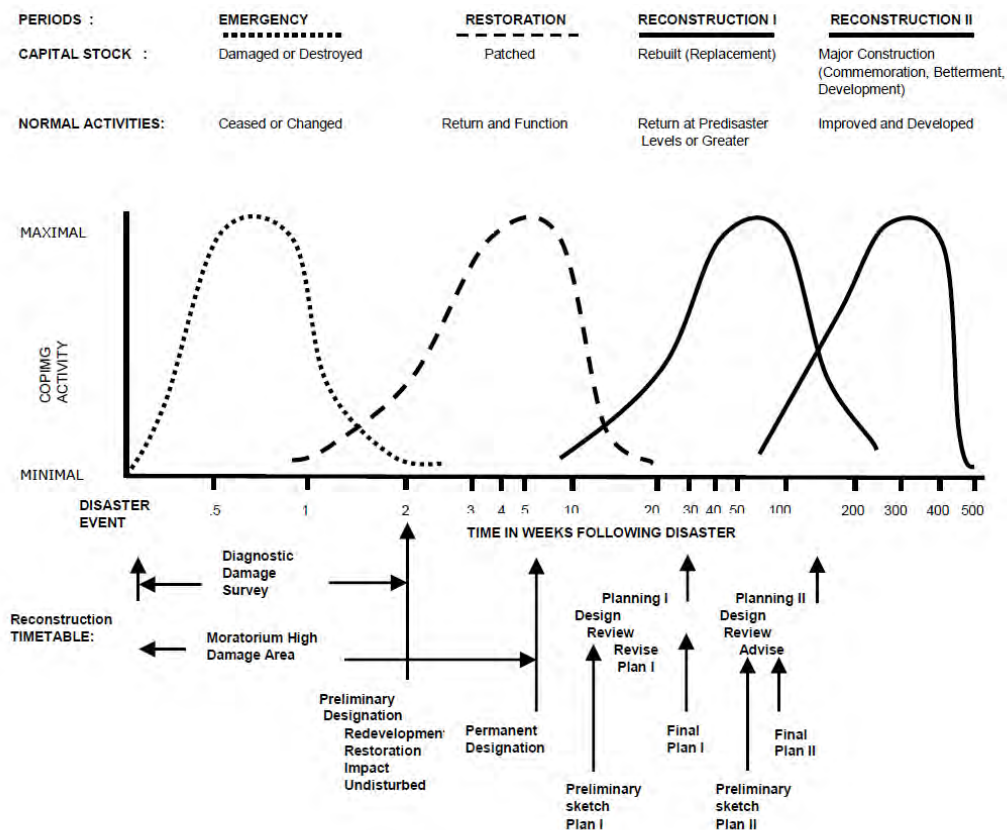
Research from Mozambique, Peru and Sri Lanka all demonstrate that less measurable aspects of livelihoods, such as the restoration of economic resource base, are important and should be given proportionately as much attention as physical reconstruction. In fact, recovery is not only the reconstruction of the buildings and physical structures, but the reconstruction of socio-economic resources that can make the affected families and communities less dependent on external help and still be able to recover in the long run. This is fully in line with the previously explained framework of vulnerability developed by Turner et al. (2003) (Figure 2). At least theoretically (and in these examples), recovery is closely linked to the three components of vulnerability (exposure, sensitivity and resilience). On the other hand, physical reconstruction only refers to the exposure component of vulnerability.

As demonstrated in the literature discussed above, the resilience of an affected population is important in influencing their vulnerability to future hazards. Equally, recovery in its true sense, is not about an affected community's return to its pre-disaster situation, but rather about whether or not a community's vulnerabilities are addressed and reduced in the post-disaster period. These points further highlight the role of „resilience“ in the recovery process.

2.5.2 Moving Forward?: The Process of Recovery

There is a significant body of work on disaster recovery (such as, Haas, Kates & Bowden, 1977; Kates & Pijawka, 1977; Cuny, 1983; Dyer, 2009; Lizarralde et al., 2009;; Davis, 2011, 1978). In particular, Kates and Pijawka (1977) pioneered the development of a four-stage model of the recovery process which they tested using empirical evidence from events in many different parts of the world. Their model attempts to estimate both the negative and positive influence of different measures and interventions, in particular, the impact of state policies on the pace of recovery. It views recovery as comprising four overlapping periods and highlights the dominant activities characteristic of each period (Figure 3). Even though the model depicts a clear, logical sequence of recovery, the authors acknowledge that other related and concurrent activities occur and that the four sequential periods relate only to the dominant activities within those periods. These they identify as: Emergency, Restoration, Reconstruction I, and Reconstruction II, which are based on what needs to be achieved in that period. Accordingly, the Emergency Period is characterized by any coping actions stemming from economic damage or destruction, and by the number of dead, injured, homeless or missing. Restoration is characterized by the patching up of those utilities, housing, and that commercial and industrial structure capable of being restored and returned to relatively normal functioning. During Reconstruction I, the aim is to restore the capital stock to pre-disaster levels, and to return socio-economic activities to at least pre- disaster levels. The indicators of this are the rehousing of the population and the re-establishment of jobs, capital stock, and urban activities. Reconstruction II serves three different but sometimes interrelated processes: to memorialize or commemorate the disaster; to mark the city's post disaster betterment or improvement; or to serve its future growth or development.

Figure 3: Sequential Model of Disaster Recovery Activity



Source: (Kates & Pijawka, 1977, p. 4)

Kates and Pijawka (1977) argue that each of the three initial periods lasts approximately ten times longer than the preceding period. Drawn on a logarithmic scale, they appear equal. The fourth and last period, Reconstruction II, characteristically involves large project development and may extend more than twice the time required for Reconstruction I. These four periods were initially tested by Kates and Pijawka (1977) in a retrospective study of San Francisco in the wake of the earthquake and fire of 1906. Further studies of large scale disasters include earthquakes in Italy (Geipel, 1991), Nicaragua, and the United States (Kates & Pijawka, 1977), and floods also in the United States (Bowden et al., 1981).

These studies all confirm the findings that were drawn from San Francisco in terms of the length of the recovery periods and the pattern of recovery. They also demonstrated that the rate of recovery is directly related to the magnitude of disaster damage. Kates and Pijawka (1977) assert that the resources available for recovery, prevailing pre-disaster trends and such qualities as leadership, planning

and organization for reconstruction are important in the rate of recovery. The model was recently applied by Kates, Colten, Laksa, & Leatherman (2006) to examine the recovery of New Orleans after Hurricane Katrina (2005) and was found to be particularly useful in underscoring the length of time required for reconstruction.

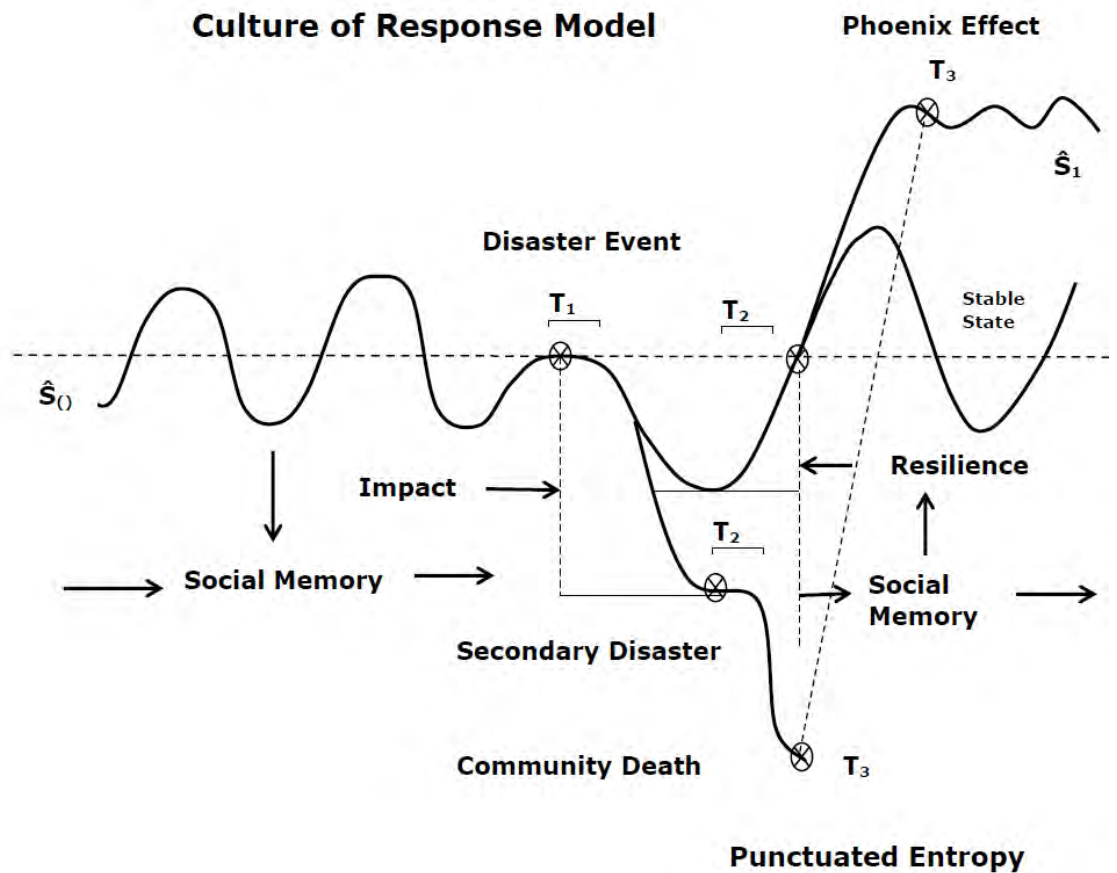
Scholars, such as Rubin (2009) and Alexander (2002), argue that the model developed by Kates and Pijawka (1977) remains empirically questionable and fails to integrate the activities undertaken at a local level. Other critics, such as the National Research Council (2006) persuasively argue that the model is too simplistic and predictable, noting that there can be substantial overlap between periods and most importantly, that different social groups even within the same community may experience recovery quite differently (National Research Council, 2006). In defence, others such as Rovai (1994) argue that such differences are partly captured in the initial length of the emergency period, which serves as an overall measure of both the magnitude of damage and the capacity of different communities to respond to the same hazard event (as cited in Kates et al., 2006, pp. 14655). These differences can be evaluated separately for varied groups within any one community (Bowden et al., 1977). Both the critique from the National Research Council (2006) and that of Rovai (1994) and other researchers are valid and remain influential. At the same time, the recovery model developed by Kates and Pijawka (1977) remains the basis of understanding of the recovery process.

A similar depiction of recovery phases is demonstrated by Alexander (2002) and Cuny (1983), using slightly modified versions of that proposed by Kates and Pijawka (1977). Despite some differences in classification and terminology, however, these versions are fundamentally similar with respect to the characteristics and sequence described. The standard classification according to Cuny (1983) is: the emergency phase, the transitional (or rehabilitation) phase and the reconstruction phase. The emergency phase is characterized by those actions necessary to save lives, the transitional phase includes people's return to work and the permanent repair of infrastructure and damaged buildings and any other actions necessary to help people regain their employment and life-style as quickly as possible. The final phase, reconstruction, is characterized by the building of

new houses and other accommodation, the repair of roads and other community facilities, and the re-establishment of the economy (Cuny, 1983, p. 40). Cuny's classification omits the commemorative betterment and development reconstruction (Reconstruction II) identified by Kates and Pijawka (1977) as the final phase of recovery. Arguably, however, this may be assumed as part of, or as an extension of the reconstruction phase in Cuny's (1983) classification.

The common feature of these models is their inclusion and explanation of relief and recovery support in the context of that provided by external agencies. They pay little specific attention to the actions of community members in a post-disaster situation, although this is tacit in Cuny's (1983) approach. Knowledge of the recovery process therefore emphasises the impact of external support on affected communities. This remained the position until 2009 when Dyer developed a more holistic model, the Culture of Response. Dyer (2009) describes this as a unifying model of human reaction to disaster, or as the culture of response. This, he argues, is determined by the traditionally embedded resilience of a population to a disaster event. In turn, this is influenced by the social memory of disasters, the availability of social and material resources, local disaster aid (including the provision or withholding of aid) and the strategies of external power brokers (p. 313). This model takes into account multiple social constructions of disaster and the involvement of different kinds of community coping and resilience mechanisms. Dyer strongly argues that a diversity of responses is possible and that the balance of responses can result in different consequences. His model specifically highlights two different consequences (Figure 4). At one extreme is sustainable improvement in the social and economic resilience of a community or organization arising from the strategic investment of capital resources after a disaster. This he calls the Phoenix Effect. At the other extreme is a permanent decline in the adaptive capacity of the human ecosystem and the associated economic system as a result of a lack of aid combined with the cumulative impact of periodic and repeated disasters. Dyer (2009) calls this Punctuated Entropy.

Figure 4: Culture of Response Model



Source: (Dyer, 2009, p. 315)

As argued by Dyer (2009), a disaster event causes disruption at T_1 , with a negative outcome expressed in social, cultural, and economic conditions. The depth of the curve (how far it drops below the stable state) is determined by the severity of the event and by the pre-disaster resilience of the impacted community. The disaster response, whether external, internal, or a combination of the two, can either improve or hinder restoration or reconfigure patterns of human/environment interaction (p. 316). Dyer further demonstrates that some communities in a post disaster situation may protest and demand the necessary resources for recovery (McCabe, 1990). For other communities, experience of disaster may lead to the pro-active development of recovery plans in case of some future event (Ronan & Johnston, 2005). Dyer further argues that the capacity to recover is determined by the severity of the event, the internal capacity to recover (resilience), and the degree of internal/external assistance.

Dyer (2009) used his model to examine two major catastrophes in the United States: first, in Alaska, after the tanker Exxon Valdez spilled 11 million gallons of crude oil in 1989, causing economic, cultural, and psychological impacts on large, coastal fishing communities, and second, after the 1992 Hurricane Andrew in South Florida, which resulted in the death of at least 41 people and damaged and destroyed thousands of homes and businesses, with a total cost of over 24 billion USD. In Alaska, the communities never recovered (Punctured Entropy). Instead, as Dyer (2009) shows, they suffered a secondary series of disasters including ongoing debt, litigation-related stress and hardship, loss of economic resources, loss of cultural capital from a diminished subsistence economy, loss of community cohesion and social capital, and post-traumatic stress. Hurricane Andrew, on the other hand, demonstrated the Phoenix effect, and how political groups may implement a strategic response and with on-going support from the national government may secure long term recovery.

Using these examples, Dyer (2009) argues that recovery is a consequence of the nature of the disaster response. An appropriate response can lead to successful recovery, while an inappropriate response can hinder any recovery efforts. This has spawned an increased interest around issues such as who responds, and what responses have the greatest influence on the shape of recovery.

Most of the previously described models, such as those of Kates and Pijawka (1977), Cuny (1983) and Alexander (2002) primarily explain relief and recovery support in the context of that provided by external agencies. Dyer (2009) however, examines the response of both community and external agencies that occurs at a community level. Dyer, however, attempts to identify the recovery trend rather than the process and unlike with the other models, fails to identify and categorize response actions. Irrespective of the different focus of the explanation of response and recovery, all the models remain focused on large disasters.

2.6 Constructing Local Realities: Understanding the Role of Key Actors in Disaster Recovery

Multiple actors may be involved in disaster recovery, including the affected population itself, local leaders, local institutions or organizations, government bodies (national, regional and local), media, military, police, national and

international humanitarian agencies and development NGOs (Aysan & Davis, 1993; IFRC, 2001; Telford, Cosgrave, & Houghton, 2006; Dyer, 2009)

Some actors or agencies, particularly those associated with the media and humanitarian aid, commonly pull out after the initial relief phase (IFRC, 2001; Col, 2007). In the longer term only a few agencies, mostly local, continue to support disaster affected communities. This is illustrated with respect to Orissa, India, in the aftermath of a major cyclone in 1999 (IFRC, 2001). Orissa attracted a lot of media attention and a large influx of humanitarian aid. The Ersama area within Orissa was the most affected and became the top priority for many agencies. Despite huge support, a year later, Ersama still hadn't made significant progress towards recovery. By then most of the aid agencies had left, and most of those that remained were locally based. Media attention had shifted to the larger centres.

Governments, both local and national, typically have a mandatory role to support affected populations and consequently commonly are important in all phases of a disaster, before, during and after (Blaikie et al., 1994; Sullivan, 2003; Col, 2007). The IFRC (2001) states that governments have a key role in providing information, policy coherence and financial assistance for response and recovery after disasters. Governments, whether by means of national, regional or local plans, policies and strategies, or in their role in promoting coordination and collaboration with non-government agencies during relief and recovery can play a powerful role in the recovery process (Davis, 1993, 2011; Kennedy et al., 2008; Amaratunga & Haigh, 2011). Other governmental plans and policies such as land use regulations, building codes, poverty reduction, employment generation, and natural resource management may be equally important in reducing a community's vulnerability whether before, during or after a disaster (Shaw & Goda, 2004; Amaratunga & Haigh, 2011).

In most cases, however, government actions have been found to be stereotypical responses that ignore the local context, and may even amplify existing socio-economic problems (Blaikie et al., 1994; Ingram et al., 2006). Blaikie et al. (1994) bluntly state: "Official relief and recovery take little account of what ordinary people do" (p. 120). The same authors demonstrate that communities have their own coping strategies for recovery, including reciprocal social systems and social

support networks. Equally, they argue, while the integration of indigenous coping mechanisms into relief and recovery is not easy, it is important. They conclude that government plans and actions need to respect the knowledge and practices of ordinary people, otherwise the result is wasted resources, squandered opportunities and a further erosion of vernacular coping skills. Similar views have been expressed by scholars such as Wisner (1993), Ingram et al. (2006), and Amaratunga and Haigh (2011). As a result, if government actions and strategies do not respect communities' own response mechanisms, they may distort established social structures and cultures and block access to the resources needed for employment and well-being. Ingram et al. (2006) illustrate this, drawing on Sri Lankan experience after the Asian Tsunami (2004). The Government's establishment of a coastal buffer zone exacerbated socio-economic problems, leading to the collapse of that policy and ultimately, its withdrawal. Shanmugaratnam (2005) and the World Bank (2005) both point out that the main reason behind this failure was a lack of community consultation (as cited in Ingram et al., 2006). Despite such examples, the role of government in disaster recovery is critical and has no adequate substitute. In fact, in many countries there have been increasing efforts by national governments to improve response and recovery mechanisms and mainstream disaster risk reduction in general development works, plans and policies (UNISDR, 2011).

Local communities themselves have been identified as potentially key actors in disaster recovery (Davis, 2011). Prior to this realisation, local communities affected by disaster were (as previously noted) typically portrayed as victims entirely reliant on external support for recovery (Wisner et al., 1977; Wisner et al., 2012). More recently research by Bankoff (2007) and Chamlee Wright and Storr (2011) have shown local communities are key actors in disasters including in preparedness, relief and recovery. This has shifted the focus of research attention and forced an acceptance of culture as a core element that strongly influences people's behaviour, actions, perceptions and knowledge (Wenger, 1978; Oliver-Smith, 1986; Blaikie et al., 1994; Gaillard et al., 2008). In the process, „culture“ has been demonstrated to be a major determinant in how local communities respond to disasters and disaster recovery (Quarantelli, 1978; Blaikie et al., 1994; Ingram et al., 2006; Wisner et al., 2012). The role of culture in disaster response is

in particular, frequently discussed in the context of *local knowledge* and *social capital*.

2.6.1 The Science of People: Local Knowledge in Disaster Response and Recovery

In the literature, local knowledge is equated with „people’s science“ (Wisner et al., 1977) referring to people’s understanding of their environment and capacity to respond to natural hazards. Such knowledge is also referred to as indigenous knowledge, traditional knowledge (Sillitoe, 1998) and inside knowledge (Mercer, 2012).

Brokensha et al. (1980) describe local knowledge as that acquired over time through the accumulation of experience, society-nature relationships, and community practice and institutions. Consequently, it may be passed down through generations (as cited in Mercer, 2012, p. 99). Over time such knowledge becomes embedded in a community’s culture. In disaster studies, this specific form of local knowledge was formerly termed a disaster subculture (Anderson, 1965; Wenger & Weller, 1973; Wenger, 1978). Moore (1964) was the first to develop the use the concept to describe the set of cultural defences developed to cope with recurrent dangers (Wenger & Weller, 1973, p. 1). Subsequently, Anderson (1965) defined a disaster subculture as “those subcultural patterns operative in a given area which are geared towards the solution of problems, both social and non-social arising from the awareness of some form of almost periodic disaster threat” (p. 3). He further states that a community’s disaster subculture serves as a blueprint for people’s behaviour before, during and after a disaster, and includes cultural elements such as norms, values, beliefs, knowledge, technology, and legends (Anderson, 1965).

Gaillard et al. (2008) examining the response to the 2004 earthquake and tsunami in Aceh, Indonesia, demonstrated that different ethnic groups respond differently. This, they explain, is due mostly to the different sub-cultures within those groups. The work by Gaillard et al. involves three different ethnic groups: the Acehnese and Minangkabau who both reside in the province of Aceh and the Simeulue on a neighbouring island. About 170,000 Acehnese and Minangkabau people died in the disaster, but only 44 Simeulue. Moreover, Simeulue Island was located closer

to the epicentre of the earthquake and was subject to a greater risk. Among the Simeulue people, knowledge of tsunami was rooted in oral accounts of a similar event in January 1907, which killed between 400-1800 people, rendering coastal areas infertile for many years. Many Simeulue were knowledgeable about tsunami and their potential impacts because of what their parents or grandparents had told them. In 2004, when only 20 minutes after the earthquake the first waves of the tsunami reached Simeulue, most of the people had already evacuated to the hills with enough rice and other foodstuffs to keep them alive for a number of days. On the other hand, the Acehese and Minangkabau populations neither detected nor anticipated the tsunami. A significant proportion of the Minangkabau people had settled in the region within the previous ten years. Unlike the Simeulue, many of the Minangkabau were not traditionally associated with marine employment, and had significantly less knowledge of their environment. They had no direct experience of tsunami and no previous knowledge or oral traditions related to tsunami (Gaillard et al., 2008).

The value of a disaster sub-culture is not limited to the emergency phase as illustrated in Aceh. It can be equally valuable in all other phases of recovery (Anderson, 1965; Wenger & Weller, 1973). Smart and Smart (2009) use the promotion of multi-storey housing in Hong Kong following a series of fires to illustrate this point. Between 1950-1960, at least 200,000 people lost their homes in the squatter settlements of Hong Kong through a series of fires. The government could not ignore this. Their initial response proved inadequate. With each fire, however, the government modified their programs, and became more effective in building a new disaster sub-culture. Eventually the government embarked on the construction of resettlement estates. This eventually became a much wider public housing system that now houses half of Hong Kong's population and has been given substantial credit for minimising the previous risk of fire and other associated problems (Schiffer, 1991; Smart & Lee, 2003).

2.6.2 Building from the Bottom-Up: Understanding Social Capital

Social capital is viewed as a fundamental ingredient in a community's capacity to respond to disaster events (Gaillard, Maceda, Stasiak, Berre, & Espaldon, 2009; Aldrich, 2012; Mercer, 2012). Social capital incorporates both the fundamental values that enable collaboration among community members and their

organisations. Originally viewed as the attributes that accrue to individuals through their social networks (Bourdieu, 1986) it has also been described as a productive resource that exists within social networks (Coleman, 1988). Building upon this, Coleman further interpreted it as mutual trust, information channels and effective social norms (Coleman, 1988). Since then it has been further extended by scholars, such as Putnam, Leonardi, & Nanetti (1993) to refer to features of social organization including trust, norms and networks that improve the efficiency of a community or a society in general to engage in coordinated endeavours (p. 167).

In times of crisis, social capital gives individuals access to strong social networks that may involve credit associations, cooperative societies, self-help organizations, and the like (Swaan, 1988). In many poor agrarian societies this can be manifest in traditional reciprocity customs and practices which allow farmers to take voluntary actions for the collective benefit (Bankoff, 2007). In all cases the underlying principle is the expectation that aid freely rendered in a time of need will, at a future point of need, be repaid in kind (cited in Bankoff, 2007, p. 330).

In the context of disasters, several studies have emphasized that social capital increases community resilience, and aids preparedness, response and recovery (Bolin & Patricia, 1978; Oliver-Smith, 1986; Bankoff, 2007; Gaillard et al., 2009; Chamlee Wright & Storr, 2011; Aldrich, 2012; Pelling, 2012). This is evident in the post disaster experience of the 1995 Kobe earthquake in Japan when community organizations were shown to play a vital role in relief and recovery (Shaw & Goda, 2004). Similarly, in the 2001 Gujrat earthquake in India, communities with a high level of social capital (such as strong kinship ties and a powerful social network) supported efficient rescue, relief and recovery measures (Nakagawa & Shaw, 2004). Brouwer and Nhassengo (2006) examined the value of social capital in a case study of community response to floods in the Limpopo Valley in Mozambique. They identified how established exchange relationships within communities support recovery. The floods which hit the area in 2000 were massive, and their impact devastating. Brouwer & Nhassengo show that social capital as evident in exchange relationships enhanced survival and recovery for the people involved in many different, small ways.

The impact of social capital in disaster response and recovery was identified by Oliver-Smith (1986) in a study of Yungay, Peru, as a series of social networks and relationships. Yungay has a culture involving strong socio-cultural relationships in the form of godparents, and godchildren that for the poor, provide economic support and security during hard times, and for the rich, provide pride, satisfaction and respect. The devastating earthquake of 1970 killed a large number of people. The survivors grieved for the dead including their godparents and godchildren. Establishing equivalent relationships was a priority in their recovery, and began to emerge among survivors within six months of the disaster.

The above examples highlight how the recovery process can be significantly influenced by the direct involvement and action of the communities concerned. Both local knowledge and social capital embedded in communities may be major contributors to resilience. Current understanding suggests that it is the combined involvement and interplay of local institutions (including government) and the social capital found in local communities that are key determinants in the recovery process.

2.7 Conclusion

Understanding of disaster and disaster recovery has evolved over time. Several key concepts or ideas have been developed that, as discussed, continue to shape understanding of disaster occurrence, impact, and recovery. The concept of vulnerability, rooted in the broader idea of marginalization, remains a central theme. According to this concept, disasters are recognized as less dependent on the severity of a physical event, and more on the degree of people's vulnerability and their ability to respond. The root cause of disasters therefore lies not in environmental or other natural conditions, but in global, national and regional economic systems, gender relations, legal rights, and other social-political arrangements which influence or determine the allocation and distribution of resources among different individuals and social groups and create unequal access to power and resources. In effect, the poor and marginalized are the most affected by disasters because they are particularly vulnerable and lack access to effective means of protection.

The concept of resilience is equally accepted as important, particularly in post-disaster situations. Resilience is understood as a community's capacity to absorb and recover from the impact of a disaster and so is central to successful recovery. Successful recovery must be understood not as "bouncing back" but as "bouncing forward" in a positive manner, and this can only be attained by a reduction of any pre-existing vulnerabilities or by the building of stronger communities in the face of any hazard and risk.

Recovery is a slow process and many factors influence its progress. The affected population and communities are the key actors. Local knowledge and social capital are core to determining people's ability to recover. Similarly, external interventions from the government, aid and development agencies play significant roles in shaping recovery.

Existing recovery models remain dominated by the nature and extent of external support provided to affected communities in the aftermath of a disaster. However, much recent literature suggests that local affected communities are key actors in their own recovery process. Understanding of the disaster recovery process from the perspective of these key actors remains limited. A further gap in understanding is the general paucity of research on small-scale disasters, despite growing evidence that these have a major negative, chronic impact on people and development. Moreover, not only is understanding of small scale disasters limited, there is no understanding of the recovery process associated with such disaster. The established recovery models are garnered only from the experience of large-scale disasters; the applicability of such models in the wake of small-scale disasters remains unknown. It is this gap that this thesis is designed to address.

Chapter Three

Unheard Voices, Unseen Communities: Framing the Research and Methodology

3.1 A Conceptual Framework

Chapter Two presented the key concepts identified in the literature which provide a framework to integrate, explore and test the ideas that underpin this thesis. They also provide a structure for the organisation of the remaining chapters. Blaikie et al. (1994) and many other researchers, including Susman et al. (1983) and Wisner et al. (2012) highlight the fact that the root causes of disasters lie not in environmental or other physical conditions, but in global, national and regional economic systems, gender relations, legal rights, and other social-political arrangements (Figure 5). These human structures influence or determine the allocation and distribution of resources among different individuals and social groups that result in their unequal access to power and resources. As a result, some groups are pushed into unsafe living conditions, including dangerous and insecure work and employment arrangements (Figure 5). For example, those who are obliged to live in flood prone areas or, to survive, degrade their environment through over-cropping, over-grazing, or deforestation.

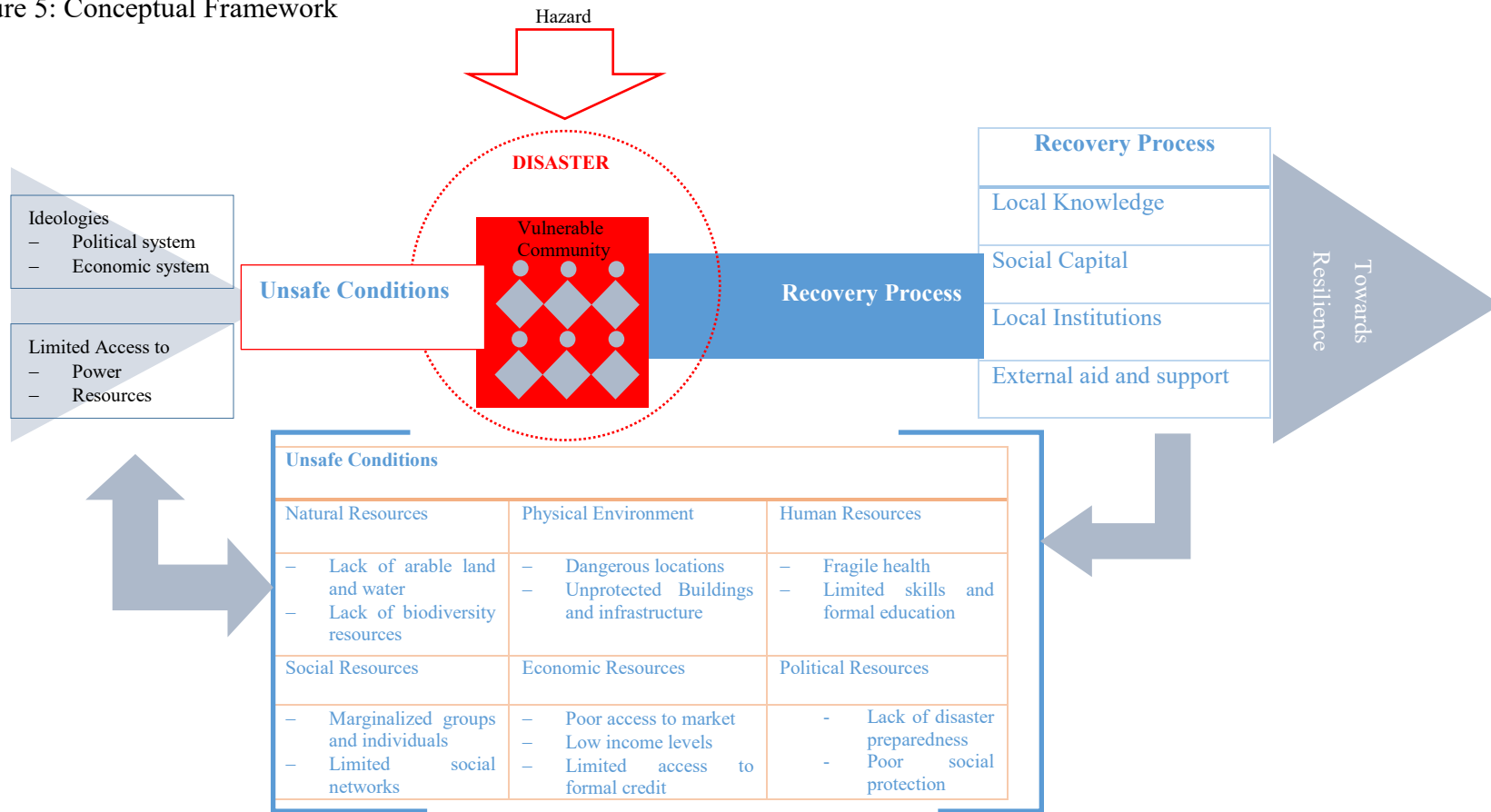
As illustrated in Figure 5, unsafe living conditions may include a vulnerable resource base, a lack of arable land or shortage of water, and a lack of biodiversity, or the often high risks that are linked to dangerous locations, unstable buildings and poor quality infrastructure. Such environments are frequently home to people with poor health, limited skills and who lack a formal education and those who are also typically characterized by marginalization, weak social structures, poor market access, low incomes, and limited access to credit. In such circumstances, disaster preparedness is commonly lacking or weak. Living and working in such conditions make people particularly vulnerable to a range of hazards. When such hazards occur, disaster frequently follows (Figure 5).

The extent to which a disaster affected community recovers is determined by how well it manages to address the unsafe conditions that lead to disaster (Figure 5). This further highlights that in the context of disaster, recovery must be understood as “building back

better”, the reduction of pre-existing vulnerabilities and the creation of more resilient (safer) communities, better equipped and prepared to face any hazard and risk. In this context, resilience is a measure of a community’s capacity to absorb and recover from the impact of disaster and so, as central to successful recovery. In the longer term, addressing unsafe conditions generates its own challenges (Figure 5).

It is clear from the literature that recovery is due to the interplay of many different factors within a social system that helps shape recovery (or as in many cases, a lack of their effective interplay). These factors include local knowledge, social capital, external aid and support, and the nature of the response from local institutions, and government (Figure 5).

Figure 5: Conceptual Framework



Source: Author

The conceptual framework (Figure 5) highlights how the concepts of vulnerability, resilience and marginalization are fundamental to the occurrence and impact of disaster and to the recovery process as a whole. It bears repeating, however, that the conceptual framework, which is largely based on understandings drawn from the literature, is still grounded within studies of large-scale disasters.

Although little detail is known about small-scale disasters, it is commonly accepted that they differ in some essential ways from large-scale disasters: they are confined to small areas, localities and communities; They tend to be recurrent, so their impact is most likely to be chronic, and they less frequently receive substantial external aid (Marulanda et al, 2010; LA RED, 2002; Wisner & Gaillard, 2009). Some other key differences can be projected. For example, studies have demonstrated that recovery for poor and marginalized populations is often particularly challenging because they lack access to various kind of resources. Indeed, Blaikie et al. (1994) have argued, using the concept of the „ratchet effect“, that a lack of access to the resources necessary for recovery can result in the further marginalization of communities and a higher degree of deprivation. This makes them even more vulnerable to any subsequent hazard. Evidence of a ratchet effect is however less detectable in the context of large disasters, where it is rarely discussed. In this current study of small-scale disasters, evidence of the ratchet effect may be more pronounced. Equally, small-scale disasters sometimes follow an annual cycle, which means that affected communities may often experience a further disaster while still recovering from a previous one. As a result, understanding of the processes or drivers of disaster and the recovery phenomenon in small-scale disasters could differ from that of large disasters.

This study uses the conceptual framework to examine recovery in the context of small-scale disasters. The ideas and themes highlighted in the framework provide a basis for analysis. In this way, the study builds and extends the knowledge of disaster recovery in the aftermath of small-scale disasters. Designed to facilitate analysis, the framework should also help boost discussion and promote insight. It provides a reference base against which recovery in response to small-scale disasters can be closely examined.

Moving from the conceptual framework (in effect a theoretical paradigm) to the empirical world, the study adopts a set of strategies and methods that are believed to be most effective in examining the recovery process in the aftermath of small-scale disasters.

3.2 People's Voices

A fundamental premise of this thesis is to allow the experience of disaster and the recovery process to be expressed and heard through the voices of those directly impacted. This and a number of other considerations, from the first supported the value of using case studies as a central component of the research methodology. Case studies allow for insight on the recovery process as experienced by people in the aftermath of small-scale disasters. They also provide a means to assemble empirical information and to generalize about the experience of poor people living in remote areas when exposed to small-scale disasters. To this extent, the case studies in the thesis can be viewed as Instrumental Case Studies (Denzin & Lincoln, 2000), where a case study is of secondary interest, playing a largely supportive role to facilitate understanding of some other larger issue or theme. This, however, as Denzin and Lincoln (2000) also point out, still requires that case studies are examined in depth, their context scrutinized, and their ordinary activities detailed. All these components help the researcher to pursue their external interests (p. 437). In this thesis that „external interest“ is to understand and examine the process of recovery.

The use of case studies, as described by Denzin and Lincoln (2000), goes beyond the long established value of case studies as an approach to investigate phenomena within a real life context (Eisenhardt, 1989; Stake, 2000; Yin, 1994). In this thesis, case studies are designed also to test the ideas described in the conceptual framework.

3.2.1 Case study selection

The identification and selection of communities for detailed examination and data collection involved four steps (Table 2).

Table 2: Selection process of study communities

Stages	Section	Criteria	Selection tools
Stage 1	County level Selection of Case Country		
	Case Country „Nepal“	Poor economy; Social Marginalization; Remoteness; Numerous small disasters; and Researcher’s familiarity with the overall socio- cultural and political setting	Purposive
Stage 2	Regional level Selection of Study Regions		
	Study Regions Far Western Region Mid-Western Region	Comparatively poor; Marginalized; and prone to natural hazards	Secondary data analysis: Comparison of indices such as HDI and HPI Secondary information from the national risk profile of Nepal
Stage 3	Community level Selection of study communities		
1	Selection of districts within the selected study regions		
	Districts (2) Baitadi Kailali	Marginalized; and prone to natural hazards Possibility to find diversity in terms of geography, and mixture of social groups Doable given the time and resource constraints of the field work	Series of consultation with governmental and non- governmental agencies involved in disaster recovery related work in national level
2	Selection of communities within the selected districts		
	<i>First round of selection (in December 2012) Two communities:</i> Bangabagar (Gokulae Gaun) in Gokuleshwar VDC of Baitadi district, and Paladi Gaun in Nigali VDC of Kailali district	Communities affected by small-scale disaster or series of such disasters; Communities that comprise of mixed social groups; and Available time and budget	Informal advice/discussion with regional and local authorities, and international, national and local NGOs in the study area re suitable communities, and Scoping visit to ground-truth advice and confirm potential sites (involves observation, informal talks with the local residents and local passing by)
3	<i>Second round of</i>	Communities affected by	Observation

	<i>selection (in November 2013- February 2014) (Additional seven communities)</i> Kichan, and Patreni in Nigali VDC of Kailali district, and Kholigaun, Devgaun, Shaungaun, Dalit tole, and Kuyadaha in Gokuleshwor VDC of Baitadi district	small-scale disaster or series of such disasters Communities located in the neighbourhood of previously selected communities (at least <3 hours of walk).	Informal talks Participatory mapping (as is discussed in the upcoming section)
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Source: Author

Stage 1 required the identification of an appropriate country. Nepal was chosen because it is a country where disasters are numerous and vulnerability to hazards is high. Poverty, social marginalization, and physical remoteness are also characteristics of many Nepalese communities. As a born and bred Nepalese citizen, I am familiar with the physical, socio-economic, cultural, and political character of the country. I also speak the national language, Nepali. These were major advantages, both at a practical level and in allowing me to apply what I believed was a necessary ethnographic approach to my work. Without my knowledge of the national language, my cultural awareness and sensitivity, the approach adopted would have been unrealistic and certainly not feasible within the time constraints inherent to a PhD.

Stage 2 required the identification of a study region. The region had to meet two criteria: firstly, it needed to highlight the issue of small scale disasters, and secondly it needed to facilitate a broader study into the recovery process. As there are few available statistics on small-scale disasters, it was unrealistic to identify the study region solely based on national records; consequently selection involved using secondary data from newspapers and other sources including The Human Development Index (HDI)⁵ and the Human Poverty Index (HPI)⁶ (UNDP, 2011)

⁵ The Human Development Index (HDI) is a summary measure of human development using three dimensions: A long and healthy life measured by life expectancy at birth; knowledge, measured by an aggregate of the adult literacy rate (two-thirds) and the combined gross primary, secondary and tertiary enrolment rates (one-third); and a decent standard of living, measured by gross domestic product (GDP) per capita in purchasing power parity (PPP) US dollars (UNDP, 2009, pp. 143).

⁶ The Human Poverty Index (HPI), is a multi-dimensional measure of poverty introduced in the Human Development Report 1997. It is a reverse image of HDI that focuses on human deprivation instead of achievement. While HDI measures average achievement, the HPI-1 designed for the less wealthy countries measures deprivation in the three basic dimensions of human development included in the HDI and therefore

as well as information from the national risk profile of Nepal developed by the Global Facility for Disaster Reduction and Recovery (GFDRR) and endorsed by the Government of Nepal (Government of Nepal & GFDRR, 2012). Measures such as the HDI and HPI are criticized as unsuitable for micro-level analysis (Anand & Sen, 1992; Harttgen & Kalsen, 2011; Kelly, 1991). They have, however, been widely used to describe, compare and communicate countries' development status (Wolff, Chong, & Auffhammer, 2011).

While newspapers, accounts, and the national risk profile of Nepal were used to identify those regions most prone to hazards, the HDI and HPI were useful in determining the poorest regions. Together, these sources allowed for the identification of the Far Western Development Region and the Mid-Western Development Region as among the poorest regions in Nepal⁷, remote from all major facilities and prone to a range of natural hazards (Map 1).

brings together in one composite index the deprivation in each of the three basic dimensions of human life, a long and healthy life, knowledge, and a decent standard of living (UNDP, 2009, pp. 148).

⁷ Nepal is divided into five development regions: Eastern Development Region, Central Development Region, Western Development Region, Mid-Western Development Region, and Far-Western Development Region.

Map 1: Nepal and its Development Regions



Source: (UNOCHA, undated)

The study communities were selected in two rounds (Table 2). Prior to a scoping visit (December 2012-January 2013), a preliminary group of communities was identified from available, published data. The second stage occurred during field work in late 2013 and early 2014.

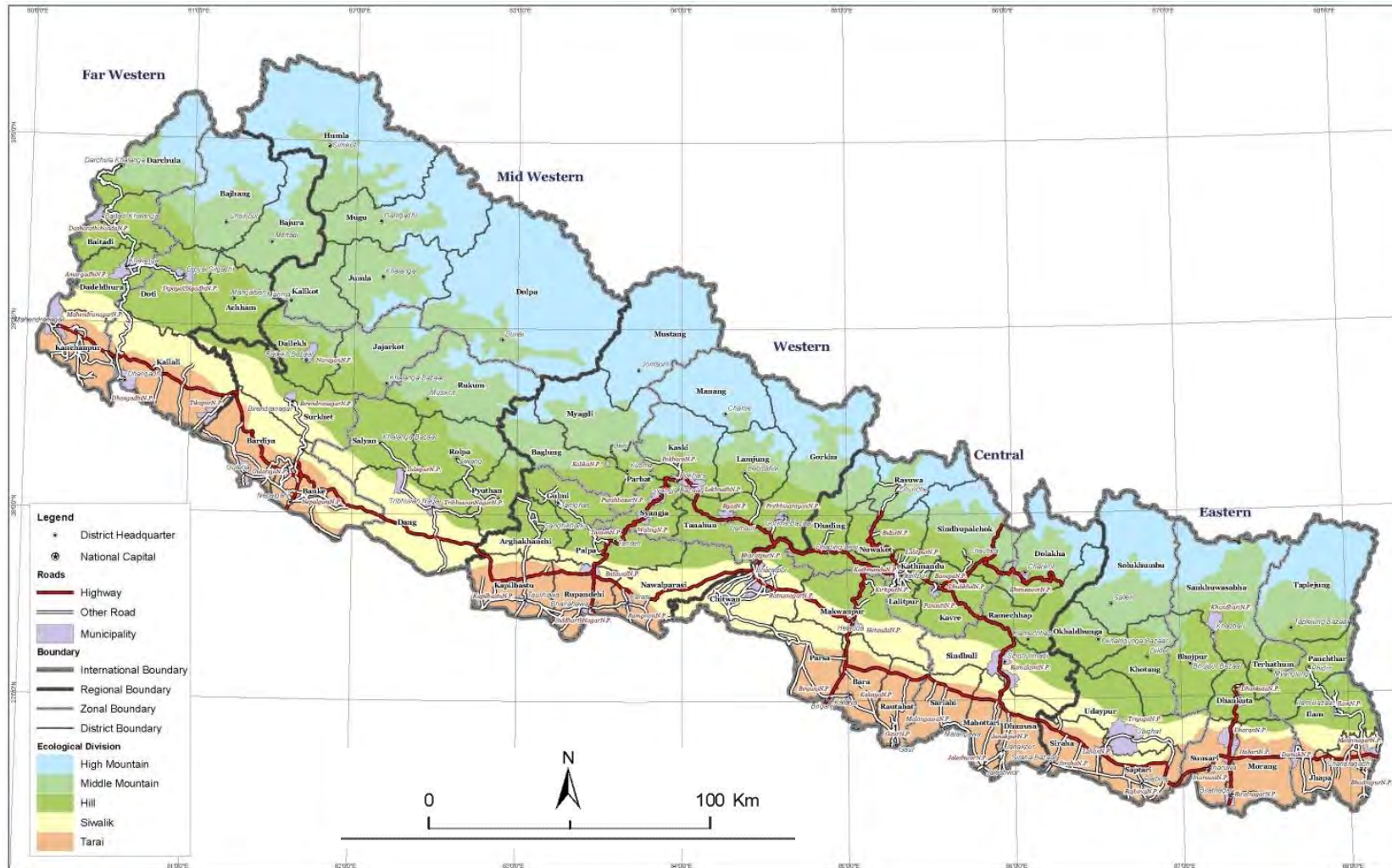
As a basic premise, it was assumed that all communities in the study regions were equally affected by disasters and potentially appropriate for detailed analysis.

The original plan was to select communities from at least two of the five recognised physiographic regions in Nepal⁸ (Map 2). These regions are susceptible to different kinds of natural hazards and each has been settled by different ethno-cultural groups, that all have their own cultures, religious practices and ways of life.

During the scoping visit, it became clear that it was unrealistic, because of time constraints, to include more than one physiographic region in the study. In effect, within the constraints of one thesis the incorporation of different kinds of natural hazards, different social systems and different local networks was unrealistic both practically and academically. The result was consequently a focus solely on communities within the Hills region of Nepal.

⁸ The geography of Nepal is divided into five physiographic regions. The five physiographic regions are the High Himalayan Region [2,500- 8,848m meters above the sea level (masl)], High Mountain (2,000-2,500masl), Middle Mountain or Hills (700-2,000masl), Sivalik hills (300-700masl), and Tarai (<300masl). For simplicity and general use, the classification, however, is taken to have three broad regions: Mountains, Hills and the Tarai. High Mountain, Middle Mountain and Sivalik hills fall within the Hills region.

Map 2 Administrative divisions and physical landscape of Nepal



Source: (UNDP, 2011)

Further considerations in the selection process included the wish to explore communities with a mix of caste and ethnicity. In Nepal, a complex caste system defines one's social class and the social hierarchy. Despite numerous legal and institutional reforms over many years, deeply rooted class divides persist and lower castes and ethnicities⁵ generally remain both socially and economically worst off (Bennett, 2005). The literature documents a relationship between the occurrence and impact of disasters and people's access to resources (O'Keefe et al., 1976; Blaikie et al., 1994; Cannon, 1994). Access is in turn believed to be strongly influenced by unequal power relations based on class, caste and gender (Wenger, 1978; Susman et al., 1983; Blaikie et al., 1994). Heterogeneous communities therefore offer a particularly useful context to explore how these different factors impact upon people's perceptions and the experiences of disasters, and helps understand how different groups cope with the same or similar disastrous situations.

The Far Western and Mid-Western Development Regions (the chosen study region) are made-up of 24 Districts⁶, each of which includes well over a hundred small communities. To narrow the focus to a District level required a process of consultation with officials in government and non-government departments and agencies involved in disaster recovery. This took place in November and December 2012. At a national level, consultation included officials in The Ministry of Home Affairs, and the Department of Water Induced Disaster Prevention of the Ministry of Irrigation. National and international NGOs were also consulted, and these included the Nepal Red Cross Society (NRCS), Mission East-Nepal (ME), Mercy Corps-Nepal, and the Disaster Unit of the United Nations Development Programme.

Issues explored included where these organizations do or do not work, their experience in those areas, and their views as to which Districts they believe met the predetermined criteria (see, Table 2) and were physically accessible within the constraints of field work. There were a range of responses, but consultation provided useful insights, including the type of hazards and the social make-up to be found within the different Districts, as well as valuable advice with respect to access, transportation and matters of personal safety. They also provided the

⁵ Caste and ethnicity are the basis of key social groups. These terms are used interchangeably in everyday conversation as well as in national census reports and reports by Government and International organizations (Hutt, 1997) and without clear distinction (Tilouine, 2009). The two groups are however different (Gray, 2012). Caste has long been the predominant basis for the organisation of society as well as governance. Whereas ethnicity focuses on the cultural-historical-linguistic characteristics, and distinguishes different ethnic groups. According to Gray (2012) the General Code of Nepal of 1854 (revised several times until 1953) used the caste system as one of its principal nation building functions by integrating ethnically diverse groups (are now called ethnic groups) into a hierarchy of castes.

⁶ The five development regions (footnote 7) of Nepal are sub-divided into 14 administrative zones and 75 districts. Each district has several Village Development Committees (VDCs) and municipalities. Every VDCs has several villages or communities. A village development committee (VDC) is the lower administrative unit in the local development ministry. Each VDC has 9 wards. Municipalities may have 9 or more wards, the maximum is currently 35.

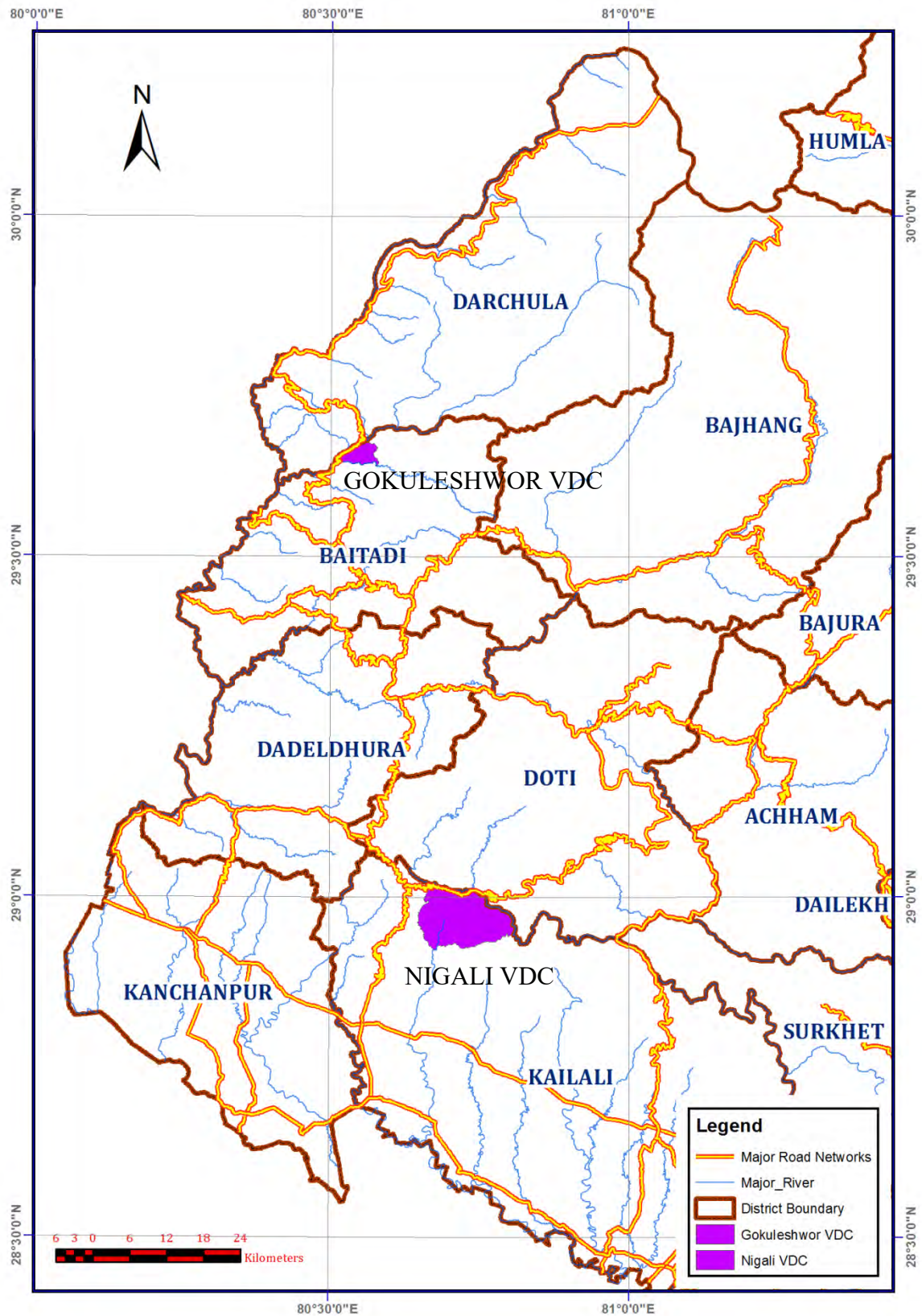
names of possible contacts at a District and community level. These factors together with a consideration of time and budget constraints highlighted Baitadi and Kailali, two Districts in the Far Western Region, as the most appropriate for investigation (Map 3).

In the period December 2012 - January 2013, a scoping visit was organized including to Government headquarters in Kailali and Baitadi to meet and consult with officials, and visit local branches of the Red Cross and INGOs. The goal was to collect background information about specific communities and to better identify and understand the hazards faced by these communities. After a week of consultation and examination of the limited documentation available, sixteen communities were identified for closer examination. However, time and budget constraints meant that only five of the sixteen communities were visited. Nevertheless, decisions about the communities visited were carefully considered in terms of their location, geography, culture and hazards they face. Two of these communities visited were in the Terai Region, three in the Hill Region.

Initial scoping visits allowed the direct observation of disaster affected neighbourhoods and allowed informal conversations with local residents. They also generated chance meetings with people from neighbouring villages and the opportunity to validate information about the five potential study communities. The outcome of this work was the identification of two communities, *Bangabagar (Gokulae Gaun)* in Gokuleshwor Village Development Committee (VDC) of Baitadi District and *Paladi Gaun* in Nigali VDC in the Kailali District (both in the remote hills of the Far Western Region) for detailed field work (Map 3). These two communities were identified as best meeting the predetermined selection criteria. In addition, unlike the other three potential study communities visited, they had no aid agencies currently working in their neighbourhood.

Both the selected communities are subject to frequent hazards, particularly landslides. Community members met during the scoping visit confirmed that they were subject to recurrent disasters (most recently between June and August of 2012). Both communities were heterogeneous in terms of caste, ethnicity and gender. The Far Western Region is also one of the poorest regions in Nepal, and the communities selected are relatively remote within this already remote Region (periphery of periphery- marginality). Life in these communities is difficult, as poverty is compounded by geographic isolation and extremely poor communication links with the rest of the country.

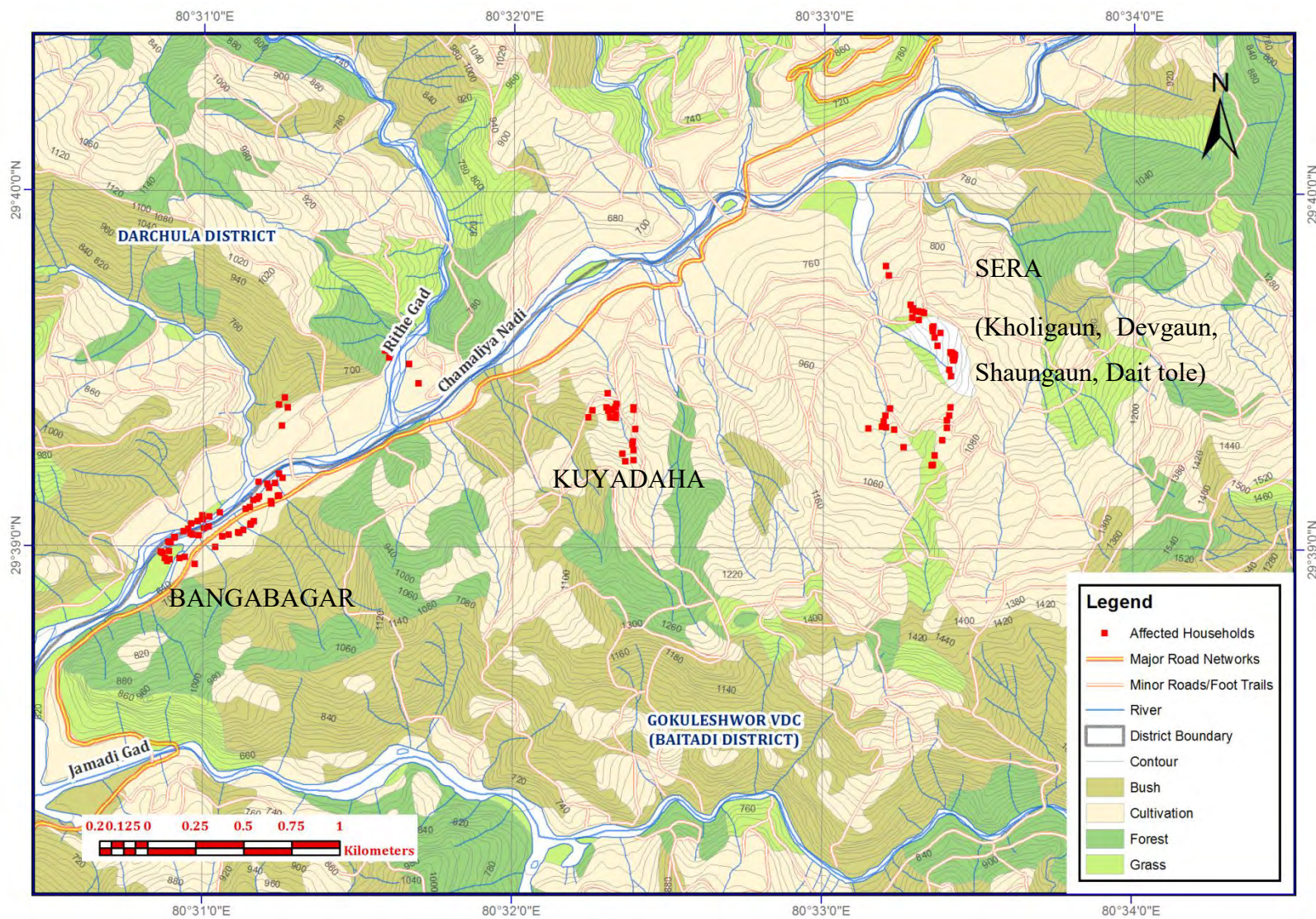
Map 3: Location of study area



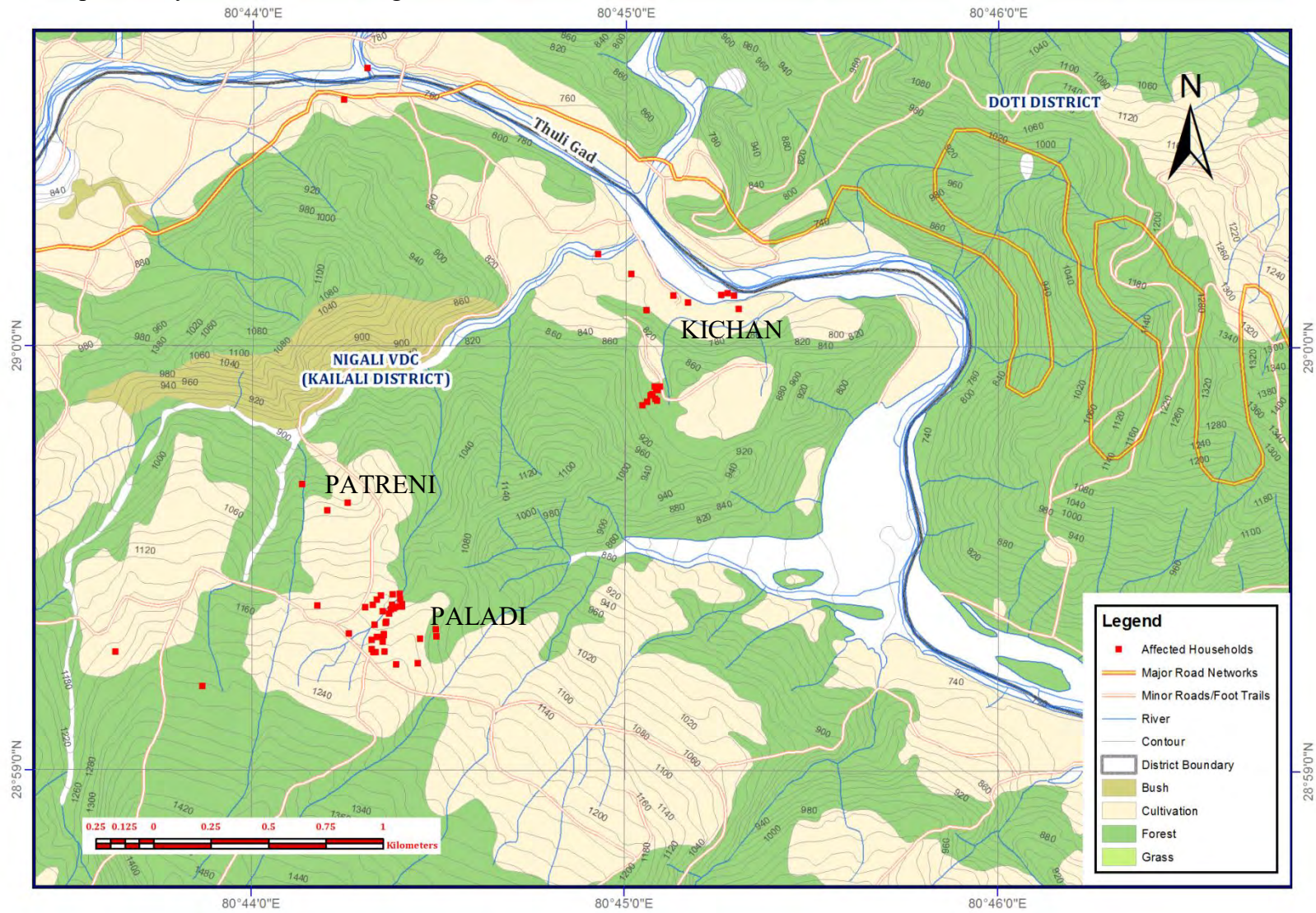
Source: Author's own (based on GIS data from the Survey Department, Government of Nepal)

While working in the field in November 2013 till February 2014, a further seven communities were added, bringing the total number of study communities to nine. After two weeks of ethnographic and participatory research in the initial two selected communities, it became clear that they contained many fewer households that had experienced disasters than had previously been understood. Additionally, it emerged that several neighbouring communities met the selection criteria and could be readily incorporated into the field work to extend the sample population. The additional communities were close to one another, and only about 3 hours walk from the initially selected communities. In this area of steep, hilly terrain, a walk of 3-4 hours is considered short. Landslides are the major hazard experienced in the two original sample communities and in six of the additional communities. Floods dominate in the seventh. The seven additional communities are: Kuyadaha, Kholigaun, Devgaun, Shaungaun, and Dalit tole in Gokuleshwor VDC of the Baitadi District, and Kichan gaun and Patreni gaun in Nigali VDC of Kailali District (Maps 4 and 5).

Map 4: Study communities in Gokuleshwor VDC, Baitadi District



Map 5: Study communities in Nigali VDC, Kailali District



3.2.2 Listening to Community Voices

To understand disasters and the recovery following a disaster as experienced by those impacted requires an understanding of their perceptions, their experience of the recovery process, and an understanding of the context in which they live. Statistical data were largely unavailable, and indeed were unlikely to have provided the insights required. Qualitative techniques are well established and commonly accepted as the best means to understand people's behaviour and actions. Denzin and Lincoln (2000) and Flick (2009) state that these offer an interpretive, naturalistic approach to the world and allow for the study of phenomena in their natural settings, providing a means to make sense of, or to interpret, phenomena in terms of the meanings people bring to them (p. 3).

Several different research tools were adopted. The value of the multiple perspectives these different tools provide is recognised in the literature (Tashakkori & Teddlie, 2003). Krishna (2007) supports this, arguing that the adoption of an effective problem solving approach is better than striving for purity of technique (p. 16), while Flick (1998) identifies how a combination of methodological practices is the best strategy to provide rigour, breadth, complexity, richness, and depth (p. 21), and is the best means to secure a broad, in-depth understanding of the multi-dimensional aspects of an issue. A multi-method approach has the additional value of allowing for effective data triangulation (Flick, 2009; Tashakkori & Teddlie, 2003).

This research aims to better understand disasters and disaster recovery from the perspectives of people from isolated, poor, and marginalized areas who are affected by small disasters that often do not attract external attention. The research seeks to gain an in-depth understanding of the concerned people, the place, their views on the disasters they face, and their life experiences before, during and after disasters. However, small-scale disasters are little documented, and little data is available about the small disaster events and the people affected. Practical and academic considerations led to collecting data through semi-structured interviews, in-depth (informal) interviews, and ethnographic techniques. Geographic data was also collected using a GPS. Table 3 highlights the main features of the tools used and their application in the field.

Table 3: Strategies, Criteria and Field Methods

S. No.	Strategy of Inquiry	Target Population	Criteria for Selection	Strategies/ Method/ tools used
1	Semi-structured Interviews	Government and other officials of NGO, INGO, local institutions, local leaders, and prominent scholars	Personnel from key organizations and individuals that are directly and indirectly involved, and influential in shaping disaster recovery interventions in Nepal and worldwide, and (or) personnel who could provide information on the selected communities and issues related to the recovery process	Semi-structured interviews Audio recorded in digital recorder
2	Ethnography	All individuals and households within the case study communities	Individuals and households directly and indirectly affected by small disasters	Participant Observation (includes observation and informal conversation) Field notes (on spot and daily journal)
3	In-depth (informal) interviews	Households within the case study communities	Households who have actual life experiences that will help to get the answers for the issues on question	In-depth interviews in informal approach and natural setting Field notes (on spot and daily journal)
4	Participatory Mapping	Community members of case study communities	Community members present in the informal social gatherings	General facilitation techniques White sheet of chart paper, pencils and color pens
5	Essay writing	School children of grade eight studying in a local school	All students of grade 8	Consultation with school subject teacher Organization of an essay competition
6	Community meetings	Community members of case study communities	Community members present in the meeting	Informal discussion Audio recorded in digital recorder Field notes
7	GPS recorder	Disaster affected agricultural land, affected buildings, important physical and social amenities,	Amenities important for the community, Direct impact of disasters Properties of households that participated in the in-depth interviews	Village walk about GPS receiver

Narrating the disaster: semi-structured interviews

As presented in the conceptual framework, external interventions, mainly by government and aid agencies are typically important in shaping the recovery process, at least with respect to major disasters. It was important, however, to establish and explore the priorities and opinions of government agencies and external actors in small scale disaster recovery. Interviews were arranged with key policy and other agencies including national, regional and local government bodies and development NGOs as well as INGOs, and local institutions directly and indirectly involved in disaster response and recovery. The aim was to gain insight into how key policy agencies view small-scale disasters and recovery. This was seen as vital contextual material to better understand the direct experience of disaster affected households. Agencies were selected for interview based on their roles and influence in shaping interventions at different levels of policy making, coordination and implementation in Nepal (see, for example, ICIMOD & ECHO, 2007; Ministry of Home Affairs, 1999). Experts from other organizations were identified for interview, including the Nepal Red Cross Society (NRCS) and the Ministry of Home Affairs (MoHA).

A total of 23 semi-structured interviews were carried out. Each lasted from 30 to 60 minutes and, with the written consent of interviewees, these were audio recorded. Details are provided in Appendix 1. Eleven interviews were conducted with officials from government ministries and departments, three from the Nepal Red Cross Society a national level NGO (including officials at district branches), seven with international NGOs, and two with international scholars. Attempts were made to interview local academics, but this proved unsuccessful.

At a national government level, two interviews were conducted with key officials involved in policy and coordination in the Ministry of Home Affairs (MoHA) and the Ministry of Federal Affairs and Local Development (MoFALD). MoHA is the central national focus for the management of all disasters related to natural hazards. This Ministry is responsible for the formulation of national policies and their implementation, the preparedness and mitigation of disasters, immediate rescue and relief work, data collection and dissemination, and collection and distribution of funds and resources. The literature highlights the fact that concerned local government authorities are one of the key actors that guide and shape recovery following a disaster. Additionally, MoFALD is a major player in disaster management from a national down to a local or community level, and has a strong influence on all actions to support local recovery. This Ministry also coordinates, supports, facilitates, monitors and evaluates all local governmental bodies in all development work including those related to disaster.

Interviews were conducted with two key officials in the Department of Water Induced Disaster Prevention (DWIDP) and the Department of Hydrology and Meteorology (DHM). DWIDP is the key agency for all water induced disasters. Its primary concern is on training, awareness and research related to disaster management, including the provision of technical and material support in disaster preparedness, rescue and rehabilitation, and during emergency situations. The DHM has a mandate to monitor all hydrological and meteorological activities in the country. It is increasingly involved in establishing flood warning systems.

Regional interviews included Local Development Officers (LDO)¹¹ and Chief District Officers (CDO)¹² in Kailali and Baitadi. Interviews were also conducted with the VDC Secretaries of Nigali VDC and Gokuleshwor VDC. The chairperson of the Ward Citizen Forum¹³ (WCF) of Bangabagar (in Gokuleshwor VDC of Baitadi District) was also interviewed. Key officials in the disaster management section of the national office of the Nepal Red Cross Society (NRCS), and officials from the NRCS district chapters of Kailali and Baitadi were also interviewed. The NRCS is the largest national humanitarian organization in Nepal. Interviews were also conducted with key personnel from some of the most important and influential international organisations and NGOs working in Nepal such as the International Federation of Red Cross and Red Crescent Societies (IFRC), the Nepal Risk Reduction Consortium (NRRC), Mercy Corps, Mission East, Practical Action, Oxfam and the United Nation's Development Program (UNDP).

As explained above, interviews with government and non-government authorities were designed to provide contextual material to evaluate against the direct experience of disaster affected households. These interviews included questions designed to capture interviewees' opinions and insights. They were also designed to identify the priorities of government and key agencies for small-scale disasters, and their respective roles.

The interviews with government officials focused on recovery policies, responses and recovery mechanisms, and how these were implemented, as well as on government priorities and perceived challenges (see, Appendix 1). The focus of questions with non-government

¹¹ Each VDC is guided from the District Development Committee (DDC) headquarters, and the chief of DDC is a local development officer (LDO).

¹² Each district is headed by a Chief District Officer (CDO) responsible for maintaining law and order and coordinating between subsequent levels of Government bodies.

¹³ The Ward Citizen Forum is created by a joint multi donor funded program and implemented by the Ministry of Local Development in every district of the country. WCF is a forum at the lowest administrative level i.e. at the ward level.

authorities concerned their role in disaster response and recovery, their priorities in the selection of the communities, and the disasters to which they responded (see, Appendix 1).

Participation in the i-Rec Conference *Sustainable Post-Disaster Reconstruction- from Recovery to Risk Reduction*, in Ascona, Switzerland in May 2013, provided an opportunity to interview two prominent international scholars and practitioners in disaster recovery, Professor Anthony Oliver-Smith from the United States and Sushma Iyengar, from India. They were interviewed for their opinions and insights on global disasters and recovery (see, Appendix 1). Anthony Oliver-Smith is a member of the Scientific Committee on Integrated Research on Disaster Risk of the International Council for Science. Sushma Iyengar is a founding member of the *Kutch Nav Nirman Abhiyan*, a network of 33 voluntary organizations committed to community-driven disaster preparedness.

Living the Narrative: An ethnographic approach to research

Ethnography is typically characterized as involving an extended degree of participation in the field by the researcher. As described by Hammersley and Atkinson (1995):

In its most characteristic form, it involves the ethnographer participating, overtly and covertly, in people's daily lives for an extended period of time, watching what happens, listening to what is said, asking questions- in fact, collecting whatever data are available to throw light on the issues that are the focus of the research (p. 1).

Others, such as Emerson et al. (2001), Lüders (1995) and Flick (2009) all confirm this view. Ethnography involves the use of a wide range of field techniques, recognizing that each technique or tool used, is closely interwoven with the researcher's participation and observation, and that the subject of study is the whole community. As suggested, participant observation is inherent to ethnographic studies designed to investigate, experience and represent the social life and social processes that occur in that setting. Emerson et al. (2001) and Rock (2001) further emphasize that an ethnographic approach leads to the researcher occupying the dual roles of participant and observer; participant because it is only by attempting to enter into the social life of others that one can ascertain the subjective logic on which that life is built, and observer, because the researcher's purposes are always ultimately distinct and objectifying and require that they stand back and analyse as an outsider (Rock, 2001).

As an ethnographic study, a major part of the research for this thesis hinges on participant observation. As the researcher, I recognized the need to be both participant and observer. I

established myself in the communities, and lived and participated in the everyday life of these communities for three months (Pictures 1 and 2). I took part in community religious rituals, festivals, social event, communal meetings, and informal small gatherings (Pictures 3. 4, 5 and 6).

Picture 1: Homestay mother and her daughters preparing a „special“ dinner (with fish brought by a relative visiting from Terai), Paladi



Source: Taken by the Author, December 2013

Picture 2: Local women who guided me to nearby villages where the affected families are increasingly migrating because of a landslide



Source: Taken by the Author, February 2014

Picture 3: Participating in a Mother's group meeting, Paladi



Source: Taken by a local woman, December 2013

Picture 4: Local Brahmin performing religious rituals for a family, Paladi



Source: Taken by the Author, December 2013

Picture 5: Local women preparing for a feast (to which I was also invited)



Source: Taken by the Author, December 2013

Picture 6: Nepal Red Cross staff conducting vulnerability and capacity assessment with the locals, Dupkikhana, Nigali



Source: Taken by the Author, December 2013

Through my involvement in these activities, I tried to gain insight into the multiple aspects of community life and culture and be recognised as a willing participant in community life. At the same time, I also tried to „systematize my status as a stranger observer“ to achieve the necessary critical perspectives.

As a participant observer, I talked to community members, asked questions using exploratory themes, and used prompts directly or indirectly to encourage discussion. Some chats were brief and spontaneous. Others were pre-arranged, long and deeper. Each and every member of the households in the communities was viewed a person of interest.

Much of the information gathered came from informal conversations which often took place in a tea shop, at the public water tap, in schools, on house porches, and on foot trails. At times I talked with individuals, at others I chatted with groups. Chapter Four discusses in fuller detail how I approached the communities, and tried to gain their trust.

Emerson et al. (2001) and many others believe that participant observation involves not only gaining access to and immersing oneself in new social worlds, but producing written accounts and descriptions that bring versions of these worlds to others (p. 352). The process of textual

production and reproduction which Atkinson (1992) and others regard as the creation of ethnographic work, begins with day-by-day writing up of notes of observations, and reflections concerning „the field“ (Emerson et al., 2001). Writing field notes is an important activity in participant observation. This study uses field notes as a key tool to record observed events, conversations, people and places. Observation, talking, asking questions and interacting with community members was viewed and is an integral part of this approach.

Ethnography, as in most qualitative research, also emphasizes naturalness and the need to develop meticulous, detailed or “thick” description (Emerson et al., 2001). I, therefore, tried to maintain as natural a setting as possible in my conversations. No audio record was made as far as possible. Field notes made at the end of each day were used to keep track of daily observations, conversations and reflections. These field notes provided a primary input for this thesis.

Deepening the Narrative: In-depth (informal) interviews

In-depth interviews with selected households in the communities were also completed as a means to understand the details of the disaster recovery process as experienced by individual, affected households.

According to Fontana and Frey (1994) an in-depth interview is a traditional type of unstructured interview. They view such interviews as going hand-in-hand with participant observation and as an integrated component of ethnographic data collection. Lofland (1984) also points out that many of the data gathered in participant observation come from informal field interviews.

Fontana and Frey (1994) argue that because the goal of informal interviews is understanding, it is necessary to establish rapport with those interviewed. With this in mind, the households for interviews were identified after I had been living in the area for about two weeks, and had built a level of comfort and understanding with community members. The targeted households were those that had been directly impacted by small-scale disasters. A total of 40 interviews were completed. Interviewees were any member of the household, depending on who was available at the time of my visit, and was able and willing to help. When more than one family member was present I conducted an informal group interview.

The interviews were unstructured and involved no specific, predetermined questions, but did involve a set of themes designed to promote discussion around the post disaster situation. The interviews did not take place in any set location. As I lived in the village, I visited the

households concerned if that was possible. Most interviews typically took place in the respondent's home, and usually household members were found busy with standard household chores. During the course of the interview, I was often taken to visit fields affected by disasters, and sometimes I had lunch with household members (Pictures 7, 8, 9 and 10). Consequently there was no fixed length of interview, some lasted an hour, and some took all day.

Picture 7: Sitting and chatting with a member of a landslide affected family in front of their house, Paladi



Source: Photo taken by the local guide (local resident), December 2013

Picture 8: A local woman talking about the landslide, Paladi



Source: Taken by the Author, December 2013

Picture 9: A disaster affected family sharing their daily concerns, Banagabagad



Source: Taken by the Author, January 2014

Picture 10: A visit to the home of one of the affected families (on the left is the temporary shed they lived in for the last three years), Bangabagar



Source: Taken by a local resident, January 2014

Picture 11: Local from Kholigaun explaining how the villagers saved her buffalo during one of the landslides



Source: Taken by the Author, January 2014

Picture 12: Going with homestay father in Paladi to his water powered flour mill where he shared stories about landslides and floods



Source: Taken by the Author, December 2013

Audio recorders were avoided. Firstly, as discussed, an audio recorder could have made the interviewees feel uncomfortable. Secondly, there was no electric power supply to some villages, making the use of recording equipment challenging. Instead field notes were used. They were not taken in detail during the conversation when any notes were more in the form of a short phrase or reminder and elaborated as soon as possible afterwards, usually at the end of the day.

Broadening the Narrative: Other methodological tools

Additional tools were incorporated to untangle the complexities encountered in the field.

a) Participatory tools:

The primary tools used include participatory (community) mapping, an essay writing competition for school kids, and informal community meetings.

Participatory Mapping:

Recent understanding of participatory mapping describes it as method involving the creation of maps by local residents, often with the involvement of supporting organizations such as

government, and NGOs (IFAD, 2009). Participatory maps are believed to provide a valuable visible representation of what a community perceives as its place (or setting) and its significant features (Chambers, 2006; IFAD, 2009). The purposes and uses of these maps vary.

In this study, participatory mapping was designed to meet a number of purposes. Firstly, as an attempt to better comprehend the relationships between neighbouring communities, including levels of interaction, cultural links and the like. Secondly to understand how the diversity of the physical landscape shapes behaviour whether by constraining the network of trails between communities, facilitating water access for irrigation, milling and the like, or permitting access to the forests for fodder and firewood. Thirdly, and most importantly, the maps were designed to gain insight on local disasters, where they occur, their impact, and the community's response.

Participatory mapping was organized during the first week of field work. A total of four mapping activities were established, each involving at least eight community members. Mapping activities were largely spontaneous. Houses in the villages were scattered and because of the terrain it took a lot of time and effort to travel from one place to another. In order to make meeting easier I tried to „piggy-back“ on other social gatherings (such as religious ceremonies, and community meetings) that involved the participation of a significant number of locals, and used these events as a platform for mapping activities.

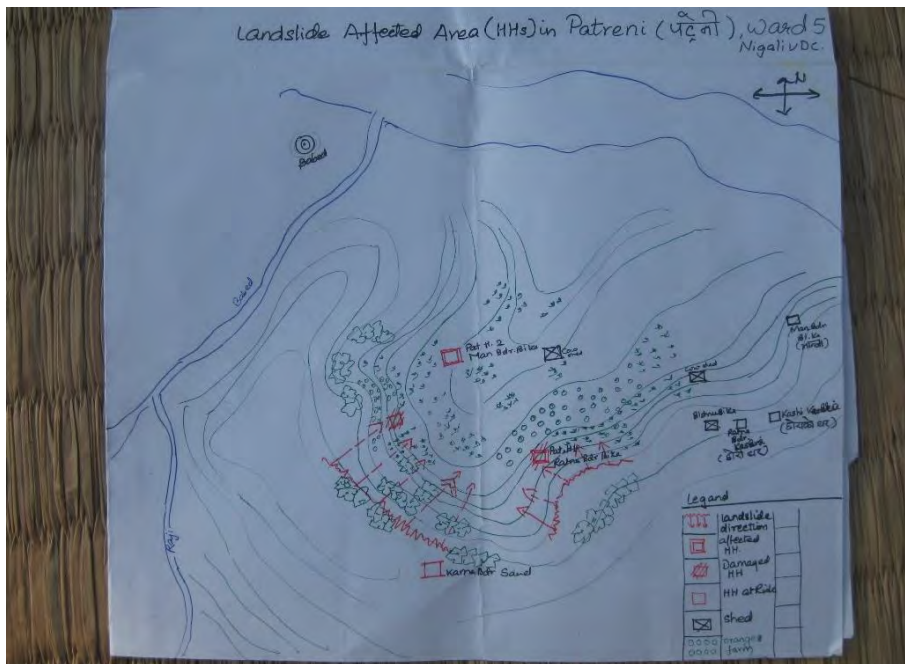
The aim was to create a map on paper that illustrated key geographic features, houses, and neighbouring villages, as well as any disaster features and other phenomena that were important to local residents. A sheet of chart-paper, pencils and colour pens were provided. I started out as facilitator asking questions to guide the mapping, but found that in practice I had to draw the map myself based on input from the participants. In the end, we did manage to come up with maps showing key landscape features, different kinds of forest, foot trails, schools, houses, health posts, neighbouring villages, disaster phenomena, disaster affected areas, and water sources (Picture 13 and 14).

Picture 13: Interacting with locals during participatory mapping, Patreni



Source: Taken by a local Red Cross Volunteer, December 2013

Picture 14: Map prepared with the Patreni community



Source: Taken by the Author, December 2013

The mapping process was novel, did not prove easy for participants to follow, and so ensuring inclusive participation was challenging. Though it was initially based on the principles of participatory mapping it didn't turn out to be fully participatory (see Chapter Four).

Essay writing competition:

Reaching each and every household in a scattered community proved impossible given time and other constraints. I therefore organized an event to encourage communication with and within the wider community. An essay writing competition was organized among eighth grade students of Tusharepani Higher Secondary School in Paladi. The students were drawn from different communities allowing a broad level of participation that was otherwise difficult to achieve.

The competition was organized in collaboration with school management. The students were given an essay as a home assignment and asked to write about disasters and the post disaster situations experienced in their community. This involved team work. There were three teams, each with three to four students. Each team could select any disaster that had occurred in their community. I worked closely with the subject teacher to develop a set of instructions. The most important was that each team should consult with parents and neighbours and integrate their reflections into their essays. Each team had two weeks for the assignment. The essay was to be written in Nepali and as an incentive, prizes were announced for the best work. The language of instruction in school is Nepali and it was thought by the researcher as an easy task.. However, it was not that easy for the students, primarily because of the poor quality of the education in the local area where students are not yet able to write a proper sentence (see, Chapter Four).

In total, three essays were submitted and prizes in the end were distributed to all students, not just to the best team as initially announced (Picture 15). Material from the essays was used as input to this thesis.

Picture 15: With students of Tusharepani Higher Secondary School in Paladi who participated in the essay writing competition,



Source: Taken by the school teacher (local), December 2013

Community meetings:

A total of five community meetings were conducted (Picture 16, 17 and 18), of these, four were conducted in Kholigaun, Dev Gaun, Shaungaun and Dalit tole. All communities were located within an hour's walk of each other, and were all subject to the impact of a recurrent landslide known as the Sera landslide. The community was reached by a three hour walk up a steep hill from Bangabagar of Gokuleshwor VDC. A further community meeting was held in Sailekh, in Kichan gaun in Nigali VDC. Because of time constraints and the difficult topography (see Chapter Four), ethnographic work in these communities was difficult. As a result, I commuted to them on three consecutive days to conduct the meetings. The intention was to listen to community members, and their views about their past (and on-going) experience of disaster recovery.

Picture 16: Community meeting, Devgaun (in Sera)



Source: Taken by a local resident, January 2014

Picture 17: Community meeting in Sailekh village (Kichan)



Source: Taken by local guide, January 2013

All the communities only had a small number of households. The largest community was Shaungaun with 43 households. Not all households attended. Participants could be anybody who was present in the community at that time. The maximum attendance was in Kholigaun, where 22 people attended. Twelve attended in Devgaun, eight in Shaungaun, and ten in Dalit tole.

Of the four meetings, two were audio recorded. As previously stated, using audio recorders was not part of the initial idea. However, in informal community meetings it was difficult to avoid recorders and this was realized by the researcher after holding a community meeting without a recorder. The researcher had to simultaneously take part in the discussion and ask questions as well as jot the notes and all this made it particularly difficult for the researcher when there were many people speaking and asking questions at the same time. Usually the researcher had a guide to help with but these local guides were mostly either illiterate or unable to write fast and even where they could write well it was not easy for them to decide what to include or exclude. Therefore, in order to avoid missing important data recorder was used at the community meetings. Each meeting started by my asking the attendees to describe the landslide. As the landslide was a visible feature in front of us at each meeting, describing it wasn't difficult. Other questions and discussion readily followed.

In Sailekh there were 15 attendees. On this occasion all the participants were women. As with all the other meetings this one was informal. But unlike previous meetings this meeting was lively and spontaneous. Indeed, the original idea on this occasion had been to interview a few affected households identified as most affected by flooding. When looking for such households I had met a group of local women most of whom had been subject to the same disaster and affected to a varying extent. I had no reason to exclude any of these women, all of whom were willing to share their stories. Time was limited and as individual interviews seemed inappropriate, I decided to hold a community meeting instead. At the meeting, the women were asked to describe the disaster and relate post-disaster conditions. In addition, basic information, important facts, descriptions, and most of the discussions was noted.

b) Global Positioning Systems (GPS)

There is no detailed map of the area. More importantly, the affected communities are scattered over a large area, which are impossible to locate on the available topographic maps. Some communities are not even identified on the map, but identified as part of a wider area. Given the blurry idea about the geographical positioning of the study communities, it was difficult to establish the locations or understand any spatial relationship they had with their immediate and wider area. In effect, with the available maps it was impossible to even estimate the damage caused by the small-scale disasters included in this study.

Facing this situation required the researcher to develop a map of the study communities in relation to the wider geographical area. A GPS was used to acquire geographic coordinates, and measures of elevation to create basic maps. The points generated were used to overlay the pre-existing digital topographic maps that were collected by the researcher from the Survey Department within the Ministry of Land Reform Management.

Using available data, several maps were produced – a location map, land-use map and topographic map (see, maps 3, 4 and 5). These were created to help visualize the location of the communities and the geography of the area (for example, relief) to help understand the physical challenges these communities face (such as remoteness, and difficult topography), their physical inter-relationships with other communities, their access to natural resources, farmland, and important infrastructure such as roads. These maps offered a means of understanding the geography of the study areas, the location of disaster events, and ultimately the relationships that communities had to their local area. Also, the GPS data helped in estimating the scale of effect of small-scale disasters, understanding used in the coming chapters to illustrate and compare the disaster impact in the community and wider area. The collected data and maps also offered a good database for future researchers or any others interested in working in the same area.

Community members were usually willing to take me around their village and show me any buildings and amenities important to them as well as those impacted by disaster. During the household interviews, I was often taken to disaster impacted areas and shown what had been damaged or lost, and the on-going risks in the area. Commonly, these occasions allowed me to record GPS points. The points recorded were often those particularly significant to the households being interviewed. Typically the maps include damaged buildings and fields and

amenities such as schools, health posts, water taps, and water mills, other local settlements, and temples.

3.3 Ethics

Significant effort was made to ensure appropriate ethical standards were maintained at all times during my research. The University of Auckland ethical guidelines underpinned the ethics applied in the field. An application was made to the University of Auckland Human Participants Ethics Committee (UAHPEC) and approved on 16 August 2013 (Ethics application number 9661).

Many ethical dilemmas arose while in the field, and these are addressed and discussed in the following chapter (Chapter Four). The following paragraphs only briefly discuss the fundamental efforts put in by the researcher to ensure high ethical standards.

3.3.1 Identifying households and informal interviews

I first approached the District Development Committees (DDCs) of the study districts and asked them to make the initial approach to individual community members on my behalf, and to seek their agreement to be involved in my research. This was deemed by the researcher (me) the most culturally appropriate approach and also helped ensure transparency and avoid any misunderstanding between me and the local communities or authorities. These Committees then advised the relevant Village Development Committees (VDCs) about my plans. The next step was to ask the VDC Secretary to invite local authorities and any persons he thought important to my research to attend a meeting with me, which I hosted in each VDCs. The main purpose was to introduce myself, and familiarize the invitees with the purpose of my visit and the research topic, and listen to any concerns the community might have with my proposal. These meetings usually included the VDC Secretary, other staff of the VDC, school principals, NRCS field staff, and staff from local health posts. Meetings were held in the two VDCs (Pictures 18 and 19).

Picture 18: Meeting with VDC personnel and other local authorities, Shivanagar, Nigali VDC



Source: Taken by local person, November 2013

Picture 19: Meeting with VDC personnel and other local authorities, Dadiya, Gokuleshwor VDC



Source: Taken by local guide (local resident), January 2014

The attendees came from different communities in each VDC. All attendees were given a written Participant Information Sheet (PIS) (Appendix 3) which was also read out at the meeting. I was able to introduce myself, explain the purpose of my visit and my research. With their support, the participants were then asked to inform the community as a whole about my plans and proposed work. These meetings proved helpful for me as they helped me to take the first step to gain trust in these communities (see, Chapter Four, section 4.2.1). The meetings involved some general discussion about potential communities and households. A couple of days later I moved to live in the study communities (Paladi in Nigali VDC, and Bangabagar in Gokuleshwor VDC) and started field work. By then, some locals were already familiar with me, and most already knew of my visit and my plan to live with them.

Living in the community gave me ample opportunity for informal chats and discussions. Whenever necessary, I told people more about my work. After two weeks in the community, some rapport was built and I started to approach individual households for interviews.

3.3.2 Information and consent

A total of ten consent forms were developed for each category of interviewee (see, Appendix 4). All interviews with officials required their written consent for the interview to be audio recorded. All agreed, and no one requested that it be turned off during the interview.

Oral consent proved more realistic in the case of interviews with community members as a significant proportion of them were illiterate. In such situations I read the consent aloud and asked for their response (see, Chapter Four, section 4.2.4). Most people were interested in talking to me and in being involved in the research. Field notes were made during these interviews, including notes of any important events, key information, or particular expressions. Further detail was memorized, and written down at the end of the day.

Most community meetings were audio-recorded. Participants were informed of this and given the option to withdraw from the meeting at any point. They were advised that information recorded before their withdrawal would remain part of the record.

I took a large number of pictures of the physical and cultural landscape of the field area. These included pictures of people working on farms or at home, and of disaster affected areas. Before any photographs were taken permission was requested from any individuals likely to be included or from property owners. On my return to Auckland, I transcribed my recordings. The transcripts were sent back to all those participants with internet access. As the areas concerned are remote and other forms of communication are limited and/or extremely slow

and unreliable, no transcripts were sent to those without internet access. Recipients were asked to make any changes necessary to clarify or expand their views. Few made any changes and any that were made were largely on points regarding clarity of prose.

3.3.3 Storage and use of results

As required by the University of Auckland Ethics Committee, it was agreed that all information obtained from the interviews will be kept in a secure place at the University for six years after the research is completed. It will then be destroyed. A summary of the final results of my work would be offered to all participants and sent to all those who request the findings. No participants are identified by name in the thesis, although a few key individuals are identified by their title, occupation and location. Almost all officials in government and in national/international organisations agreed to disclose their titles.

3.3.4 Risk and benefits

There was no direct benefit of this research to the participants themselves and this was made clear to them. Indirectly the research may have encouraged them to think more about disaster risks and strategies for recovery. Ultimately, the research findings could influence national/international recovery policy with long-term benefits for those affected. This is discussed further in the following chapter (Chapter 4, section 4.3.1).

As the research was conducted in remote areas, problems of physical access and the related challenges were anticipated from the start. The field work required the building and maintaining of good relationships at every level, and this also helped ensure my own well-being and my access to assistance while working in remote field areas.

Language was not a barrier as I speak and understand Nepali. The mother language of the communities is Dotyali which is slightly different from Nepali. When necessary, particularly when speaking to older women I spoke Dotyali.

Issues related to the risks and benefits of language and „insider“ research is elaborated in the next chapter.

3.4 Conclusion

The nature of the research required collecting personal as well as the collective life experiences of people and required understanding multiple perceptions of concerned stakeholders. In parallel, it required understanding a social setting and examining social processes involving (and influencing) the researched subject(s). The nature of the research

required the adoption of an ethnographic approach to data collection. Given the limited amount of time, a set of strategies/multi-methods of inquiries was developed to get both deeper and wider knowledge on the researched subject, at the same time, they helped address the multiple dimensions of the researched subject.

The study used a set of criteria to select the first study communities. These criteria were chosen because they are hinted at in the literature as the appropriate factors in determining the most suitable „setting“ for the research topic. Selection of the second set of communities entirely depended on the potential of these communities to contribute to enriching the research process and its outcomes.

Fieldwork was guided by a set of norms and guidelines put forward by the University of Auckland Human Participants Ethics Committee (UAHPEC). Though some proved challenging, especially in contexts where Western perspectives are not understood, these guidelines played an important role for the author in applying a principled, decent and sensible approach to social, qualitative research.

Chapter Four

Tales from the Field: Doing Disaster Research in Remote Nepal

Dowling (2005) states “interactions between two or more individuals always occur in a social context. Societal norms, expectations of individuals, and structures of power influence the nature of those interactions” (p. 19). The inclusive nature of this thesis and the necessary methodological approaches were designed to allow a range of voices to speak. This required direct face-to-face interaction between me, the researcher, and those in the communities who had had different levels of involvement in disasters and their aftermath. While this offered the potential for a better understanding of the practicalities of the recovery process, it also raised a range of specific ethical issues.

In the role of participant observer, I lived with the research participants and observed and participated in their daily lives. Throughout the research I tried to understand and interpret these people, their lives, and their different experiences and perceptions through my interaction with them. These interpretations are a core component of this thesis.

My positionality influences my interpretation of the data. My position and the position of my research participants needs to be examined because of the impact they can have on the research process and the learning that takes place. England (1994) states “...the world is an inter-subjective creation and, as such, we cannot put our common sense knowledge of social structure to one side” (p. 243). In practice, it is impossible to be neutral about the choices made, or to be fully detached in one’s observations. I have my own personality and own biases. My background, personality, socio-cultural beliefs and experience shaped my position in the field.

The researcher is, in a sense, a knowledge producer. The end product of cross-cultural qualitative research involves the representation of the participants. There are inherent power imbalances between a researcher and those researched. At the same time, the research subjects have the power to refuse to talk or limit the answers they give. But such power relationships need to be recognized and managed to avoid (or at least minimise) any

domination by the researcher and minimize any misinterpretations, and ensure the proper involvement of the research subjects.

While it is important to be aware of inter-subjectivity and to recognize positionality, this does not necessarily eliminate the power relations interwoven in those situations in which research occurs (England, 1994; Smith, 2003). Many researchers (such as, Hay, 2005; Kobayashi, 2009; Skelton, 2009) have argued that a process of auto-ethnography can counter this representational dilemma and is fundamental to avoid misinterpretation by the researcher. Auto-ethnography is a form of self-reflection that allows recognition and sensitivity to the research participants as “knowing subjects” proactive, and self-confident in their engagement with the researcher and the research project. In short, auto-ethnography helps the researcher to minimize misinterpretations and therefore enables the process of „appropriation“ of the voices of the research participants.

In the context of this research project the question addressed is:

“What efforts have I made in „appropriating“ the voices of those researched?”

This chapter addresses this question and at the same time details the data gathering process followed in the field, and its related challenges. These are, in effect, my tales from the field.

4.1 Reflections on Positionality: Myself as a Subjective Researcher

I am a Nepalese woman born and raised in Pokhara, the second largest city in Nepal and the administrative capital of the Western Region. To obtain a higher education and employment, I lived in the national capital, Kathmandu (Central Region), for several years. The national language *Nepali* and the country’s cultural norms are an inherent part of my make-up and experience. Through my employment, I got the opportunity to spend around three months in Diktel (the district administrative capital of the Khotang district in the Eastern Region), two months in Charikot (a city in the district administrative capital of the Dolakha district of the Central Region), and two weeks in the Far Western Region (the study region). The overall physical, political, socio-economic, and cultural context of these regions, and country in general, was therefore not entirely new to me. Therefore, to some extent, I was an „insider“ in the field.

Being an insider has its advantages and disadvantages. For instance, knowing the national language was useful, because except for a few people, everyone I met could understand Nepali and most people were fluent Nepali speakers. The ethnographic approaches used

would not have been possible without my familiarity with the language. Similarly, my work experience in the disaster management sector in Nepal, meant that it was relatively easy for me to quickly identify, contact and schedule interviews with key officials in key organizations. As a result, I was also able, thanks to my pre-existing regional contacts, to get involved quite quickly with local networks in the study areas. This facilitated my logistical arrangements and most importantly eased my establishment in the study communities. This was a fundamental requirement for my work. However, while being an insider, there is some probability that I might have failed to recognize issues that would have caught the attention of a complete outsider. Those issues, in turn, could also have also been useful in providing different insights on the country and the people. Any limitations as an insider, however, were less damaging when it came to the community level.

At a community level, I quickly realized that I had a dual position both as an insider and an outsider. Though familiar with the overall setting of the study area, I was totally new to the community members and their local culture. Nepal is a multi-ethnic, multi-caste, multi-lingual, multi-religious and multi-cultural country. The studied communities, although they share the Nepalese culture, language and religion, each have their own local language, cultural norms and beliefs. I was aware previously of such differences, but I had never before had the chance to live in these communities for an extended period, nor had I had much direct experience of the poverty and hardships that are widespread in so many remote Nepalese communities. To me, it was exotic and almost alien, which in a sense made my position that of an outsider.

For the members of the local communities too, I was neither fully an outsider nor a complete insider. Locals referred me as a *Kathmandu ko keti*- a girl from Kathmandu. For them I was an „insider“ because I am a Nepali, who speaks understands the language. We shared similar understanding and beliefs regarding religion and culture. But while in this sense an insider, the locals still referred to me as an outsider because I did not belong to their community, nor their region. Physically, I looked different. I also dressed differently from the local women without compromising the decency required. First of all, it is patronizing to dress like them. Secondly, and more importantly, I believe, it was not right in the context. Gender discrimination is strongly rooted in the study area – girls and women are badly criticized for wearing pants. If, as an outsider, I started behaving (or dressing up) and trying to fit into the culture where women are devalued, it is indirectly supporting discrimination. I believe that it was important that the locals saw the positive changes going on in the wider society in terms

of changing gender roles. For example, when I was living in the community, one of the young educated woman came and told me that she was able to convince her father and that she now had been permitted to wear pants. She regularly commutes to nearby villages to conduct training and collect data from the Red Cross. She used me to convince her father that she should be able to wear pants. She had him told that, “look at her (referring to me), women of today can wear pants and, like men, work with men. It is not a bad thing to do anymore” (Field notes, local teacher, Paladi, 19th December 2013). Wearing dresses is a small issue, but reflects the level of freedom and independence of women that exists in many remote Nepalese communities. Similarly, I had a different accent and could not fluently speak the local language. As a result, I was both an „insider“ and an „outsider“ to the locals.

Being an insider-outsider proved both advantageous and challenging. While to a large extent my position as an insider helped me quickly establish myself in the communities and facilitated gaining insight on the multiple aspects of community life and culture, my position as an outsider helped me critically analyse what I observed in the field. It also allowed me to avoid any temptation to „go native“. According to Flick (2009) going native is to immerse oneself in the field to the extent that one loses one’s critical, external perspective and unquestioningly adopts the viewpoints expressed by field respondents. Yet, being an insider-outsider posed its own challenges. As a woman I was expected to meet strict gender practices that were unacceptable and offensive to me while I had at the same time to juggle the need to retain the trust and respect due to the local communities’ religion and traditions. This dilemma and my management strategy are fully discussed in the following section.

Caste is still a dominant social system in most of Nepal. It largely defines a person’s social status. Despite the legal abolition of *untouchability*¹⁴, its practice is still commonplace. A person’s caste is reflected in one’s surname, and in most parts of Nepal, one is expected to introduce oneself with one’s full name. Consequently, people know your caste from first meeting. Caste is not personally important to me; it did, however, matter a lot to the people in the communities in which I worked.

I am, by birth, an inter-caste. My mother is a Thakuri belonging to the Chettri caste and my father is from the Newar caste. My surname Shrestha comes from my father’s side, and this makes me a Newar. Being inter-caste positions me as somewhere in the middle status ranking

¹⁴ Untouchability: It is the product of the caste system. According to the system different casts have varying degrees of purity and pollution. One caste group is considered impure and its members are not allowed to touch members of other castes, and are prohibited to touch and use communal ponds, or enter the houses of members of other caste groups or even enter communal temples. If they do so then they are punished by the community. It is believed that the touch of untouchable groups pollute people and things.

within the Newar caste. Caste and ethnicity are, however, not static. I am now married to a man from a higher caste group within the Newar community, and as a result caste-wise my social status has increased. Traditionally, women change their surname after marriage, but in contemporary Nepal this is not required. I haven't changed my surname, so I remain a Shrestha. The study communities had no Newar people. Most locals had little idea about the Newar caste and were unclear as to my social position. For them, I was essentially viewed as a neutral participant. This was beneficial. It was quickly apparent that, while people from the upper caste groups had no difficulties in interacting with me, those from lower caste groups could equally talk comfortably with me. Such ready communication would have been far more problematic if I had belonged to one of the higher or lower castes found in these communities.

Throughout the fieldwork I tried to accept the role of a „supplicant“. Supplicant, according to Smith (1988), is where a researcher explicitly acknowledges her/his reliance on the participants to provide insight on the research subject and related issues. Smith (1988) further states that for the researcher-as-supplicant the fieldwork is predicated upon an unequivocal acceptance that the knowledge of the person being researched (at least regarding the particular questions being asked) is greater than that of the researcher. Fundamentally, the key element in recognising this supplicant role lies in its potential to help deal with asymmetrical and potentially exploitative power relations (as with respect to the case of the researcher and those researched) by recognising the power of those who are the focus of the research. This does not necessarily give conscious power to research respondents, but does oblige the researcher to acknowledge the power respondents hold and obliges the researcher to acknowledge and accept a more nuanced power relationship than might otherwise be the case.

4.2 Into the Field: Initial Visits, Contact Building, Establishing Myself in the Study Communities

My previous contacts at a national and regional level, and my initial scoping visit in December 2012- January 2013 (see, Chapter Three) gave me the basis to start building my contacts in the study areas. The main period of fieldwork period started with my visit to the administrative headquarters of the study districts. The next step was at a community level and primarily involved an ethnographic approach.

4.2.1 Finding a homestay

Fieldwork, at a community level was, as expected, challenging. As Kearns (2005) argues the fundamental challenge was to gain entry to the social setting. Initially, the plan was to find a homestay while I was still at the District headquarters, so that when I entered a community I could directly move to live with a local family. Unfortunately this couldn't be realized. Potential homestays were identified with the help of local contacts, but none of them could confirm arrangements. This surprised me because the rural Nepal I knew was welcoming, and finding a homestay I had thought would be easy. My first criterion was the provision of meals. There were no local hotels that served meals. Markets were far away. I therefore had to rely on the homestay family to provide me with my daily meals. My only other criterion was the provision of basic toilet facilities.

My local contact mentioned that local families seem uncomfortable because, as they themselves described "we live in a poor condition and as a city woman she would find it difficult to live in such a condition, and probably would make fun about the way we live". This made me realize that I wouldn't find a homestay unless and until I actually arrived in the community and met the locals. I was confident that once they had met me they would be more comfortable in offering me a place in their home.

As a preliminary step, I arranged transit accommodation in the VDCs and in villages near the study communities. In the case of Nigali VDC, I was offered a homestay in the house of my local contact, in Alad. This village is 3 hours walk from Paladi gaun (the study community in Nigali VDC). In the case of Gokuleshwor VDC, I had no options other than to get accommodation in a small local motel on the highway. The motel was half an hour drive from Bangabagar (the study community in Gokuleshwor VDC). Public transportation was available, but was limited and infrequent. In the end, I stayed in the transit accommodation for around 4-5 days until I got a homestay in the study community.

Transit accommodation wasn't part of my initial plan. I initially saw it as an obstacle to my work. Later, however, I realized that transit accommodation is not a bad idea. Staying in such accommodation not only brought me physically closer to the study communities and facilitated face-to-face interaction with community members, but also provided me with an opportunity to experience the wider physical and socio-cultural setting, and to interact and listen to multiple voices outside, but close to the study communities. Together these factors enabled me to grasp the larger socio-economic and cultural context of life in the remote hills

and the role and importance of spatial, socio-cultural factors in relations between different communities. While commuting and necessarily interacting with people through living in transit facilities I came to see and know many other, different communities and people who also had been and were impacted by small disasters.

The initial idea of moving to a homestay in the study communities included conducting meetings with local authorities at the VDC level. The purpose of such meetings (see, Chapter 3) was to inform the local authorities about my research. Although as a Nepalese citizen there is no formal requirement to get government approval to conduct research, it is recognised as culturally appropriate to ensure the support of the local authorities prior to starting fieldwork. Transit accommodation provided the appropriate time to hold these meetings. If I had delayed and had these meetings after I had moved to live in the study communities, as initially planned, it might have seemed that I had jumped the gun. Living in transit accommodation outside of the study area provided a forum to meet and inform officials about my research and get their approval and support to start the fieldwork.

With the help of my District contacts, I scheduled my meeting with the VDC secretary, who, at my request, arranged a semi-formal meeting with key community representatives, something he saw as important for my work. Two such meetings were held - one in each study VDC. Each meeting lasted for about an hour and involved representatives of the VDC, the local school, representatives of political parties, local health staff, staff of local NGOs, including the Red Cross, and the Ward Citizen Forum. These meetings were beneficial primarily in contact building and ensuring support from the local authorities. Some participants at the meetings were also residents in the study communities and they helped inform other community members about me, my background and my purpose before I had even moved to live in the community. This whole strategy of contact building and extending my contact network from the district to the community level was extremely beneficial, particularly, in gaining access to communities in the „right way“.

By this point, I also understood why people were hesitant to provide a homestay. The majority of households were so poor that they had difficulty providing themselves with two basic meals a day. Open defecation is also common in these areas, so finding a house that could serve me meals and that had toilet facilities limited the possibilities. People were not unwelcoming, but simply afraid they would not be able to meet my basic needs.

These were not the only reasons. Communities in the study area strongly believe and practice *Chhaupadi*. This social tradition is particularly prevalent in Far and Mid - Western Nepal. It impacts directly on Hindu women by prohibiting them from participating in normal family activities during menstruation because during menstruation they are considered impure. Over that time women are kept out of the house and have to live in a shed. This lasts from seven to eleven days depending on local practice and further varies among women depending on such criteria as whether they are single or married, and have or do not have children. Childbirth also results in a ten to eleven-day exclusion period when women are forbidden to touch men or even to enter the courtyard of their own homes. They are barred from consuming milk, yogurt, butter, meat, and other nutritious foods, for fear they will forever damage the productivity of the animals that provide the raw material for these goods. During this time, therefore, women must survive on a diet of dry foods, salt, and rice. They cannot use warm blankets, and are allowed only a small rug, most commonly made of jute. They are also restricted from using toilet and water taps, going to school or performing daily functions such as taking a bath, and are again forced to stay in a shed – a semi enclosed bamboo shed like those used for keeping animals (Picture 20).

Picture 20: A typical Chhaupadi shed



Source: Taken by the author, December 2013

These sheds are usually located far from the house so that men aren't be able to see them. Communities in (or near) cities and towns have Chhaupadi sheds close to the house and the practice in such places is less rigidly applied. Chhaupadi sheds in remote communities are located farther from the house and Chhaupadi is more strictly observed. The rationale behind such practices is now largely accepted by most Nepalese as superstition. But the practice continues to be justified in the belief that if a menstruating woman touches a tree it will never again bear fruit; if she consumes milk the cow will not give any more milk; if she touches a god, the god will be angry and a crisis will follow; if she touches a man, he will become ill. Chhaupadi was outlawed in 2005, but the tradition lingers on.

The study communities were strict in the observance and practice of Chhaupadi, but at the same time were not proud of this and were hesitant to admit its practice to outsiders. Indeed, during the scoping visit the local people had denied the existence of the practice and it surprised me to discover its existence and strict enforcement. As a woman, living with a local family would have meant that I would have had to follow the tradition. People were uncomfortable and hesitant to directly ask me to do so because they were aware that being highly educated and from a city, I would question and disagree with such traditional practices. This posed a major dilemma. On the one hand, Chhaupadi was „undocable“ for me – my self-esteem wouldn't allow it. I view it as discrimination against woman in the name of religion and tradition. On the other hand I didn't want to show blatant disrespect for the community's traditions (though while in the community I did speak against) or lose the trust of community members by disobeying community norms. The only solution was to move out of the study communities for a couple of days during menstruation. Both of us (I and my homestay family) agreed to this arrangement.

Given the available time, budget, and the hassle involve on account of the difficult physical accessibility of the study area, I was unable to move out of the community to live in a city. Again, I fell back on the use of my transit accommodation. In Baitadi, my transit motel posed no problem. In Nigali, the family was less rigid with respect to Chhaupadi, and though difficult, the conditions I had to observe were physically and psychologically were tolerable.

In my first week in the community my focus was to get to know the different members of the community and establish rapport with them. Getting to know respondents is integral to the research process particularly where that research involves sharing personal life experiences (George & Stratford, 2005). Local households commonly form large family groups and I could interact readily with different age groups and access a full range of household members.

For example, the older people were usually the most active members of forest user groups. In general, women belonged to community women's groups, and children were involved in the school. I made use of these established social groups, institutions, and communal activities and relationships to gain access to other community members. Participating in social gatherings including religious rituals and community meetings, interacting with school children and teachers, spending time with local women around public water taps, and talking to people in local tea shops, walking along the village trails, holding a VDC level meeting, and conducting participatory mapping activities, all proved beneficial in getting to know community members, in understanding the community in general, its setting, and communal relationships.

During most informal conversations, school activities and participatory mapping, I didn't talk much. Asking specific questions about disasters wasn't usually necessary. The locals I met and others who had heard about me, knew that I was there to study the impact of landslides and floods. When we met they readily chatted about any issue related to local disasters, and related stories about families impacted by these disasters. Initially most people smiled at me when they first saw me, but hesitated to talk. It was only after a week that they started to talk to me about my research, upcoming community events, shared rumours, and other tales. In the process I gained much useful information that fed-into my studies.

4.2.2 Field Help

Fieldwork required a lot of walking from place to place. This was not easy, particularly because the walking trails were themselves through remote terrain, were often steep, ill-defined and provided no sense of direction. Detailed maps don't exist. To help me and minimise any risk, I hired two local young women as guides and chose locals residents of the study communities in each VDC. Both VDCs had few young people available for such work as most had left the villages to work or study. In Nigali VDC I had no choice other than a Brahmin girl. As a Brahmin is the highest caste others of lower caste have to pay respect to them, and I suspected that this might cause problems, either by discouraging lower caste people from talking with me, or by discouraging openness. I was right; I soon realized that having a Brahmin girl as a guide was a bad choice. When I was with her, lower caste people were hesitant to express an opinion. They were much more expressive and open when I was on my own. But I had no choice as there was no other alternative.

The continued use of the Brahmin guide proved untenable. It was better for me to be on my own or at least avoid being accompanied by a high caste guide. The solution emerged from the fact that my homestay operated two water powered flour mills. Many locals used the mills, offering a locale where I could meet people, and where social interaction was natural. Such meetings proved useful in helping plan my field interviews and also resolved the issue of my guide. I used to informally share my work plan of field visits with the locals I met and also told them of my concerns as to how best to access specific households or areas. Usually it turned out that they knew someone who was going in that direction; and he/she was informally contacted and acted as my guide for the day. Sharing my plans and concerns with the community proved extremely helpful. In Nigali, after I had dropped the use of the Brahmin girl, I was guided in total by eleven local people including a small, seven year old girl.

In the case of Gokuleshwor, I first obtained a local guide through the field office of the Red Cross. She was a local woman belonging to a middle caste as were most residents of the study communities. She also belonged to a family that had been directly affected by one of the disaster events being studied. Having her as a guide was valuable because it gave me the opportunity to spend a lot of time with her and to share and learn from each other's experience and knowledge. I got the opportunity to listen at some length to an insider's perspective and experience of disasters and views on social arrangements within the community. Being with me gave her the opportunity to see and talk to members of other communities, and to exchange experience of disasters, and meet authorities and personnel involved in disaster management. Indeed, she described all this as „an enlightening and an enriching experience“. Although she had heard about disasters in neighbouring villages, she had never visited these places and so had no direct experience of them. She knew the necessary officials in the different authorities but had never before had the chance to listen to their views, their plans for village level development and their views on disaster management. Moreover, as a local from a middle caste background and having the same ethnicity as most other community members, she had relatively easy relationships with others of all castes in the community. This facilitated my fieldwork.

4.2.3 New additional case communities

Bradshaw and Stratford (2005) rightly state that “sometimes we find a case, and sometimes a case find us” (pp. 70). When I entered the field I had only two case study communities in mind- Bangabagar in Gokulaeshwor VDC, and Paladi Gaun, both selected during my scoping

visit in December 2012 (Table 1). As the fieldwork proceeded and I came to better understand the study areas, I identified a further seven communities for examination (Table 2).

It had become clear that the two pre-selected communities of Bangabagar and Nigali gaun, contained fewer households that had experienced disasters than previously understood. Although the area experiences many small disastrous events these tend to be irregular and relatively infrequent and widely scattered over the area. At the same time, most houses in the area are spread over steep hills, so that the number of households directly affected by a single disaster may be few. For instance, Paladi gaun is a typical hill community, and the number of families directly affected by one of the landslides totalled only four households. On the other hand, locals drew my attention to other neighbouring communities that were impacted by more frequent landslides or floods. These were also poor communities. They comprised mixed social groups, so met my research criteria and were appropriate potential case studies. They were all within 3-4 hours walk, and so „doable“. Although this expansion in the number of case studies necessitated considerable additional time walking to and from the communities, their incorporation proved useful in helping better understand the inter-relationships among different communities in the area, including their physical, socio-economic and cultural inter-dependence. For instance, land close to river banks is typically owned and cultivated by people from a number of different, neighbouring villages, and so the impact of any flooding simultaneously impacts on several communities. Communities usually share one school, as well as common forest and water resources. Inter-community marriages are common and people in one community usually have family and relatives in another. Mutual assistance is common among different communities when disasters hit. Studying several neighbouring communities helped expose the broader social system and the impact of disasters across this system.

4.2.4 In-depth interviews

Those interviewed in the study communities were members of families affected by identified disaster events. The interviews started after I had been living in the communities for two weeks. This allowed me to establish rapport with interview participants, and this, as George & Stratford (2005) identified, was integral to success. It was vital in this particular instance which involves the interviewees sharing their real life experiences.

The two week delay in starting my interviews allowed people to be comfortable with my presence and allowed me time to appreciate the general difficulties and pain faced by these communities on a daily basis. The already harsh living conditions affected the people in many different ways. On top of that, they had experienced a disaster (or a series of disasters), I didn't want to cause them any further distress, psychological pain, discomfort or awkwardness through any insensitivity on my part. Neither did I intend to add to their burden through my interview demands. I gave careful attention to establishing a „morally justifiable way to carry out my research“ (Stanley & Wise, 1993). Stanley and Wise point out that the subjects of research should be treated as „people“ and not as mere mines of information to be exploited by the researcher as the neutral collection of „facts“. Following this injunction, my plan was to make the interviews, including the questions, timing, and environment as comfortable, and as least demanding and least stressful as possible.

In Nepali culture we don't usually say „No“ to a visitor's request, even though we may have other things to do. I tried to be careful in how I requested an interview. For instance, instead of saying „Are you available for interview tomorrow?“ I posed the question in such terms as, „What are you doing tomorrow?“. This gave the respondent the opportunity to outline their plans and if this, for example, involved cattle herding in the afternoon, I then asked if I could join them in that and whether they could at the same time tell me about the disaster. This approach often worked, but in some cases I had no option other than to directly approach people for an interview, especially those families who lived far away from my homestay.

The comfort of the interviewees was highly prioritized throughout the whole interview process. Efforts were made to keep the interview setting as natural as possible. Interviews were held wherever it was convenient for the interviewee based on their work schedule and psychological comfort. Most interviews were held in their own home. In a couple of cases interviews were held at a cattle herding ground, on a river bank, or in a crop field. I applied no hard and fast rule on the length of any interview, rather this hinged on the flow of the discussion. For instance, in the course of an interview, children often came home from school and their mother (the interviewee) had to prepare a snack for them. Often, people came to visit and joined us for lunch or a snack. At times the interviewee had to feed their animals. As a result, some interviews lasted particularly long durations, some even a whole day. While this approach was time consuming, it was necessary and proved an effective means to establish a comfortable natural context that facilitated both a wide ranging and deep

conversation. This allowed both me and the interviewee to better understand each other, our lives, and the societies we live in.

Most community interviewees were illiterate so I used the oral consent procedure approved by the University Ethics Committee. This required that I read the consent aloud and asked the interviewee to respond. I made a considerable effort to observe this rule while interviewing, but it did prove difficult. Although theoretically important, reading the consent before an interview was in practice awkward and contextually inappropriate. My interviewees, were generally not unknown to me and I was trying to maintain an informal tone to create a comfortable environment. I was dealing with people living in remote hill areas who didn't usually get involved in such interviews or talk to outsiders about their lives. Formally reading the consent form ran counter to the overall environment I wanted to create. After a few interviews, I realized the inappropriateness of reading the consent aloud and the awkwardness it brought to the proceedings. In subsequent interviews I summarized the consent into more appropriate words and acted accordingly. In practice I believe this was a more honest ethical approach which did not intimidate my respondents but did ensure their informed consent within the constraints imposed by the Ethics Committee.

The in-depth interviews focused on the respondents personal experiences, therefore, they were less formally structured and designed to allow the respondent scope to talk freely. The interviews followed a set of research themes designed to promote discussion of key topics around the post-disaster situation (Appendix 2). This allowed the conversation to be flexible enough to flow as naturally as possible, but at the same time allowed me to raise any issues that had been neglected. Research themes provided an interview checklist, not an interview guide. Each interview was unique. The questions I asked were almost entirely determined by the informant's responses. Even the primary opening question was not the same in all cases. In some instances it was related to basic questions such as the number of family members, occupations, ages, and the like, and then the interviews slowly moved on towards the family's experience of the post-disaster situation. In other cases, particularly where people had shown me or walked me around the disaster affected areas, or where the disaster impact was visible to us, there was no need for any particular opening question. Questions were prompted by the participant's initial response or their desire to describe a particular situation.

The following example is drawn from an in-depth interview with *Dhan Ram Saud*, a member of a disaster affected family in Bangabagar on 11 January 2014.

The conversation started with Dhan Ram's description of the family's experience of frequent landside events: Dhan Ram Saud says, ".....this is our new home. In the last five years we have lost two homes in landslides. This landslide affected area extends further with every landslide. Landslide occurs 1-2 times every year. We have been shifting further away from the landslide and now it is again coming towards our new home. Most of the land is taken away and we don't have any other place to shift to. We have now no option other than to move to our small land across the river.

Me (Follow-up question): Why did you not move to that land earlier instead of building a house here? You could have been farther away from the landslide?

Dhan Ram Saud: The land there is uninhabitable.

Me: Why inhabitable?

Dhan Ram Saud: There is no source of drinking water. We have to travel around two kilometres to reach a water stream. Here the stream is closer. The forest is also far away. If we move to stay there then we have to come here every day to collect basic things like firewood and cattle fodder. That is difficult. Also, the land is located close to the river bank, and there is a danger of erosion, some parts are already eroded.

A lot of useful information came from such questions. They added depth to the detail of information sought. I saw my role as listening to people's experiences and then check them against my interview themes to confirm if all my key issues had or had not been raised. If not, I then raised questions or prompted discussion around those themes.

4.3 Fieldwork: challenges and reflections

Challenges were posed by the whole experience of fieldwork, from the initial network building to entering into a new community, living with the informants, and data collection. It was also extremely enlightening and rewarding. This section presents some of the major challenges and reflect on the process of doing fieldwork.

4.3.1 Community expectations and direct benefits

Most of the study communities had experienced repeat disasters. On previous occasions therefore, outsiders, whether government officials or humanitarian aid agencies, had come to make preliminary disaster impact assessments. Many communities had received some sort of external relief aid. I was often perceived no differently from these earlier visitors. When I entered into the communities, the locals often expected some sort of benefit from me. In their

shoes, I realized I might well have reacted similarly. It was quite natural for them to expect material support from me because I too came from the city, I had good contact with government officials and aid agency staff and I was there to carry out some sort of investigation related to disasters.

I had not anticipated this challenge so I had to make a considerable effort to clarify the purpose of my research and explain that it was academic and included no direct material benefit to any participant. Whether at a VDC level meeting or at a community meeting as well as in all other interactions I emphasized these points. Some, particularly the educated, and those who had experience outside the community easily understood what I meant. Despite this, however, I soon realized that most participants still retained some expectations. Those who did understand helped me explain my situation to the others but some misunderstanding inevitably remained. For the most part, however, in the communities where I lived, understanding increased as time passed.

In one community, one person, thinking that I wouldn't understand, asked my local field assistant (guide), if I was a *Dine wala* or a *Nadine wala*. *Dine wala* is one who gives, and *Nadine wala* is one who does not give. Later, after realising that I had understood what he meant, he laughingly explained that after disasters some outsiders from different organizations come to investigate the situation. While some returned with help, including food, money, and crockery, others never came back and provided no help. The individual respondent, therefore, was getting at whether I was from an organization that provided material assistance or from one that „just takes records“. During my time in the field I got used to such questions and comments as many people I met expected help and support in their recovery. Such expectations were, as noted above, perfectly reasonable and understandable. Repeatedly, I explained that my work was a piece of academic research and that there was no direct benefit to any participant, but that in the longer term policies or programs might be influenced by my findings and so some indirect benefits might occur. This was difficult for me to explain and I was repeatedly tempted to be less explicit.

While living in the communities, it was not difficult to understand the struggle and pain that most families faced in their day-to-day life, exacerbated in the months and years following a disaster. Though I understand, believe and trust that the findings from my research could contribute to improve national and international recovery policies being unable to offer or promise any direct benefit or release for the communities was often frustrating and depressing. During an in-depth interview with a family I found out that they had nothing at

all for their dinner that night, and they were unsure about what they might have the following day. I had spent almost a whole day with them. It was impossible for me to leave without ensuring that they had at least something for dinner. I offered them a small amount of cash from my personal funds - enough for a couple of meals. I encountered three other similar situations where I again provided direct help to families in need. Such situations were not covered anywhere in the standard research ethics forms, but in these particular instances I believed it was appropriate and necessary to follow my own ethical guidelines. I was there as a researcher with certain aims and strategies, and working within a certain official ethical boundaries, but first and foremost, I remained a compassionate human being with emotions. Helping other human beings in need is, I believe, a primary responsibility. Despite their poverty and need, these families willingly gave time and shared their life experience with me. I wouldn't have been able to forgive myself if I hadn't personally helped them in their time of need.

I tried to generate some small direct benefits for at least some participants. I designed some events that not only helped me garner information but also provided a small return to the community. An essay writing competition (Chapter 3, section 3.2.2) was one example. It was not a pre-designed field activity, but was developed and applied in the field. I had previous experience working on a development project that focused on the role of school children in disseminating awareness of disasters among vulnerable communities. The idea was to help inform children about disasters so that they in turn could pass-on this information to their families and the wider community. In this way school children might act as information disseminators. When I went to Paladi (where I started my fieldwork), I realized that the harsh landscape compounded with the scattered housing would not allow me to reach each and every household. I also realized that the local school catered for children from several neighbouring communities. I thought I might apply the same concept of „children as information disseminators“ as I had once before, but in this instance emphasise its use „in reverse“ i.e. „children as information collectors“. An essay writing competition was organized among eighth grade students of Tusharepani Higher Secondary School in Paladi. The primary aim was to collect information and opinion from and about the wider community. As explained. I also wanted to provide some small direct benefit to the community. There was no better alternative than making these children happy through some small gifts. I distributed stationery packages to all participating students. The package comprised basic stationery items but was valuable because for most of children these were otherwise not affordable.

At a personal level, besides the small amount of cash to four families, I gave small gifts including packets of noodles, chocolates, biscuits, and stationary to the children of families living in poor conditions. This was my gesture to thank them for their time and participation. Also, I went out of my way to buy local produce (such as fish, ghee-clarified butter, and lemon juice) from the poorest families, despite those often being of lower quality than those available at the local market. For instance, as poor families had limited firewood they could not completely dry their raw fish, making it inferior to that available in the local shops.

These strategies provided a small benefit to needy families although the benefits were insignificant in comparison to their needs. But these gifts definitely gave some brief satisfaction to me and generated much gratitude. In such ways I was able to more comfortably carry out my fieldwork.

At the completion of this thesis, the findings and recommendations will be shared with agencies at all levels of disaster management and recovery and development in Nepal (international, national, district, and local). It is hoped that this will help influence policies, programs and projects that could ultimately benefit communities. Additionally, in response to a request from Nepal based international development and aid agencies (Practical Action and Mission East), I have already shared some of my preliminary research experience and knowledge and suggested possible actions that that could help shape better government policies and help international donors identify and prioritize potential areas for improved disaster management in Nepal. This was done in meetings, using a case analysis report of a remote community in the Mid-Western Region of Nepal (see, Belperron & Shrestha, 2014). In the future, I plan to continue working in the disaster risk reduction sector in Nepal. This would provide further opportunities to share my knowledge and benefit these study communities and other communities in Nepal and elsewhere.

4.3.2 Cultural differences and coping

Any exotic culture has some intrinsic appeal; living and indulging in that culture as demonstrated here, however, it was not necessarily easy. As a participant observer in a community with a different culture, and living within that community as a part of a family, frequently proved challenging.

The practice of Chhaupadi, as described previously, is strongly rooted in the studied communities. I was aware of such practices but I had never experienced them before. Chhaupadi, to some extent, exists throughout Nepal, including in the cities, but in different

ways. In other parts, particularly in the cities, a menstruating woman is not allowed in the family kitchen or inside a temple, and for 4-6 days is not allowed to worship God or take part in religious rituals. Other than that, women are not as restricted in their behaviour and actions as they are in the study communities. Coming from an urban background I viewed (and view) the conditions of Chhaupadi in these communities as unhygienic, cruel, and discriminatory. In contrast, however, I realized that most women in these communities view Chhaupadi as „normal“ and „necessary“. Such insiders“ views shocked me. Some young educated women in these communities do view Chhaupadi as a bad tradition and openly discuss the obstructions it puts to their physical and psychological health, education and work. A few local families were liberal in their interpretation of it and how it is observed. The wider community, however, regards such liberals and their actions as a bad influence.

I was extremely disturbed to see women going through such bitter experiences in the name of tradition. In order to influence the local people to abandon the practice of Chhaupadi, I often spoke out about its adverse consequences on the well-being of women. To my surprise, many people who were aware of such consequences but still often verbally supported its continued observation and practice. The practice of Chhaupadi is not about to be abandoned. Most people in the study communities strongly believed that abandoning Chhaupadi would anger the Gods and bring crisis and chaos in the form of disaster, hunger, and disease. Locals said that there were a lot of past incidences that strengthened their belief. Although my efforts to convince people against the practice of Chhaupadi continued throughout my fieldwork, I also came to accept that I could do nothing much about it, at least for now. Whether acceptable to me or not I realized that I had to gain some level of acceptance of seeing woman living inside Chhaupadi sheds, no matter how much I continue to reject such practices.

4.3.3 ‘Participation’ in participatory mapping

Participatory mapping took place towards the start of my fieldwork when many people were still unfamiliar to me. The activity was designed to better comprehend the physical and social setting of the community, people’s perceptions of disasters and their impact (Chapter 3, section 3.2.2). In practice, participatory mapping became a forum to familiarize me with many community members, and to better understand recent local disasters and their impact.

To facilitate the mapping exercise it was scheduled where possible in conjunction with other community events (such as, religious ceremonies, and community meetings). In this way, I felt I could avoid (or at least minimise) any potential additional burden on community

members and at the same time, allow myself to access community members already gathered together for some other purpose and potentially maximise participation in terms of the age and gender of those involved. Time remained a constraint as the participants had no prior experience of participatory mapping and viewed maps as an almost impossible challenge. As a result, I had to spend around an hour convincing people to get involved. Many people remained unsure that they could help me produce a map. Most of them were illiterate and had never before used a pencil or pen, and many said that they had no idea about mapping. I tried to convince them that the exercise was not about some technical map and assured them that they did not need to be literate to participate. Women were particularly difficult to involve. As the local culture strongly discriminates against women, men take the lead in most social activities. Surprisingly, however, in some instances involving mapping I had more female than male participants, but despite this, the women often remained passive; they hardly spoke. To move matters along, I asked the help of younger participants to translate the conversation into Dotyali (the local language). Unfortunately, however, this strategy still did not succeed in promoting the active involvement of women.

Men participated actively throughout the mapping process, although they wouldn't agree to draw the map by themselves. Theoretically, in participatory mapping, the participants should draw the map, and the researcher is there as facilitator. Despite several efforts, I failed to convince the participants of this, and eventually, I had to draw the map. As a result, this mapping activity couldn't be strictly described as „fully participatory“. It did, however, provide a visible representation of what the community perceives as its place (setting) and the significant features in their environment. All the information and details on the map – directions, community locations, physical and social features, the site of local disasters and the physical extent of impact, are based solely on the information and perceptions of local participants. I simply facilitated and drafted this information onto a sheet of paper. I fully recognised that the local people, despite their denial, had a lot of knowledge and the skills required for mapping. For instance, it wasn't difficult for them to orient the map (as the local population are Hindus and orientation is an important element in all their religious rituals and other daily activities). I also realized on reflection that full participation could have been ensured if I had organized an exclusive participatory mapping exercise rather than linking it to some other social event. I could then have determined the number of participants and it would potentially have been easier to familiarize them with the nature of the mapping

exercise. It would have given me more time to facilitate activities and convince participants to draw a map.

In the context of this study, it doesn't really matter whether or not the participants drafted their own map because the purpose was to gain insight on local disasters, where they occurred, their impact and the community's response, and to better comprehend the physical, social and cultural setting of these communities. Despite not being fully participatory, the exercise met its purpose. I therefore chose not to change the strategy of using social events as a platform for participatory mapping, and continued in a similar fashion in the remaining communities. In the subsequent mapping exercises, strenuous efforts were made to enhance the overall level of participation, but this remained an on-going challenge during the fieldwork.

4.4 Conclusion

Ethnographic fieldwork is not just about research and those researched, but it is also about the researcher themselves. Personal identity in terms of caste and ethnic origin, culture, and the personal values and beliefs of the researcher can significantly influence the research process. Utmost care should therefore be taken to balance the researcher's role as a participant and observer. At the same time, there are both merits and demerits in being an outsider, an insider, or an outsider-insider. Being aware of such merits and demerits allows the researcher to substantially avoid and overcome challenges, thus allowing them to use their position(s) as a means of developing the skills and tactics to overcome cultural differences. Besides the ability to generate rich multi-dimensional data, ethnography also offers a unique and valuable learning experiences for both the researcher and the participants.

Ethnography, with the extensive participation and observation by the researcher, combined with the strategies it requires in being aware of inter-subjectivity and positionality is therefore an ideal methodological approach for minimizing misinterpretations and ensuring the proper involvement of the research subjects, thereby actively contributing towards the process of appropriating the voices of those researched.

Chapter Five

Redefining the ‘Norm’: Understanding Everyday Lives in Remote Nepal

There is broad acceptance that disasters are best viewed as an extension of everyday life and that pre-existing social and environmental conditions (and their interaction) determine the root causes of disasters (see, Chapter Two). By extension it is reasonable to assume that these same conditions impact on the nature of disaster response and the recovery process. In line with this thinking, this chapter examines „everyday life“ in the study of communities and attempts to identify and explain the root causes of the disasters explored in this thesis.

5.1 The ‘norm’

This section describes the everyday conditions in the studied communities.

5.1.1 The Communities

The nine studied communities, as introduced previously, are all located in the Far Western Region, in the Siwalik Hills and the Middle Mountains, more commonly encapsulated and described as the Hills. Altitudes range from 200 - 2,400m (Land Resource Mapping Project, 1986). The Hills enjoy a sub-tropical climate, but with cool, dry winters (minimums around -5°), and warm to hot wet summers (maximums around 30°). The higher peaks receive an occasional snow cover and lower parts experience winter frosts. But snow is rare although frosts are quite common.

Nepal as a whole is landlocked and wedged between two of the world’s major powers, China and India (Map 1). Dominated by the Himalayas, it has a landscape characterised by high mountains and hills, steep slopes and deep river valleys. These features result in sometimes abrupt variations in climate within short distances, although the seasonal Monsoon rains are a dominant feature throughout the country. These usually start in June and last through till September,

occasionally October. The associated rain averages 800-3000 mm per year (Kansakar, Hannah, Gerrard, & Rees, 2004).. It is against this background that the communities examined here have been built, and their residents work and live.

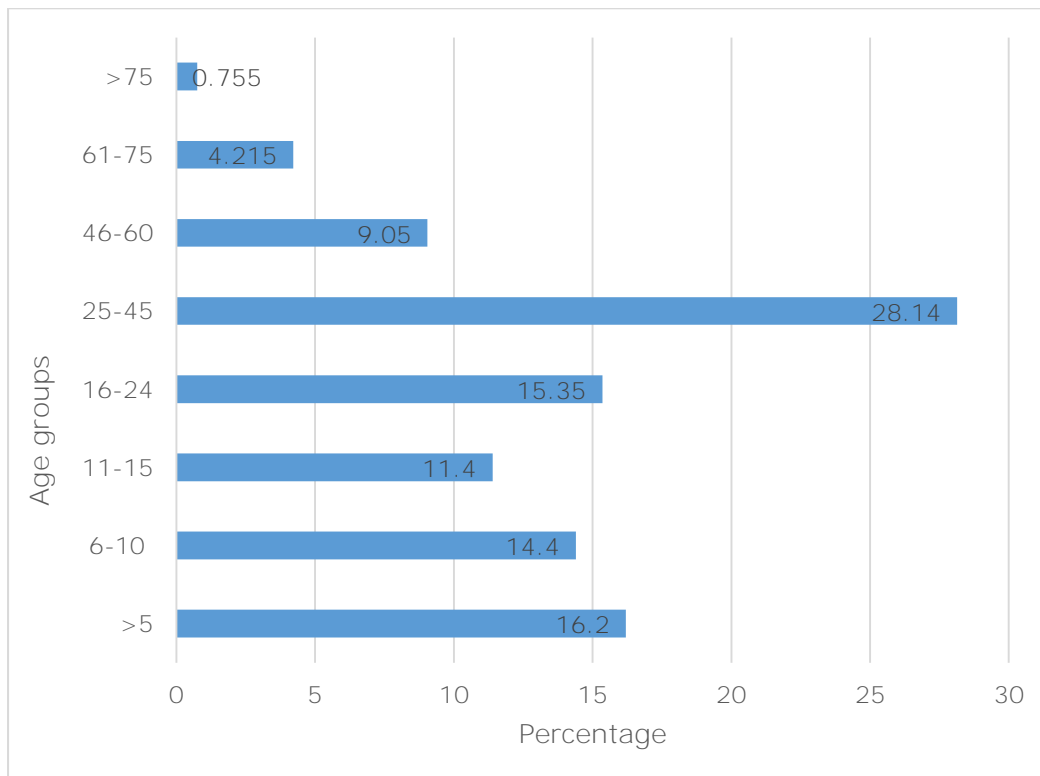
Table 4 The study communities- a population profile

District	VDC	Study Communities	Number of households	Total population	
Baitadi	Gokuleshwor Total household: 680 Total population: 4999	Bangabagar	39	211	
		Sera*	Kholigaun	22	179
			Devgaun	24	156
			Shaungaun	43	332
			Dalit tole	18	149
		Kuyadaha	19	141	
Kailali	Nigali Total household: 1074 Total population: 6893	Paladi	44	263	
		Kichan	34	357	
		Patreni	76	569	

Source: Field data (2013, 2014), Gokuleshwor Village Development Committee (2010), and Nigali Village Development Committee (2011)

Each of the study communities is small with populations ranging from 141 to 569 (Table 4). The average number of people in a household is 7, most commonly made-up of two parents and their children (Gokuleshwor Village Development Committee, 2010; Nigali Village Development Committee, 2011), well above the national average of 4.8. Children (<15 age) and older people (<60 age) form around half the total population (Table 4), and can be roughly equated with “dependents”, though a significant proportion of children and older people are involved in agricultural wage labor.

Figure 6: Population structure in the study communities



Source: (Gokuleshwor Village Development Committee, 2010; Nigali Village Development Committee, 2011)

Nationally, the annual population growth rate is low at 1.35 percent (2011) and although no data are available it is generally accepted the growth rates in remote rural areas are much higher. The total population of Nepal is 26.49 million (5,427,302 households), and despite increasing rural to urban migration, more than 80% of people continue to live in rural areas (Central Bureau of Statistics, 2011a).

Nationally, the population is diverse in its cultural, ethnic, caste, language and religious mix (Appendix 5). In the studied communities, most people are culturally described as *Parbatiyas*— the people from the mountains. Linguistically they are of Indo-Aryan origin, and follow Hinduism, but all the local residents speak Nepalese and Dotyeli. As with the country as a whole, a major compounding factor, however, is caste and this adds an important element of diversity. Numerically, the largest caste group is the Chhetris, followed by the Dalits, Brahmins, Thakuris and the Naths. Any one community commonly has one or two dominant castes (although the overlap between ethnic group and caste is

inherently complex, and within any one community or local area different castes and ethnic groups coincide). This results in a series of different often powerful hierarchies that impact on almost all aspects of daily life (see, Bennett, 2005; Gellner, 2007; Gray, 2012; Gurung, 2005a; H Höfer, 1979; Niraula, 2010; UNDP, 2011; UNDP, 2004).

The study communities include many of the physical challenges found elsewhere in rural, hilly parts of Nepal. Soils are thin and the combination of altitude, steep slopes, narrow river valleys and fast flowing rivers result is a fragile landscape that is particularly vulnerable to extreme weather conditions (Picture 21).

Picture 21: Typical landscape of the Gokuleshwor area



Source: Taken by the author, January 2014

These characteristics seriously constrain settlement and human activities and directly impact on the isolation of the region. Most parts have poor transport links¹⁵. People usually have to walk along steep, narrow walking tracks over difficult terrain for two or three hours to reach the nearest road suitable for motor vehicles (Picture 22).

¹⁵ Only 60 of Nepal's total of 75 administrative districts are linked by road to other parts of the country (UNDP, 2004).

Picture 22: A typical walking trail Dalit tole, Gokuleshwor



Source: Taken by the author, January 2014

These trails and the roads themselves commonly remain blocked for at least three months a year due to rock falls and land slips that regularly occur during the Monsoon season. This was a problem repeatedly identified by interviewees. Indeed the driver who took me from Dhangadi to Paladi bluntly stated:

"You are „lucky“ to be here in the dry season. If you had come in the monsoon you wouldn“t find any vehicles to take you here. Who would want to be stranded for days as these roads–trees, rocks and slips are everywhere."

(Field notes, Nigali, local driver, 27th November 2013).

The isolation experienced in these communities is hard to convey. To reach Kathmandu from the study communities, for example, I had to walk a minimum of two hours to reach the nearest motor road. In the Monsoon season it could easily have taken double that time. Once on the road I hired a vehicle which took me to the nearest airport in Dhangadi a trip of at least 8 hours. As a result, even to get to the airport often required an overnight stop. From the airport I took a direct

flight to Kathmandu which took 1 hour 15 minutes. Therefore, in optimum conditions it took me around 24 hours to reach Kathmandu. For most of the locals who have to rely on public bus, which is less reliable, this trip requires two or three changes to reach Dhangadi and a further minimum of 18 hours by bus to Kathmandu. If everything goes perfectly (which is rare) the trip involves two nights’ stop-over (one in Dhangadi and one on the bus) – a total travel time of close to 48 hours.

Even to reach a local regional government and administrative centre takes a minimum of 8-10 hours, and involves a combination of walking and bus. In poor weather it takes much longer. Most roads in the study area are impassable in the rainy season, and most links between individual communities are limited to narrow, steep foot trails across mountain slopes that are perilous and vulnerable to rain, slips and rock falls (Pictures 23).

Picture 23: Recently built feeder road to Shivanagar, Nigali



Source: Taken by the author, November 2013

A local Red Cross volunteer described the Monsoon as “the tough season”. She lives in the study area and as part of her job, has to report local events to the local Red Cross office, and therefore has to frequently walk from one place to another. Once she slipped down a slope towards a fiercely flowing stream. Her father had

accompanied her to assure her safety and she would have drowned if he hadn't been there to pull her out. (Field notes, Alad, 29th November 2013). To conduct an interview with personnel in the VDC office I had to go to Shivanagar and use the same path described by the Red Cross volunteer. Despite it being the dry season, the walk wasn't easy. There were numerous landslides and small streams along the way. I could easily imagine how dreadful it would be during the Monsoon when the same small streams turn into major, muddy fast flowing floods, and the landslide sites are active. Walking and other movement in the Monsoon season is difficult and is responsible for multiple incidents causing injury and even caused the death of a boy on his way to school in 2010 (Field notes, Nigali, local resident, 27th November 2013). Similar treacherous conditions and major disruptions are almost equally characteristic on the major traffic highways that connect remote communities to the major towns and cities (Picture 24).

Picture 24: One of many landslides on the narrow Mahakali Highway (on the way to Gokuleshwor)



Source: Taken by the author, January 2014

Walking is the main means for people to get from one small community to another. For long-distance travel, as the interviewees reported, bus is the most common means used. Although there are no official data for the study communities themselves, the 2011 National Census shows that overall only 43 percent of households are within 30 minutes from a public bus service and that in rural hilly and mountain areas, transport is both more limited and much more difficult. Similarly, in the Far Western Region only about 50 percent of households are within 30 minutes of the nearest paved road (Central Bureau of Statistics, 2011), in the study communities the average bus/walking time is closer to 3-4 hours (Field data).

The National Census describes, the average time to reach the nearest health post or sub- post (the most basic form of health service) is 44 minutes. To reach the nearest hospital takes 2 hours, and fifty percent of households are more than 30 minutes from their nearest police station. Fifty-five percent of people are more than 30 minutes from a market centre, although 64 percent have access within 30 minutes to a Haat bazaar (a local market held only on certain days of the week) within 30 minutes. Yet again, these national averages grossly underestimate the time and effort required by residents in the study communities to access services. For example, the average minimum time to reach a market centre from the study communities is over 2 hours. Likewise, access to a post office, telephone booth, cooperative or bank is always difficult, and is again made more problematic by weather conditions.

Most of the study areas lack almost all basic infrastructure, including irrigation canals, and piped water (Gokuleshwor Village Development Committee, 2010; Nigali Village Development Committee, 2011). Access to potable water, sanitation, education, health services, and public transportation is difficult. Most households need to walk 15-20 minutes or more to obtain drinking water. In the communities, although 87 percent of households theoretically have a primary school within 30 minutes' walk, thirty-one percent are 1-2 hour from the nearest health post or sub-health post. In practice, to reach a school, access fresh water or health services is tough because of the difficult terrain, lack of transport, and frequent adverse weather conditions (Field data, 2013 and 2014).

Within the studied communities, most commodities and services must be obtained from the nearest town a 2-3 hours walk away (Pictures 25 and 26) (Field data, 2013 and 2014). For example, residents in Nigali take an average of 3 hours to walk to Shivanagar, a small market center which also has a VDC office serving the whole district, a Red Cross office, a high school, a health post, a police station, and a radio/mobile repair center. It also has a transport service that uses a gravel feeder road to the Mahakali highway that provides a link to other parts of the country. The bus from Shivanagar takes around 6 hours to reach Dhangadi (the nearest city) which offers a wider range of services including an airport (for both Nigali and Gokuleshwor. This is the closest airport with a direct connection to Kathmandu), a hospital, government offices, a university, and a market. As so often, however, the feeder road itself is not usable during the Monsoon (mid-June to mid-September). And a gravel road which runs closer to the communities and can be used by motor vehicles, is also routinely closed during the monsoon.

Picture 25: Gokule Bazaar- the town center in Gokuleshwor



Source: Taken by the author, January 2014

Picture 26: A local bus boat boarding passengers to go to Dhangadi (the District capital)



Source: Taken by the author, November 2013

Gokuleshwor illustrates wider regional conditions. The town center Gokule Bazaar is about one hour's walk along the Mahakali highway from Bangabagar and a few hours more from the other study communities in Gokuleshwor, which lie off the main highway. The town provides a range of similar goods and services to Shivanagar. Public transport is available, but not during the Monsoon. The nearest health post is about 1-1.5 hours walk away; the nearest hospitals are 6-12 hours away in Khalanga (in Darchula district) or Pithoragarh (in India). There is also a small airport with an unpaved runway in Gokule bazaar, but it has been out of operation for more than a decade.

5.1.2 The Economic Condition of Remote Nepal

The steep mountain terrain in the Hills places severe limits on where people can live, build homes and grow food. The combined need for access to water, forests,

and productive land means that the deep river valleys and surrounding slopes often provide the best sites. At least partly in consequence, a significant proportion of the population live on hazardous sites, including steep slopes, narrow ridges, and flood prone river valleys and plains. For some, living in such areas provides an economic opportunity, for most, it offers their sole means of survival.

These same conditions mean that there is a severe shortage of productive land – a problem common in most hilly and mountainous areas of Nepal. The 2011 Census shows that the Hills contain around half of the country's population, but have disproportionately less cultivated land. As a result the population density per hectare of cultivated land is higher than in other parts of the country (Food and Agriculture Organization, 2008). Pressure on land resources is high. This has resulted in huge out-migration. In this way, potential population pressure in rural areas, such as the study area, is reduced, at least in part, but substantial out-migration remains insufficient to counter population growth. In 1991 the rural population density per unit area of arable land in the study area was over 1500/ sq. km., or 15 per hectare (Shrestha, 1992) and the total population of the Hills was 841,9889 (Central Bureau of Statistics, 1991). In 2011 the population has increased to 1,139,4007 (a 35% increase) (Central Bureau of Statistics, 2014).

Increased pressure on the land continues to build. Most of the arable land in Nepal is in the Terai, a narrow strip of the low-lying Gangetic plains in the South (Map 2) The Terai is consequently viewed by interviewees in the Hills as a „dream destination“. There has been a huge migration from the region to the Terai (Field data, 2013 and 2014). The exact numbers, however, remain unknown, and undocumented. But the attractions of the Terai have significant social repercussions. While I was in Paladi, a school girl (age 15) ran away with a man who the villagers thought was most probably from the Terai. A teacher at Kedar Lower Secondary School (local government school in Paladi) pointed out that this is a common incidence among school girls – “one happened just two weeks ago”. He further said that young girls get easily attracted to men who claim to be from Terai and who give them the prospect of a comfortable life. “Why wouldn't they? why wouldn't anyone be lured in this way? - compared to this place Terai is heaven – fertile soils, roads, schools, hospitals, everything. A small piece of land

there is quite enough to survive” (Field notes, local teacher, Paladi, 19th December 2013). At the same time human trafficking is not unusual. Locals believe that the girls who run away but “never came back with their husbands” most probably had been sold to Indian brothels (Field data, 2013).

Despite multiple barriers, threats and constraints, agriculture (and a continued reliance on traditional technologies) remains the main source of work for 70 to 80 percent of the population (Gokuleshwor Village Development Committee, 2010; Nigali Village Development Committee, 2011). For most households, output is mainly for subsistence, and centres on crops such as millet, corn, paddy rice, wheat, and vegetables. Even so, the amount of food produced is generally inadequate and at best meets household needs for only 6 months a year (Gokuleshwor Village Development Committee, 2010; Nigali Village Development Committee, 2011). Cattle are found on 65 percent of farms – usually two to three beasts. These too, are mainly for household use, providing milk, meat, manure and draught power. If required, however, they offer an asset that can be sold for cash. Over time, change has occurred. Some communities have adopted vegetable and fruit production as a means to generate a cash income. Indeed communities in Nigali VDC are particularly well known for their oranges, lemons and other citrus fruit. Such fruit crops ripen in the dry season which allows entrepreneurs to transport them by jeep to regional markets. Similarly, in Kuyadaha (Gokuleshwor) some households grow vegetables as a cash crop. These crops are more perishable and the total output is small and largely sold to local residents. Despite these small, but positive signs of improvement, the majority of households continue to have little land (an average of 0.5 ha) and even this is often fragmented into smaller pockets (Central Bureau of Statistics, 2011b) and for those who do grow cash crops their income is still usually inadequate to meet their basic needs (Field data, 2013 and 2014). Cultivation is typically carried out on narrow terraces that straddle the hill slopes (Picture 26). These often lack proper drainage to control surface water run-off (which could lead to landslides and slumping).

River valleys are attractive areas for agriculture and business. Such areas are highly valued and are therefore commonly the site of the homes of the rich. Due to

relatively gentle terrain river valleys comparatively have better physical access and therefore are often centres for services, business and commute.

Local families usually have two pieces of land: Bari land (non-irrigated or rain-fed, less fertile land), and Khet (irrigated land). Most families, (around 70 percent of those who own land) also have a small patch of private forest (Field data, 2013 and 2014). In most cases Bari and Khet are located on different sites. This is primarily a response to the limited cultivable land available, and to provide ready access to firewood, and fodder plants for cattle.

Picture 27: Typical agricultural terraces in the study area, Sera, January 2014



Source: Taken by the author, January 2014

Over time, the area of land per household has gradually decreased due to increasing fragmentation caused by traditional inheritance laws which require that each son gets an equal share of the family land (Nepal, 2013). More recently this has been extended giving daughters an equal right if they remain unmarried (Asian Development Bank, 2010; Pun, 2013). At the same time, most farmers expressed concern at the diminishing fertility of the soil.

This was typically expressed at a community meeting in Kholigaun, when one participant, reflecting wide-spread views, stated:

“This land is not as fertile as it used to be twenty years ago. At that time with 20 ropani (approx. 1 ha) we could easily make 30 Muri rice (around 2000 kg), and now the maximum we can hardly make 10-12 Muri.”

(Field notes, Kholigaun, local resident, 3 January 2014)

The combination of scarce land, limited technology, population pressure and other factors mean that many farm households need to buy a substantial amount of grain to survive. This was a recurrent theme raised in the interviews. This grain is imported either from Terai or from India (Field data, 2013 and 2014). Food insecurity has also forced many people to find alternative or additional sources of income. For most, the only option is wage labour. After working one's own land, wage labour (agricultural and non-agricultural) is the main source of employment in the communities (Gokuleshwor Village Development Committee, 2010; Nigali Village Development Committee, 2011). But even this type of work is not readily available and in consequence has resulted in migration to neighbouring cities and abroad, particularly to India. Due to open boarder migration between Nepal and India such movements remains largely undocumented (Upreti, 20012). According to the data that are available, in Gokuleshwor, for example, around 5% of the total working population are involved in foreign employment, 92% of this in India (Gokuleshwor Village Development Committee, 2010; Nigali Village Development Committee, 2011). This may well be a gross underestimation. Data from the fieldwork for this thesis found that one in every four families has at least one member working in India. Based on the field interviews most of these migrants have low-paid unskilled jobs, which are often seasonal (Field data, 2013 and 2014). Around 3.1 percent of the local population in the communities have work in the service sector particularly in government, schools, the police and the army. A few are employed in the Indian army; a further 1.64 percent are involved in small businesses, including small local shops and petty trade (Gokuleshwor Village Development Committee, 2010; Nigali Village Development Committee, 2011). Most household members are involved in more than one form of work or employment (Field data, 2013 and 2014).

Despite some evidence of economic growth in recent years (UNDP, 2004), nationally, the number of Nepalese living overseas had climbed and is now more than 2.5 times that in 2001. Close to half of these migrants are aged between 15 and 24, and remittances now make-up as much as 25-30 percent of GDP (World Bank 2011). There are no comparable data for the study communities, but the field interviews repeatedly highlighted the importance of remittances to buy food, or to help access credit.

5.1.3 Living on the Margins: The Social Condition of Remote Nepal

Ironically, the landscape of the Far Western Region projects a “perfect picture”; an image of great beauty that has immense international appeal (Pictures 28 and 29). Behind this, however, are many harsh realities, poverty, a weak economy, political instability, and some cruel traditional and religious practices.

Picture 28: The Gokuleshwor area



Source: Taken by the author, February 2014

Picture 29: The community of Dalit tole overlooking the river valley



Source: Taken by the author, January 2014

Environmental and economic conditions and traditional practices severely impact on the people who live in rural areas, and are most pronounced in remote areas, such as in the study communities. One local man in Kuyadaha summed matters up stating that, “to be born in these hills is to be cheated by fate” (Field notes, Kuyadaha, local resident, 12 January 2014).

On most criteria, the study communities are comparatively worse off than those elsewhere in Nepal. The Far Western Region is one of the poorest and most isolated regions of Nepal (International Monetary Fund, 2003; UNDP, 2009, 2011). Mass poverty and deprivation are apparent in the pervasiveness of poor nutrition, unhygienic conditions, poor housing and a general absence of modern medical care and social services (Central Bureau of Statistics, World Food Programme & World Bank, 2006). A large proportion of the population has only limited access to basic shelter and sanitation. As many as a third live in impermanent homes¹⁶ (Central Bureau of Statistics, 2001). As noted above, the food supply for most households comes from their own land and is usually inadequate to meet basic needs. In consequence, unsustainable practices, including

¹⁶ Impermanent house: a house having both the walls and the roof consisting of temporary materials

over-cultivation, cultivation of fragile lands, steep slopes, over-grazing and deforestation are common elements in the struggle to survive (Field data, 2013 and 2014).

The health services in the study area are largely inadequate. The closest health service providers are health posts¹⁷ or sub-health posts. One such post serves several communities. Residents of communities have to walk 1-2 hours across difficult terrain to reach them. In case of emergency, family members or other community members carry the sick person on bamboo stretchers or *Doko* (a hand-woven conical shaped basket) to the nearest place where they can access an ambulance or other motor vehicle (Field notes, Paladi, local guide, 29 November 2013). Most people rely on herbal medicines and first contact a spiritual healer (in the study communities, a Brahmin or Nath priest) to treat their illness, before seeking help from western style health providers (Field data, 2013, 2014; Gokuleshwor Village Development Committee, 2010; Nigali Village Development Committee, 2011). This situation is compounded by other circumstances. For example, A local teenage girl who had suffered from stomach pains for three days, still refused to go to the local health post, saying “they (the health post) don’t have anything there” (Field notes, local resident, Bangabagar, 3 Jan 2014). She added that if the pain persisted she would go to the hospital in Pithauragarh (in India) 6 hours away by bus. When I visited one of the sub-health posts in Gokuleshwor I found an empty room, with only very basic equipment and even that was in poor condition (Kuyadaha, 13 January 2014). There were very few medicines available. The situation for maternal health care and related issues is generally worse. More than 50 percent of births occur at home with no skilled, professional aid. Fifteen percent of girls marry before the age of fifteen (Government of Nepal & United Nations Children Fund, 2010).

Nationally, the maternal mortality¹⁸ rate is high. According to data from the Nepalese government’s Ministry of Health and the United States, between 5,000 to 6,000 Nepalese women die in childbirth each year (IFRC, 2006). Moreover, if

¹⁷ Health post or sub-health post is the basic unit of health services provided in Nepal.

¹⁸ The Maternal Mortality Ratio is the number of maternal deaths per 100,000 live births. The World Health Organization defines maternal death as the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes. Maternal Mortality Ratio is the ratio of the number of maternal deaths per 100,000 live births.

this occurs, the likelihood of the baby surviving is greatly reduced. Neonatal mortality rates¹⁹, with an estimated 30,000 babies dying before they are a month old, are among the highest in the world (IFRC, 2006). Rural areas again have the poorest record. Inevitably, childbirth is extremely dangerous in the study communities, not just due to the lack of skilled medical staff (or lack of access to them) but also due to the still prevalent tradition that considers delivering women to be polluted and requires them to stay away from the family home. In most cases, they end up giving birth in unhygienic and unsafe conditions, in places such as a cowshed (Field notes, Nigali, resident of Alad in Nigali, 15 November 2013). All these are indicative of the very poor health facilities and discriminatory practices found in the area; together they are suggestive of disproportionately high infant mortality rates in the study area, and rates even higher than the (already high) national average. Such facts go some way to explain a national, life expectation at birth of 66.6 years and crude birth and death rates of 22 and 7.3 respectively (Central Bureau of Statistics, 2014).

Health conditions typify wider social conditions. For example, field investigation by the author found that only 50 percent of households have tap/piped water (community or private). Others must rely on streams, rivers, lakes and wells (Field data, 2013 and 2014). Equally, most households have no toilet of any kind. This is the case for as 68 percent of people in Gokuleshwor, and 51 percent in Nigali. Consequently, and inevitably, open defecation is common practice whether in the forests, on cropland or along river banks. None of the community households had an established electricity supply but rely on kerosene, bio-gas or solar power for lighting. For over 90 percent of households cook over a wood fire. In abrupt contrast, radios and mobile phones are common and most households have access to both pieces of modern technology (Field data, 2013 and 2014).

The literacy rate is just over 60 percent (Gokuleshwor Village Development Committee, 2010; Nigali Village Development Committee, 2011). Poverty, traditional mind-sets, and cultural practices, thwart access to education, although physical access is not the only problem. A greater problem is accessing a „quality education“. The student essay competition conducted in Kedar Lower Secondary

¹⁹ Neonatal Mortality Rate: the World Health Organization (WHO) defines the neonatal mortality rate as the number of deaths during the first 28 completed days of life per 1,000 live births in a given year or period.

School (as a component of my fieldwork) required eighth grade students to write a group essay in Nepali on „after disasters“ (see, Chapter Three, section 32.2). The essays received were extremely useful and interesting, but, at first I could not understand them because most sentences had no structure, were incomplete, and the spelling and vocabulary used were all wrong. This was surprising because by grade eight children can commonly and readily write a correct sentence and have a basic command of spelling and vocabulary at least in Nepali. Later with the help of the members of my homestay family and neighbours (the youngest daughter of the homestay family and the kids from the neighbour“s family were participants in the essay competition) I sorted things out, but it took over three hours. When I discussed this issue with the older members of the family and others, they pointed out several issues that contribute to the poor quality of education in the local government schools. The issues aren“t limited to a lack of human and financial resources. The key issue is poor management of the school. For example, many locals complained that some teachers go to class „being fully drunk“, and many aren“t present in the school but sign the attendance register only when they do turn-up. When the managers asked these teachers to stop such behaviour, instead of an apology, they received threats to burn the school down or to hurt anyone found to replace or send their complaints went to a higher level (Field notes, Paladi, local resident, 19th December 2013).

The nationwide, armed conflict waged by the Communist Party of Nepal-Maoist²⁰ [CPN (M)] against the state lasted from 1996-2006, and had a massive impact on the study communities. In the course of interviews, and informal conversations, it was rare for people not to mention the “conflict” while sharing their experience in and around the topic of disasters and disaster recovery. Many researchers identify the conflict as a reflection of more than two hundred years of top-down, exclusionary, centralist, autocratic rule and a feudal political and social system that nurtured social exclusion, marginalization, poverty and food insecurity, discrimination and subordination in Nepal (see, Adhikari, 1999; Seddon & Hussein, 2002; Upreti, 2004, 2010; Murshed & Gates, 2005). Maoists used popular, sensitive issues and key items on the agenda of the poor and

²⁰ In January 2009, CPN (M) and Unity Centre (another communist party) united and the name of the CPN (M) was changed to Unified Communist Party of Nepal [UCPN (Maoist)]. The name CPN (M) was prevalent during the armed conflict time and the context referred at that time contains the CPN (M) instead of UCPN (M).

marginalized, including ending exploitation, discrimination, and the establishment of people's rights, to attract supporters. As a result, conflict quickly spread in areas (like the study area) where there was a high prevalence of poverty, food insecurity, social injustice and discrimination. During the conflict the study area was one of the prime areas influenced by the Maoists and was officially described as one of the „Maoist-Controlled“ areas (Seddon & Hussein, 2002). The armed conflict killed, injured and displaced a lot of people; development plans and projects were delayed or withdrawn; trade and markets collapsed due to the barriers on the movement of people, goods, and services; infrastructure was destroyed, and people (including children) were forcefully taken by the Maoists either to work for them or to fight as rebels (Seddon & Hussein, 2002; Upreti, 2004, 2010; Murshed & Gates 2005). Richer groups and business people were asked for large sums of money, large quantities of food or material as “donations”, poor families had to prepare and supply food and housing to the rebels (Field data, 2013 and 2014).

The armed conflict resulted in parents stopping sending their children to school for fear of abduction, and people stopped going to the forest as they feared both the Maoists and the Government (Field data, 2013 and 2014; Seddon & Hussein, 2002). Local government bodies, schools and health posts were unable to function as they were largely under the control of the Maoists. Most staff of these institutions had no choice other than to run away to safety. When the war intensified, the majority of families in the study communities had to escape to Terai or India to save their lives (Field data, 2013 and 2014). Field investigations found that most returned to find their homes emptied and vandalized. The field interviews also exposed the fact that during the conflict many children had dropped out of school. Twenty-five percent never resumed their schooling. Bad environmental practices, including excessive mining and deforestation, which had been stopped by the Government some years before the conflict started, were reintroduced and even accelerated during the conflict period, and were strongly supported by the Maoist fighters. A local Chhetri man (age 64) says, the Maoists encouraged such activities because “if poor people could get work and food though resources, mining shouldn’t be stopped, and wood provides food” (Field

notes, Bangabagar, local resident, 9th January 2014). In addition, Government buildings, and vehicles were left vandalized (Picture 30).

Picture 30: Government owned vehicles vandalized during the Maoist War (Bangabagar community)



Source: Taken by the author, February 2014

The VDC office in Nigali was completely destroyed in the conflict, and now operates from rented rooms (Field data, 2013). Overall, the conflicts increased isolation, environmental deterioration, and underdevelopment throughout the study area. Nationally, it shifted the Government's focus to activities designed to suppress the Maoist forces. As a result, according to Pokharel (2004) the administrative and military budget significantly increased while the development budget decreased, and the focus of investment on remote areas dropped off the list (cited in Upreti, 2010, pp. 11-12). These circumstances, a result of the ten-year conflict, set back development in the region by several decades.

Today, Nepal remains in a period of political transition following the end of armed conflict and the peace settlement of 2006. Negotiations over a new constitution remain ongoing. This has created and maintains a range of uncertainties. It has, in addition, weakened the effective implementation of existing legislation and this impacts on all aspects of life. It has slowed the pace of development and encouraged bad practices. A senior official in one study district explained, the ongoing political transition has weakened law and order, and

weakened the power and ability to control the „obvious“ forms of mal-development in the District. He particularly noted the expansion of illegal squatters, mostly of migrants from the remote Hills, on forest land and on flood prone river banks in Terai – (Interview, Dhangadi, Chief District Officer, 7th November 2013).

Due to the prolonged conflict and associated political instability, local government elections (includes at District, VDC and ward level) have not been held since 1998) (IFRC, 2011). The absence of an elected local government has thwarted the progress of “bottom-up participatory planning” that is written into many different government plans and projects. This has hit remote communities particularly hard because they rarely get a chance to be heard. Locally elected governments should play a vital role to encourage public participation in planning, and provide a means to communicate local needs to the national government. Lack of local, elected representatives is a huge setback to the participatory, bottom-up planning that Nepal states it intends to follow. Remote and isolated, the study communities are again among the worst affected by such gaps and delays.

The Question of Gender

Life is hard. And some groups are doubly penalised. Women have a lower status than men and in general, are less well-off (see, Cox, 1994; United Nations, 2011). This is explained as a direct consequence of the Region’s physical isolation which has preserved Hindu orthodoxy in all its manifestations (including caste and gender based discrimination). Several gender-related discriminatory practices are deeply entrenched including child marriage, Chhaupadi (See, Chapter Four, Section 4.2.1), and practices related to child-birth (as explained previously). Different areas and communities within the Far Western Region have different levels of discrimination, and again, women living in the remotest parts, including the study communities, suffer most of all. Women lag significantly behind men in almost every facet of their lives.

In the study communities, except in the few female headed households, all decisions are made by men and any money is controlled by men. Women are confined to domestic and subsistence activities. These commonly include a variety of heavy tasks such as fetching water, collecting firewood, working in the fields,

and all sorts of other household chores. Women are little involved in „outside“ activities.

A local woman neatly summarized the situation:

“Going to the jungle, cutting grass, collecting fodder, digging farm, fetching water, beating rice—this is women’s work here; men talk, go to the farm (particularly ploughing! she adds), drink and gamble, and eat „meat”—this is how it is!”

(Field notes, Kichan, local woman, 27 December 2013)

Alcohol consumption in the area is very high (Field data, 2013 and 2014), and domestic violence against women is common (Field data, 2013 and 2014). In an informal conversation with the daughter-in-law of the family with whom I lived when in the field, whose husband had previously working in Malaysia and now recently back, she explained:

“Here, men start drinking from early morning, and when they go home they start beating their woman. My man thankfully hasn’t beaten me so far. I fear he might learn those things from his friends with whom he hangs around from morning to evening.”

(Field notes, Bangabagar, woman aged 33, 9 January 2014).

Females make-up more than 50 percent of the national population, but discrimination limits the capacity of many to engage in a wide range of socio-economic activities, to attain higher education, or access health care (UNDP, 2004). In the study area women are equally well represented (Gokuleshwor Village Development Committee, 2010; Nigali Village Development Committee, 2011) but face a higher level of discrimination than in the country in general. Traditional gender discrimination is frequently reinforced by legal barriers with respect to citizenship, inheritance, land ownership, marriage and employment (Asian Development Bank, 2010; UNDP, 2011).

Discrimination translates into stark measures of „development“. The national literacy rate for women and girls (aged five and over), is 57 percent compared to 75 percent for males in the same age group (Central Bureau of Statistics, 2011a). Women and girls make-up only about one third of those who have completed

secondary school (Central Bureau of Statistics, 2011). The Census also shows that men own more than 80 percent of houses and land. Women, more than half the population, hold only about 15 percent of civil service jobs and less than one percent of higher level positions (Department of Civil Personal Records, 2013). Female representation in the executive and judiciary branches is even lower (Central Bureau of Statistics, 2001). Thus while legal and institutional transformation over the years has brought many positive changes, progress remains slow because the discriminatory practices are socially and culturally rooted in most communities. This is again particularly the case in remote rural areas.

The number of literate females in Nigali VDC, for instance, is less than half that of men; of the just over five percent of the population that have completed basic education, only 30 percent are female (Nigali Village Development Committee, 2011). Female literacy and education levels are higher in Gokuleshwor VDC, which has a broader range of educational services and is more accessible. But both VDCs have school dropout rates for girls which are high at all levels. This is undoubtedly linked to the value attached to girls in contributing to household chores and work in the fields, the low age of marriage, families' inability to pay the cost of schooling²¹, and the priority given to males. Labour migration has further helped compound the burden women must bear. Field evidence demonstrates that, in the absence of many males, women now do an increasing share of manual tasks on the land, and are increasingly pulled out of school to fill these tasks.

The Question of Caste

The social hierarchy and power structure evident in how women are treated is compounded and extended across the whole population by the persistence of caste-based discrimination which, although legally abolished in 1963, remains widely observed, particularly in remote rural areas.

The caste system is the traditional basis of social stratification in Nepal and involves the categorization of socio-cultural groups into different hierarchies.

²¹ Nepal provides free education in government run school up to grade 10. This includes payment of school fees and textbooks. The cost of uniform, and stationary are not included. Moreover, most school illegally charge additional fees in the name of school repairs, extracurricular activities or exam fees (Aryal, 2012).

One's position in the hierarchy determines one's status, social role, employment options, and potential interrelationship with people from different caste groups. It therefore determines one's access to various resources, a key element in disaster recovery. Caste as legally identified in Nepal before 1963 identified the legal role and responsibilities of different groups, and the extent and nature of the restrictions between different castes (see, Appendix 5). To cross these limits was a crime.

Both „pure” and „impure” castes are still observed in the study communities. The pure castes are the Brahmins, Chhetris, and Ascetic sects –the Naths, and Thakuris, and within the impure category are Kami, Sarki, Damai, Lohar, and Sunar. The entire pure category falls within the highest caste group – and all those in the impure category fall within the lowest caste group, „the impure and the untouchable castes” (Dalits).

The consequences of caste practices remains readily evident. Different social groups still have unequal access to physical, socio-economical, and political resources. The Dalits (the most discriminated group) is most impacted and marginalized. According to the Nepal Living Standard Survey 2003/04, about half of the Dalit population live below the poverty line, compared to 31 percent of the total population and 19 percent of Hill Brahmin/Chhetri (higher caste groups) (International Labour Organization, 2005; UNDP, 2011). In Nepal, land remains the primary economic resource, and a key asset in terms of power, recognition and influence. Landlessness is widespread among Dalits. Since food security is associated with landholding, Dalits commonly suffer severe food deficiencies. In 2005, food deficiencies were highest for Dalits (50 percent), followed Brahmin/Chhetri (32 percent), Vaisya (14 percent) and others (5 percent) (National Dalit Commission, 2005). The literacy rate for Dalit men is 60 percent compared 81 percent for the population as a whole and is 93 percent for Brahmin/Chhetri men. Only 1.6 percent of those who hold technical and professional jobs in Nepal are Dalits. They also lag behind on almost all health indicators (UNDP, 2011). Dalit representation is low in all state institutions including the civil service (Murshed & Gates, 2005). There is no Dalit at Secretary level, nor in other high ranking positions. Domination of certain caste/ethnic groups also exists in Nepal's political process. Representation of

certain caste and ethnic groups in parliament and the central committees of all political parties is a vivid example of exclusionary politics (Upreti, 2004, 2010). Since the 2008 elections, representation of Dalits has increased, up from almost zero in Parliament to about 50 of the 601 members of the Constituent Assembly. This is still short of their proportion in the population²² (Niraula, 2010). Dalit presence in the judiciary is even worse. Until the appellate court appointed a Dalit in 2009, there were no Dalit judges in the entire judiciary, and there are still over 200 discriminatory legal provisions in place affecting Dalits (International Labour Organization, 2005; UNDP, 2011). Since the legal abolition of caste-based discriminatory practices there have been many positive legal and political initiatives to reduce inequalities among different caste groups. Despite these changes, discrimination against Dalits still exists in severe forms, particularly in remote areas. The consequences of inequalities continue to be observed in all aspects of socio-economic life (Gurung, 2005a, International Labour Organization, 2005; Niraula, 2010; UNDP, 2011). The study areas provide vivid examples.

Numerically, the largest caste in the communities is the Chhetri followed by the Dalits, the Brahmins, the Thakuris and Nath. Any one community usually has one to two dominant castes or ethnic groups, but within each local area many different caste and ethnic groups exist. The community of Paladi gaun, for example, is dominated by the Chhettris but has some Brahmins. The neighboring community of Patreni gaun is made-up only of Dalits.

„Untouchability“ remains the most common form of discrimination against the Dalits. Considered as impure and untouchable, higher caste groups look down on them and they are still prohibited from entering many public areas including public temples, teashops, local restaurants, and the private houses owned by those of a higher caste. Specific kinds of food and milk, if touched by an untouchable person, are considered impure, so working in, or often merely entering teashops, food factories, dairy farms, and milk collection centers is often denied.

²² The size of the Dalit population is highly contested but is claimed to be around 14-20% of the total population (Gurung, 2005a; Niraula, 2010).

In an informal conversation with a Dalit man about how things are now in accessing jobs in the dairy sector, he quickly said:

“...no, no that’s not possible, not here, nor in India.”

(Field notes, Bangabagar, local Dalit resident, 8 January 2014)

Caste continues to limit the employment opportunities for Dalits. Moreover, the practice of untouchability has also made Dalits dependent on higher caste people for the use of natural resources. As a water-untouchable caste, Dalits are not allowed to share the same source of drinking water source as higher castes. Similarly they are not allowed to use public wells or taps used by higher caste groups (Field data, 2013). Studies by Upreti (2001, 2002) even show that it is almost impossible for a poor Dalit to get irrigation water in a dry summer until the local elites get what they need (Upreti, 2010). Such practices maintain Dalits’ dependence on the higher castes for natural resources, and discourages their empowerment and autonomy.

Physical contact between a member of a pure group and a less pure or impure person is a sin. Bodily contact with a member of an untouchable caste is still viewed as a vehicle of impurity. To avoid bodily contact Dalit and higher caste members walk very carefully then they have to pass on a narrow foot trail (Field data, 2013 and 2014). If touched then the higher castes, especially Brahmins, go through a process of purification²³. Untouchability discourages Dalits from participation in important political, social and cultural events and gatherings including attendance at education facilities. As a result, they have little opportunity for social improvement. This can be clearly seen in the education levels of Dalits in the study communities. For instance, in Nigali VDC, of all of those who have completed school only 3.6% are Dalits, whereas Dalits constitute around 20% of the population, The situation is no different in Gokuleshwor (Gokuleshwor Village Development Committee, 2010; Nigali Village Development Committee, 2011). As a result of low levels of education, service jobs are inaccessible to the majority of Dalits. No Dalits in the study communities are involved in any service role.

²³ Purification process: A person (from a pure caste group) touched by a member of the untouchable caste sprinkles himself with water which has been brought into contact with gold, which is held to be the „purest“ of all metals.

Untouchability also contributes to low self-esteem. During my fieldwork, it was only the higher caste men who approached and interrogated me about my work, and/or offered help. All Dalits remained silent; they never approached or talked to me unless I took the initiative. Lack of self-esteem means that the Dalits often remain poorly informed about what is happening in their local area (or learn last), and they miss-out on opportunities such as skills development training or attendance at meetings, opportunities quickly taken-up by the so called *Tatha batha* (which means smart people) who are usually higher caste, and are most often Brahmins.

Besides the practice of untouchability, traditionally Dalits were assigned all work socially tagged as „low-class“. This included tailoring, shoe-making, animal skinning, leather work, playing music, metal work and fishing. On the other hand, higher caste groups were assigned jobs that were socially prestigious (Brahmins-priests, teachers, preachers; Chhetris and Thakuris- kings, governors, warriors and soldiers; and Nath: semi-divine with spiritual and magical powers). While all other groups had the right to own land, farming was considered inappropriate for Dalits. As a result, they have historically had less (or no) access to arable land. Today, half a century after the legal abolition of caste, some progress has occurred, and many Dalit in the study communities now own land. Indeed, most Dalits in the study communities have tiny patches of arable land, and are involved in limited farming activities. The traditional „low-class“ jobs, however, still remain their primary occupation, if not in terms of income, certainly in terms of their social identity and status.

Today, traditional customs such as *riti magne* which translates as asking, begging, requesting, or soliciting from higher caste people according to „tradition“, are routinely practiced (Field data, 2013 and 2014). . Such requests remain a common form of interaction between people whose families and lineage had been connected for generations. Many Dalit still visit higher caste families to request basic items such as rice, wheat, corn, and spices, even cigarettes, tea, and sugar, or cash (Picture 31).

Picture 31: A Dalit woman with items obtained from begging (Bangabagar)



Source: Taken by the author, February, 2014

All Dalit families in the study communities (including children) are involved in such activities. Such practices traditionally helped to strengthen the economic, social, and political dominance of the higher caste (Cameron, 2007). They also ensured that the Dalits had little autonomy and were left socially dominated and powerless. As Dalits have gained access to land there is, however, some emerging resistance, observed in the field, of higher caste groups refusing to respond to their requests on the basis that they (the Dalit) are no longer disadvantaged (Field data, 2013).

The Question of Power and Social Dynamics

Inequality pervades the relationships between different social groups. For the most part, the „majority“ of the population in these remote rural communities are to a large extent subject to the power and influence of a few „prominent“ community members. Such power is displayed in terms of information sharing, networking, interaction with outsiders, community decision making and leadership roles. This group is commonly categorized as being prominent and locally referred to as *Thulabada* (or, also as, *Buddhijiwi*), and primarily comprises landlords and Hindu priests. According to earlier studies, such supremacy, at least in the case of

landlords, is rooted in the long history of feudal land governance that resulted in skewed land ownership patterns and was compounded by a deeply discriminatory and strictly hierarchical society that excluded women, ethnic minorities and tribal groups, and especially those of lower castes (Wickeri, 2011). In earlier research (for example, see, Caplan, 1972) Hindu priests were said to have reached their powerful positions through exercising their traditional occupations as priests, for which they were paid in cash and grain. They used this income to buy land and lend money at a high interest rate, securing their loans with usufructuary mortgages (i.e. the creditor was authorized to use the mortgaged property until the repayment of the loan by the debtor), or contract for labour service, sometimes of indefinite duration. In the studied area, the „prominent“ group of the community not only included the landlords and Hindu priest, but also some educated community members with power and leadership roles (such as, teachers, government officials, and health workers). This could be the consequence of the increasing influence of formal systems in recent decades.

Overall, these prominent community members often have higher status primarily because of their wealth (particularly land), and hold a key role in religious rituals and in some instances their higher level of education and jobs. Through their role, these prominent members gain access to wider social networks, accumulate information and gain knowledge, and often have access to resources that can be donated for social causes such as helping needy families. In effect, these help maintain their capability and power to lead and guide the community. In terms of caste, Brahmins, Thakuris and a few Chhetris make up the prominent class. Given the traditional socio-cultural setting and the deeply rooted systems of discrimination against the Dalit caste, no Dalits are represented in this group.

On the other hand, there is the other social group that involves the majority of the population. This majority comprises the poor who often uneducated (or less educated) and less empowered households who are not limited to Dalits. Non-Dalit members, such as members from caste groups of Chhetris and Naths, also fall into this group who are largely dependent on the prominent community members in any decision making such as those concerning development work, community disputes, and utilization of internal resources (such as mobilization of human and natural resources in the area). Because of the lack of formal systems

(such as access to formal loans and social security systems) combined with little opportunity for advancement, members of marginalized groups have no choice other than to depend on the prominent members for their day-to-day survival. For example, this is obvious in the context of the informal credit system in these areas. Many poor families in the studied communities face a severe shortage of arable land and therefore face a shortage of grain for subsistence (Gokuleshwor Village Development Committee, 2010; Nigali Village Development Committee, 2011). Additionally, formal credit is not accessible to the poor. In effect, most poor families get cash loans from rich landlords (who often are prominent members) at high interest rates, and, for most part, are unable to survive without these loans. The loans finance poor families who are unable to meet every day basic requirements through their own farm production. Occasionally, they are also taken to meet the costly social responsibilities linked to marriages and funerals and other major religious and cultural rituals. The majority of poor families in the studied communities are severely in debt (Field interviews, 2013 and 2014). The high interest rates associated with such loans are immensely profitable for creditors while simultaneously eroding the earning capacity of the poor and cutting deeply into their already inadequate food reserves. When debtors find themselves unable to keep up their payments, they must renew their loans or take out additional loans, pushing them to greater debt and misery. Loans are often attached to labour work – the inability to repay the loan with cash or kind forces the debtors to provide free labour, therefore eventually trapping them in a web of indebtedness. This phenomenon has been repeatedly identified by past research as a major cause behind the continuous impoverishment of poor farming families in remote Nepal (Bista, 1976; Seddon, 1987; Levine, 1988; ICIMOD, 2000; Wickeri, 2011). These previous studies have also demonstrated that indebtedness is not limited to matters associated with the monetary economy, but creates a dependency and political weakness among the poor to the extent that the poor are never able to come out of this trap. This compares with the rich and powerful factions of society, who can utilize their positions to maintain and develop their economic, social and political status.

The studied communities exist in what might best be described as a “culture of poverty”. Overall they are poor, marginalized and therefore vulnerable to a range

of hazards. Within the population itself some social groups are more vulnerable than the others. Deprivation is significantly aggravated by discrimination on the basis of income, gender and caste, which further limits the capacity of many to reach their full potential. This is highlighted by the fact that women, half of the population, are significantly less educated and in poorer physical health and well-being than men, and only have limited direct control over their daily lives. Similar conditions are experienced by the Dalit caste, who make up around one-fifth of the population. Power is exercised by a few community members. The majority depend on these few, thus creating an extremely unequal power structures and dependent relationships among different social groups.

5.2 On Unstable Ground: The Driving Forces and Root Causes of Vulnerability in Remote Nepal

The recurrent theme underlying the previous discussion in this chapter is that of poverty and a deteriorating resource base. Over time such conditions overtime have forced people to adopt unsustainable land use practices that have degraded the environment, making these hills an unsafe place to live and work.

5.2.1 The Driving Forces

Deforestation, over-cultivation, over-grazing, and cultivation on steep slopes, marshy areas, and already eroded lands, are common features in the landscape (Pictures 32 and 33).

Picture 32: Expanding area of bare hills due to excessive cattle grazing near Bangabagar



Source: Taken by the author, January 2014

Picture 33 Cultivation on steep slopes (close to 80°) in Kuyadaha, parts of which have already been impacted by landslides



Source: Taken by the author, January 2014

Typically, the residents of Paladi village describe how they formerly had a lot of pine trees. The father of my homestay family (aged around 64) whose house is sited in the middle of cultivated terraces, says that in the late-1980s the population of the village was made-up of only 24 households but now there are 44. Under pressure to feed their families, the cultivated area has been extended onto increasingly unstable infertile land (Field notes, Paladi, local man, 22 December, 2014).

Erosion and gulying can be observed across the study area. Eroding hills, and unsustainable land-use increase the threats to the environment and with it to the well-being, life and property of the vulnerable population. Such conditions have made them vulnerable to hazards.

The annual Monsoon rains often generate acute erosion, landslides, and floods across the area, with widespread social impact. Thus, despite no major disaster in the last decade, around 40 percent of households in Nigali and Gokuleshwor reported having experienced disasters, including landslides and floods over this period (Gokuleshwor Village Development Committee, 2010; Nigali Village Development Committee, 2011)., In my first weeks in Paladi, when exploring the impacted households and planning my visits, the eldest daughter in the homestay explained:

“Who, and what of them hasn’t been impacted by the landslides and floods in this village? If you are going to visit, ask and write a case of everyone impacted then you will not even finish in 5 months. When will you go to Gokule (the next study area)?”

(Field notes, Paladi, local woman, 19th December 2013)

On the other hand, such conditions have further pushed the population and communities into greater poverty and deprivation, therefore making them more vulnerable to hazards. These issues and concerns are indicated in the repeated comments to this effect by respondents during the author’s field work in 2013-14 (Table 5).

Table 5: Poverty and Environmental Degradation

<p>A disabled young farmer (age: 29) who has lost a large portion of his arable land in a recent landslide points out deforestation as one of the main causes of the landslide. He says that the community forest was only registered in the late 1990s and that in the preceding years massive deforestation occurred. Recalling his childhood: <i>We used to collect pine cones from in the neighbourhood, and eat „Simta” (local name for the roasted seeds of the pine cone). There were many pine trees, we had enough Simta to take home. But, slowly the pine trees disappeared. Some people just thought about money and sold the trees to “contractors”. They didn’t listen to other villagers. Also, now we have to go to the jungle to collect the pine cone.</i></p> <p>(Field notes, Paladi, local farmer, 18th December 2013)</p>
<p>A farmer, whose properties was affected by a landslide, and who has now moved to <i>Baskot</i> (neighbouring village), also identified a shrinking forest as the cause of the landslide:</p> <p><i>This area had thick forest— they used to have numbers of “Kalij” (bird: Kalij Pheasant) and wild boar (wild animals). A lot of forest, private and non-private was cut down mostly between 1970s and —farms were extended, timbers sold, and animals hunted. We are now suffering the consequences.</i></p> <p>(Field notes, Baskot, local farmer, 9th January 2014)</p>
<p>A widow in Paladi, upset by the decreasing fertility of land, said:</p> <p><i>When I got married and came to this place (almost 10 years ago) we alone used to produce 300 kg of oranges in one season, now it hardly produces 200 kg. We get only like 12,000 (approx.120 US\$) per year. The “heartbeat” of the orange trees have loosened because of the cracks developed</i></p>

<p><i>in the land and their roots exposed.</i></p> <p>(Field notes, Paladi, local farmer, 19th December 2013)</p>
<p>Referring to the Paladi landslide (locally called <i>Udareko Pairo</i>) one of the essays submitted in the student essay competition conducted as part of my field work at Kedar Lower Secondary School gave the reasons for the landslide:</p> <p><i>The trees were cleared haphazardly for house construction and cultivation, plants and vegetation were pulled out, and cows and other cattle were left unattended anywhere. They burned the tress and vegetation in the hills to allow new crops to grow. Some cultivated in the slopes without making terraces, and many cultivated without the provision of proper drainage. People were uneducated and selfish. They only thought about themselves and their family and cut tress and sold them.</i></p> <p>(Student essays, December 2013)</p>
<p>During a community meeting with a Dalit community, an older man described the current land conditions:</p> <p><i>The land has holes everywhere, how can it produce well? It lasts hardly for 6 months. We earn from “lohar work”(blacksmith work), and men go to work in India. My son does dishes in Mumbai, her husband (pointing towards the younger Dalit woman) works as a porter and carries furniture for some shops also in Mumbai— these earnings help us to survive the rest of the months.</i></p> <p>(Field notes, Dalit tole, local man, 3rd January 2014)</p>
<p>A Dalit family with 17 members, whose many of the children had stopped going to school, when asked why they had quit school, generated the following response from one of the two wives:</p> <p><i>We often sleep with an empty stomach, how we can send our children to school?</i></p> <p>She adds,</p> <p><i>The children started crying and didn't want to go to school as they didn't have notebooks and school uniforms. Instead they started doing little works— (laughing) they used to go to the jungle and pick “Bayarko dana” (Nepal sumac- a wild fruit like berry/plum) and sell. With the money they bought stationery, and were happy to go to school. Then, how long it would last? The berry season was over, and the money we earn is not enough. What to buy and what not to buy? So now they are out of school, and have started to work, cutting stone, fishing, and whatever is available.</i></p> <p>(Field notes, Bangabagar, local woman, 7th January 2014)</p>
<p>A Brahmin man described conditions saying:</p> <p><i>For those who easily manage basic food throughout the year we consider them rich— and the number of rich can be counted in fingers.</i></p> <p>(Field notes, Kholigaun, local man, 4th January 2014)</p>
<p>Access to school is often difficult, and during the monsoon the conditions are worse. A local man explained:</p> <p><i>The “ones” (children) beyond this hill have to cross only one river (Udareko Khola) and those on the other side of this hill (which is still the part of the Paladi village) have to cross two rivers— Udareko Khola and Masadimado Khola, to reach school. In the monsoon, school is closed for about a month, but for the rest of monsoon months the children from the other hills can hardly make it to school. Who would dare to cross two fiery rivers?</i></p> <p>(Field notes, Paladi, local man, 19th December 2013)</p>

Access to basic human needs, including food and education, and a shrinking resource base, remains dominant concerns, and the consequences of such

conditions are clearly evident in the immediate environment and repeated disasters.

This, however, isn't a new phenomenon in Nepal. Eckholm, described the situation he found in the Nepalese Hills in the 1970s:

“Population growth in the context of a traditional agrarian technology is forcing farmers on to even steeper slopes, slopes unfit for sustained farming even with the astonishingly elaborate terracing practiced there. Meanwhile, villagers must roam farther and farther from their homes to gather fodder and firewood, thus surrounding most villages with a widening circle of denuded hillsides. Ground-holding trees are disappearing fast among the geologically young, jagged foothills of the Himalayas, with are among the most erodible anywhere. Landslides that destroy lives, homes, and crops occur more and more frequently throughout the Nepalese Hills.”

(Eckholm, 1976, pp. 77)

Eckholm is not alone in describing “ecological collapse”. Other researchers in the 1970s and 1980s, including those from different philosophical perspectives, for example, Enke (1971), Rieger et al. (1976) (as cited in Uprety, 2001) and Blaikie, Cameron, and Seddon (1980) came to the same conclusion as all expressend deep concern, emphasizing the urgent need to address this collapse. Their research was focused on the central and western hills of Nepal, but, there is no reason to believe that conditions in the far-western hills were not similar. Moreover, since the Far-Western Region has a significantly higher level of poverty and marginalization compared to the Central and Western Region, the ecological condition of the hilly areas of the Far-Western Region must surely have been even worse. The ecological collapse identified by Eckholm and others almost 50 years ago has still not been addressed. The reasons behind the extreme poverty and the continuity of the (and even worsening) situation of the area largely lie in the wider political economy within and outside the country.

5.2.2 Unstable Foundations: The Root Causes

Poverty in the study communities can be traced back many centuries, and remains an integral part of the overall mal-development of Nepal. Today mal-development is argued as strongly linked to the slow moving (stagnant) national economy and the continual constraints imposed through transnational and intra-national dependency relationships (see, Blaikie, et al, 1980; Blaikie, Cameron, & Seddon, 2005; Mishra, 2007). At a transnational level, these authors note, the dependency relationship manifest in the „semi-colonial experience“ of Nepal in relation to British, and later independent, India. At an intra-national level, it is manifest in the dominance-and-dependency relationship between Kathmandu and the outlying areas of the country. These coexisting constraints underpin the archaic economy of Nepal and thwart the possibility of Nepalese development. The study region, remote and distant from the center, was and remains seriously disadvantaged.

Conditions in the Far Western Region are pointed-up in comparison to Terai. Fertile, densely forested, and with extensive areas of level ground, Terai was attractive to local and outside interests and while as a result it was heavily exploited, it nevertheless benefitted from substantial investment and infrastructural development (Blaikie et al., 1980; Mishra, 2007). The Hills, on the other hand, saw and continue to experience massive degradation. The population in the Hills experienced rapid growth, and, in the face of stagnant economic development, pressure on land increased (Central Bureau of Statistics, 1991, 2001, 2014; Food and Agriculture Organization, 2008). Such conditions are brutally evident in the physical environment (Pictures, 34, 35 and 36)

Picture 34: Erosion in Tusharepani, Paladi Village (school in foreground)



Source: Taken by the author, November 2013

Picture 35: Erosion in Shivanagar, Nigali



Source: Taken by the author, December 2013

Picture 36: Recently formed gullies on the agricultural areas of Paladi



Source: Taken by the author, December 2013

The study area therefore has a long history of marginalization. Until the East-West Highway was completed in the late 1990s, there were no road links from the Far Western Region to other parts of the country (Blaikie et al., 1980; Seddon, 1987; International Monetary Fund, 2003). Indeed, until that time, access to and from the Region was mainly through neighbouring India. It is not surprising that between 1996/97 and 2000/01, the Far Western Region and Mid-Western Region together received only 11-12% of total government expenditure (International Monetary Fund, 2003). Even now, there is only a limited connection between the Hill Regions and the rest of the country. The result is continued isolation, a lack of full integration with the Nepalese economy, low levels of investment, poor market access, and little development activity. This is evident in poor infrastructure, a lack of education and health facilities, drugs and medicine and food insecurity (International Monetary Fund, 2003; Upreti, 2004, 2010; UNDP, 2011; UNDP, 2009). Marginalization limits people's access to resources making them weaker compared to others in terms of power, health, wealth and well-being, all these characteristics are evident in the study area. In the long run, these weaker groups have been forced to live in harsher conditions, compromising their safety in the

daily battle for survival. Marginalization is intimately linked to vulnerability. Together they facilitate the occurrence of disasters.

Government and non-government initiatives have been taken to address the ecological crisis, and reduce the social and other causes of mal-development. These include policies to promote land reform, improve community forest management, alleviate poverty, remove social exclusion, extend basic services and extend agricultural services closer to the farmers (Asian Development Bank, 2002, 2010; International Monetary Fund, 2003; Wily, 2009; Gurung, Karki, & Bista, 2011; Shrestha, 2013).

The government also took serious steps in late 1990s to decentralize power to local bodies for resource development and planning. The process of decentralization started more than 50 years ago (in 1962), but it was only with the restoration of multi-party democracy in 1990 that decentralization came to the forefront of the national agenda (Dhungel, Sapkota, Haug, & Regmi, 2011). The Local Self-Governance Act, an umbrella act to promote devolution and decentralization, was passed only in 1999. The aim was to bring development closer to the rural poor by involving local communities in the development of programs best suited to their needs and to ensure the implementation of these programs to promote inclusive development and equal opportunities for the whole population.

The pace of decentralization remained extremely slow mainly due to institutional capacity and fiscal constraints (International Monetary Fund, 2003). And before any major, positive results could be realised new hurdles arose. The decade of Maoist insurgency (1996 to 2006) resulted in the death of around 17,000 people. Substantial infrastructure was destroyed. This decade of war hindered all kinds of socio-economic development. The impact was felt most in the poor, most remote parts of the Nepal, including the remote areas of the Far Western Region. (Seddon & Hussein, 2002; Upreti, 2004, 2010; Murshed & Gates, 2005; Gurung, 2005b). Poor, communities in these areas were pushed still further into poverty and deprivation.

Although the armed conflict ended in early 2006, political instability remains, and This prolonged national crisis remains the greatest on-going barrier to national development. Lack of a written constitution, frequent changes in government, each with its own short time horizons have weakened the administration, increased corruption and the leakage of funds, and generated a culture characterised by a lack of accountability. It has also undermined the effective implementation of reform/development programs. The result is poor governance (Seddon & Hussein, 2002; Rajbanshi, 2013). Recent efforts towards the goal of decentralization and community participation in planning have been hampered by political instability. This is due, in particular, to the dissolution of elected local bodies. These bodies are the key actors in the decentralization process. Poor and remote parts of the country are again, and inevitably those most impacted by the slow pace of decentralization. As a result, poor remote communities found in the study area remain marginalized and have benefitted little from any development efforts.

The cumulative effects of decades of marginalization, war and recent political troubles, has meant that the study area, has seen more frequent adversity than progress. A weak national and regional legal framework and a lack of institutional capacity has blocked government efforts to implement land-use plans and building by-laws, (field data, 2013 and 2014). As a result the government has failed to provide the physical or socio-economic protection the study communities require with the result that the people have been forced to increasingly build their homes on hazardous sites. A fragile geophysical environment, steep slopes, deep valleys and numerous streams, combined with frequently harsh weather conditions, make the area subject to a variety of natural physical hazards, in particular landslides and floods. The vulnerability inherent in the physical environment is compounded by the social and economic conditions of the population. It is the interaction of these physical and social-economic circumstances that results in a high level of risk and susceptibility to disaster.

The risk of disaster is increasing. The Government has neither been able to fully monitor the implementation of existing forest policies to prevent the illegal timber trade or unsustainable forest uses, nor use the forests to create new economic opportunities. Meanwhile the agricultural sector has remained largely

unsupported. Land, often largely inappropriate for cultivation continues to degrade under increasing population pressure. Deprivation is further aggravated by historical and more recent political circumstances and on-going economic conditions. The consequent economic and social marginalisation – and so the vulnerability of communities in the far Western Region - has been even further compounded still further.

5.3 Conclusion

The conditions of everyday life in the case study communities, as described, are far from what is commonly understood in many other parts of Nepal as normal. People are poor, lack a secure food supply, and endure poor health and a low level of well-being. A majority of the population are particularly disadvantaged due to social discrimination rooted in traditional religious and cultural beliefs. In large part, poor social and economic conditions in the area are the product of long-standing marginalization by the State, compounded by a decade of armed conflict, and more recently by ongoing political instability. Despite some more recent government efforts to redress this situation, such efforts have to date failed. People in the study communities remain isolated and are in large part trapped in a physical environment that is naturally dynamic, vulnerable to extreme weather conditions, and seriously degraded. They are trapped too by traditional religious, cultural and social practices. Unsafe and unsustainable land-use practices have of necessity been maintained and have even increased, leading to an on-going cycle of environmental degradation and increased vulnerability and risk. Ecological collapse, driven by poverty and need, combined with a deteriorating physical resource base is the root cause of vulnerability. That disasters are part of the local „normal“ everyday experience therefore comes as no surprise.

Chapter Six

Understanding the Impact of Small-Scale Disasters and Response in Remote Nepal

The literature confirms that recovery from disasters is in large part determined by the extent to which a disaster affected community has secured the resources necessary to move forward in a positive manner, so that pre-existing vulnerabilities are addressed and reduced. This allows a community to become comparatively stronger and less vulnerable to future disasters than before. Recovery does not equate with a return to the pre-disaster situation. Rather, it is determined by the extent to which the vulnerabilities that led to disaster are addressed and reduced. To examine recovery from this perspective it is important to understand the impacts of disaster, efforts made in response, and the contribution of those efforts to recovery. This Chapter provides a case-by-case narrative describing what happens *in* and what happens *to* an affected community following disaster. This allows the identification of the key factors that influence the recovery process following small scale disasters and frames the debate presented in Chapter 7.

6.1 The Effects of Small-Scale Disaster on Remote Communities in Nepal

As noted in the previous chapter, houses in communities in rural Nepal, and the land that those communities with their primary source of food and work, are necessarily perched on steep valley slopes or narrow valley bottoms. These hills are subject to continuous erosion from unsustainable land practices including intensive agriculture, over-grazing and deforestation, themselves the result of people's struggle to meet their basic needs. Landslips and floods are a frequent occurrence in the Monsoon season, associated with intense, prolonged rainfall. As described in Table 6, all the study communities were hit by disasters in the decades prior to the field survey in 2013/2014.

Table 6: Disasters and the losses incurred in the study communities

Study Area	Study community	Hazard	Total number of events over the period recorded ²⁴	Approximate total land area affected so far ²⁵	Total number of directly affected households ²⁶	Number of households indirectly affected households ²⁷	Nature of damage	
Gokuleshwor VDC	Bangabagar	Landslide	Since 2007 there has been 14 repeat events (Frequency: 1-3 repeat events per year)	30 hectares	35	> 100	Loss and damage of productive land Loss of food crops Decline in soil fertility Loss and damage to homes, cowsheds, shops, farms, and office buildings Damage/loss of trees and forested land Destruction and damage to fodder crops, vegetables and other plants	Loss of personal property (including furniture, stored grain, cooking pots, livestock) Damage to irrigation canals Contamination/interruption of drinking water supply Damage to roads and walking tracks
	Sera (Includes Kholigaun, Devgaun, Shaungaun, and Dalit tole)	Landslide	Late 1960s, 1970s, 1998, annual repeats (Frequency: 1-2 repeat events per year)	32 hectares	>100	> 100	Loss and damage of productive land Loss of food crops Repeated damage and destruction of irrigation canals and other water channels. Destruction/	Loss of personal property (including furniture, stored grain, cooking pots) Repeated destruction of homes and farm buildings Destruction (twice) of

²⁴ These events refer to one landslide that has spread and deepened with an increasing impact over time.

²⁵ Calculated using google maps and GPS points recorded by the author in the field

²⁶ Those households who lost their property (land, crops, houses, shops, cattle etc.)

²⁷ Those households who haven't lost their property but are affected by the loss and damage to community infrastructure such as school, forest and bridges

							damaged of foot trails	primary school and contents Temples destroyed (twice)
	Kuyadaha	Landslide	Since 2007 there has been 7 repeat events (Frequency: 1 repeat event per year)	8 hectares	13	13	Loss and damage of productive land Loss of crops Decline in soil quality Repeated destruction of homes and farm buildings Trees, other vegetation, and fodder crops destroyed/ damaged	Loss of personal property (including furniture, stored grain, cooking pots) Damage to irrigation canals and interruption of drinking water supply Damage to homes, temples, cowsheds
Nigali VDC	Paladi	Landslide	Since 1998 there have been 5 repeat events (Frequency: 0-1 repeat event per year)	8.2 hectares	4	>44	Loss and damage of productive land Damage to productive land Loss of crops and fruit trees Decline in soil fertility Loss and damage to homes, cowsheds, and shops	Damage/destruction of foot trails Destruction/damage of irrigation and water channels Destruction of trees, vegetation, and fodder plants
	Patreni	Landslide	Two repeat events (2007, and 2009)	3 hectares	2	2	Loss and damage of productive land Damage and loss of crops and fruit trees Destruction/damage of water tank and water source	Loss of personal property (including furniture, stored grain, cooking pots) Loss and damage to homes Damage/loss of trees, vegetation, and fodder

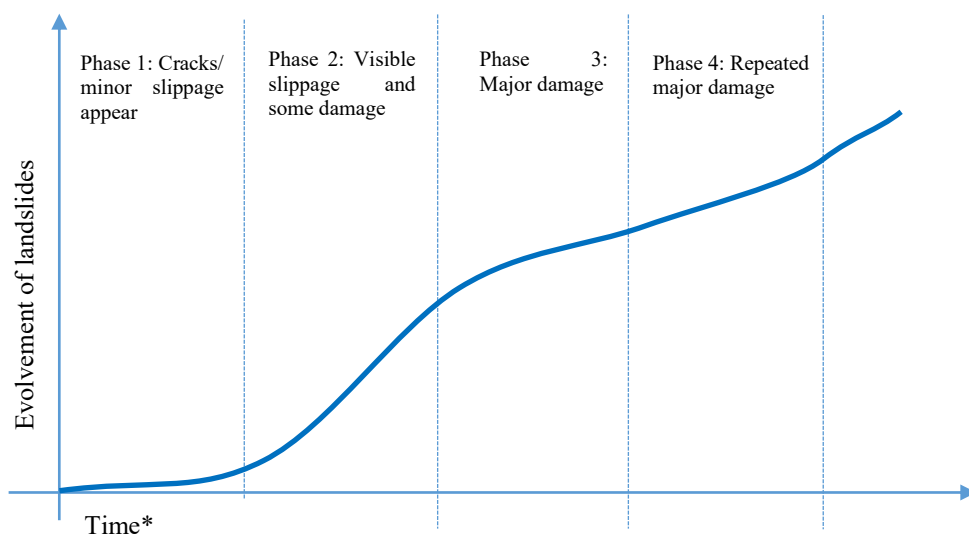
								plants
	Kichan	Flood	Flood in 2007	30 hectares	> 25	>25	Loss and damage of productive land Loss of food crops Destruction of homes, cow sheds, shops, water-powered flour mills Destruction/damage of irrigation canals	Loss of personal property (including furniture, stored grain, cooking pots, and livestock) Primary school and contents damaged

Most of the study communities (7 out of 9) have experienced disasters and for many these were recurrent events. Yet, even among the 7 communities that have experienced repetitive events, their frequency of recurrence varies; for some communities disasters are as frequent as 1-3 a year, for others, disasters have hit only twice in seven years. Kichan experienced a major disaster flood in 2007 and is the only community examined not subject to recurrent events.

6.2 Sequence of hazard and damage in repeated landslide

By their very nature landslides are often insidious to start with but have a cumulative, long-term impact with an incremental loss of land and property. As such, they entail a persistent and long-term risk to the communities involved, and have a cumulative impact resulting in an increasing loss of land and declining soil fertility. Landslides are initially evident in accelerated erosion and gulying and an increased susceptibility to future rainfall. In such circumstances, the scale of the disaster develops a momentum of its own with an increasing loss of land, decreasing soil fertility, and the increasing the vulnerability of the population impacted. Simultaneously, the scale of the hazard often increases. The combined result is the extension in the scale of disaster and increase in the number of people affected. Responses to a landslide by the affected population or other concerned authorities at the early stage shift over time. Figure 7 illustrates the different phases that occur in repeated landslide events.

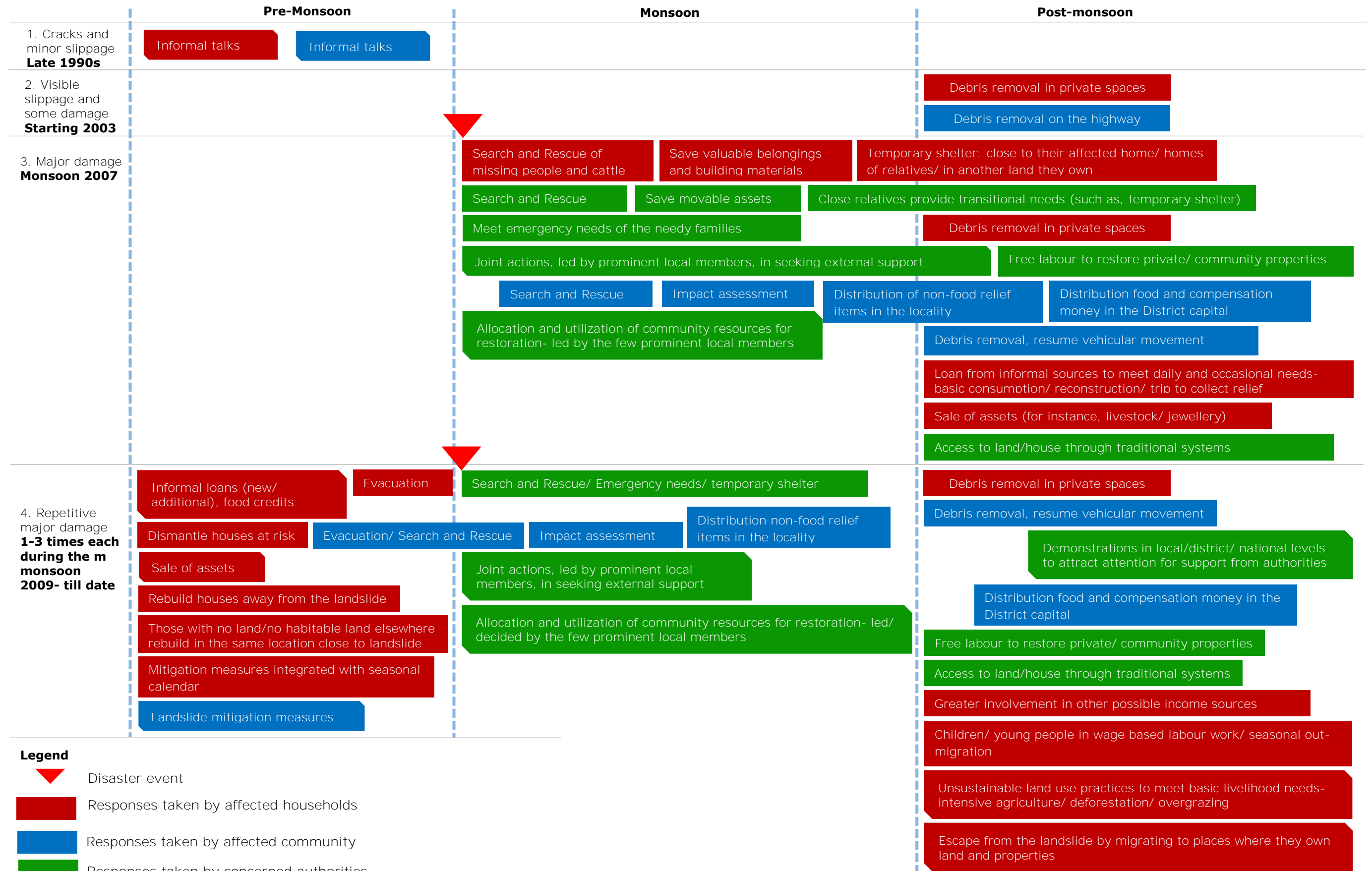
Figure 7: Sequence of hazard and damage in repeated landslide.







*There is no set time period for each of these phases

Source: Author

Figure 8: The Case of Bangabagar



Legend

-  Disaster event
-  Responses taken by affected households
-  Responses taken by affected community
-  Responses taken by concerned authorities

Boxes with shape  refer to actions taken by the respective actors that extends beyond the given time period

As shown in the Figure 7, there are four main phases in repeat landslide events. Based on the characteristics of landslides and the losses incurred at different stages of their evolution four phases can be identified: 1) Cracks and minor slippage, 2) Visible slippage and some damage, 3) Major damage, and 4) Repeated major damage.

A landslide starts with land cracks and minor slippage on the hill side. These result from years if not decades of erosion. In the Monsoon these cracks and slippage are impacted by intense and prolonged rain. Overtime, this leads to Phase 2. In this Phase these cracks deeper and slippage increases causing increased damage to land and property with each subsequent Monsoon Phase 3 is reached with visible ground movement due to slope failure, debris flows, earthflows, and rock falls. In effect, once initiated the landslides recur and worsen. This leads to Phase 4 which is characterised as having similar damage to Phase 3, but the severity of the impact on the environment and on human well being worsens There is no set time period associated with each phase. In the study cases the phases vary in length from a couple of months to a couple of decades, and they continue today. All the study communities affected by recurrent landslides remain stuck in Phase 4.

6.3 Narratives from the Field: The Research Case Studies

The following section provides separate narratives for each case (a total of six) describing the impact of disaster on the community, the actions in response, and their contribution to the recovery process.

6.3.1 Bangabagar

Since the late 1990s, Bangabagar has been repeatedly affected by a landslide, which over time has expanded and the damage increased. Actions taken by the affected households, communities and authorities in response to the landslide are described in the following paragraphs are summarized in Figure 8.

Response

Initially evident as only „a scratch on the land“ this was at first the subject of only occasional discussion among community members and local authorities. No remedial action was taken as the cracks were considered minor compared to more urgent community needs such as provision of drinking water, irrigation, education, and health.

The Monsoons from 1998 till 2007, generated muddy debris that spread into the settlement, affecting a few houses, patches of farmland, and the Mahakali highway. Action was limited

to clearing debris, and concerns were not prioritized, although it was noted that “while some people predicted and talked about the possibility of a big landslide no action was deemed necessary” (Local government official, Dadiya, 2nd January, 2014).

The monsoon of 2007 resulted in more visible, larger-scale damage, and destroyed a large chunk of the community forest and agricultural terraces. A debris flow deposited more than a meter of silt and other material and destroyed a shop, damaged three more and some cowsheds. By February 2014, a total of 9 houses had been completely buried, 10 more were at high risk, several cowsheds and shops had been buried, as well as approximately 10 ha of irrigated cropland, and damage caused to 20 ha of rain-fed farmland and crops (Pictures 37 and 38). Irrigation and drinking water canals, flour mills, and electric poles had also been destroyed or damaged. Deposits had repeatedly blocked the highway and interrupted traffic flows.

Picture 37: Impact of landslide on cultivated land and property, Bangabagar



Source: Photo taken by Peter Crawford, September 2012

Picture 38: The expanding landslide, Bangabagar



Source: Photo taken by the author, January 2014

Since 2007, the landslide and its impact has extended over an even larger area. The frequency of disasters has increased with every subsequent Monsoon, on a scale at times even greater than that in 2007. The year 2011 was typical. By the end of the Monsoon, deposits had accumulated to a depth of around 1.3 meters, destroying crops, and filling the ground floor of several homes. The total cumulative impact of the 2011 event included the partial destruction of six houses, serious damage to six more, with an additional nine left at extreme risk, and destruction of more than 5 ha of cultivable land. Over time the threat has increased and remains on-going

The immediate response to the 2007 event was primarily characterised by search, and relief activities. Affected families that had abandoned their homes returned to search for missing family members, and cattle, they also attempted to salvage valued possessions. Those whose homes were damaged or destroyed rescued reusable building materials. Community members helped in these efforts. Those worst affected or most at risk took shelter in the houses, cowsheds, and porches of neighbours and relatives. The community itself provided immediate emergency relief. As the slip increased and spread, community members

continued to provide emergency support and organize applications for government relief and external support.

After every disaster event local government authorities responded in line with established pre-existing rescue and relief procedures. On each occasion, families received „non-food relief items²⁸“. However, food and cash relief were available only if the authorities recognized the circumstances as a major event, and this isn't easily determined given the cumulative nature of a landslide. Moreover, accessing food relief and cash aid involves families assembling all the necessary documentary evidence and travelling to the District capital within a month of the relief announcement. Many householders spent several days travelling there, often at some risk, and always at considerable cost and inconvenience. Yet such external aid is vital as the community has no funds of its own. If no relief is announced, the community pressure the Government by blocking the Highway.

Some households whose houses were either heavily damaged or were located close to the landslide, temporarily abandoned their homes and moved to another piece of land they owned in a neighbouring village. Those who had no land elsewhere, built temporary structures where they could, but did not attempt to rebuild for a couple of years, partly due to cost, but also because they retained hope that the landslide might stabilise. Despite the risk, many people continued to live in their damaged houses close to the landslide (Pictures 39, 40 and 41). Most clear any silt deposits from their home and live in whatever parts of their house they can. This involves using the free labour of family and neighbours. Where the deposits are too thick to clear, families adapt to live on what space is left.

²⁸ Non-relief items from the Red Cross: Tarpaulin, blanket, cloth (16meters of cloth per family), lady saree, Kitchen set (5 pieces cooking pots, 3 pieces *thals* (dishes), 2 pieces glasses, 2 pieces cups and 2 pieces serving utensils and 1 piece cooking pot cover), plastic mat, water storing jar.

Picture 39: A family lived in this house for over a year despite the damage and risk, Bangabagar



Source: Taken by Peter Crawford, September 2012

Photo 40: The same house (Photo 39) in 2014, now abandoned



Source: Taken by the author, January 2014

Picture 41: After their house was destroyed in 2007, the family lived for 5 years in the shed (right) until they could rebuild a new house in 2012 near the same spot (left)



Source: Taken by the author, January 2014

After each landslide, some families are left with little or no land to farm. This increases their reliance on imported food. This is costly and necessitates a cash income. For some this is obtained by family members working outside the area or in India. Others benefit by having rich relatives who lease them land at lower charges. Some households cannot remove the silt off their land. Despite knowing that its productivity has decreased, wherever possible families re-cultivated their farms (Picture 42). For most, loss of land and crops involves an increased scarcity of food. Any stored grain gets used, and cattle and other valuables are sold to buy food. Some borrow from moneylenders, or travel to India to find work. Wherever possible, affected families, with help from other community members, repair their flour-mills, drinking and irrigation channels, and water sources.

Picture 42: Local woman removing deposits and re-cultivating the farm, Bangabagar



Source: Taken by the author, January 2014

Over time, landslide control has emerged as a key priority. Community members have also increased approaches to government and non-government authorities for help to control landslides. Households at risk have become more vigilant. Many households, when the Monsoon begins, move to nearby villages where they stay as long as needed, either in their own house/cowshed, or in that of a close relative. The police and army now stay alert during the monsoon. If they see the likelihood of the landslide expanding they go door to door to warn neighbours, and help them move to safety. People also now recognise the urgency and importance of mitigation efforts. They have initiated new, short-term measures to reduce the impact of the landslip, although long-term remediation remains viewed as impossible because of the limited resources available.

Since 2009, community efforts have resulted in the digging of large drainage channels to control the flow of debris (Picture 43). Stone walls or dykes (up to 1 meter high) have also been built to block the debris flow (Pictures 44 and 45).

Picture 43: Drainage channel by the Bangabagar community to control the debris flow



Source: Taken by the author, February 2014

Picture 44: Stone walls built by a household to block the landslide deposit from entering their farm and house



Source: Taken by the author, February 2014

Picture 45: Rocks piled up to limit the landslide impact, Bangabagar



Source: Taken by the author, February 2014

These activities (short-term measures to reduce impact) are now integrated into the regular seasonal calendar. Before the start of the Monsoon households combine to dig drainage channels, just as they jointly plough to plant maize. Such activities are community-driven but given the scale of work required must have the involvement of government to fund equipment needs. Every year the community has to seek external help to support these activities. In 2009, they received financial assistance from the VDC office and a private contractor, but such funding is irregular due to budget constraints and the level of need. Now the government is attempting its own landslide mitigation, including financial and technical support to construct dams and gabion walls, although too often such efforts prove futile in the face of recurrent floods and debris flows.

Budgets and limited human and organizational resources remain a major constraint. Funding is further constrained by misappropriation and mistrust at every level. As a result, and in response to the ever-expanding threat, the community is now demanding resettlement. Lack of an effective response has resulted in community demonstrations both in the District capital and in Kathmandu. In practice, however, government and other agencies continue to focus on immediate short term relief.

Damage and destruction of infrastructure, resources, property and investment increases hardship. They add pressure to obtain cash and material resources to repair infrastructure, reconstruct homes, farms and farm buildings, and to find opportunities for paid work. People use stored grain and sell valuables, including cattle to buy basic foods such as maize, rice, salt and oil. These opportunities, however, aren't available to most families. Inevitably many after a disaster fall into greater debt after disaster than before. Lack of access to formal credit sources leaves most people with no option other than to borrow from *Seth or Sahu Mahajan* (richer groups and money lenders) who commonly offer only high interest loans. Debt repayment is a repeated concern and for most families, food and basic groceries on credit from a local shop have become the new normal.

Families in debt use all possible means to clear their debt, including money earned from seasonal labour in India, or received from family members and relatives who live and work in other parts of Nepal, or alternatively or in addition, from selling cattle and other valuables, or from money earned as labourers. Whether they wish to or not, many are forced to seek wage labour and many go abroad, mainly to India. Even children are involved in such activities. Multiple income sources particularly those generated from sources other than agriculture are particularly helpful in the struggle to recover. Some families even use resources generated by landslides to earn money (Picture 46). For a few this is now an integral component in the family budget. Landslides deposit large rocks on the damaged land. Money earned from the sale of these rocks, however slight, provides some relief in hard times. Indeed, families in areas with no stones to sell see themselves as unlucky.

Picture 46: Locals labours hired to break rocks to sell



Source: Taken by the author, February 2014

Unsustainable land-use activities increase with repeated landslides. Loss of forest is felt severely across all the community. Villagers must roam farther and farther to collect fodder and firewood, and often have to compromise on the quantity and quality of fodder available (Field data, 2013 and 2014). Some respondents said that the situation is now so bad they have to buy, borrow or beg for grass for their cattle (Field data, 2014). In these circumstances people are unable to increase their cattle numbers, and this further increases their vulnerability.

Deforestation means a widening circle of denuded hillsides. Bare hills due to excessive cattle grazing and deforestation are common. The traditional fallow period is still observed on those farms that are unaffected by landslide-related disasters but less common on others.

As land degradation has increased, community members allocate community property to help the neediest families. Those who do not have elsewhere to relocate are offered land for their free use. So far there has been no support by government authorities to assist needy households to obtain long-term livelihood needs, despite plans for this, they have not been implemented.

These householders who can't move have to rebuild on the site of their original home, or close by, where the threat of further damage or destruction remains. Those who reconstructed their house explain how the lack of reliable road links/ transportation, difficult physical access to building materials and water, and their own inability to afford equipment and labour to assist rebuilding make reconstruction difficult (Field Interviews, locals, Bangabagar and neighbouring villages, January 2014). As described earlier, those whose homes were severely affected and had moved to land in neighbouring villages where they built temporary shelters, but not permanent homes, have dropped any plans to rebuild and with the worsening situation, have also dropped any intention to return to their home community.

After repeated major losses, the community has lost hope. Repeated small-scale disasters have negatively impacted on economic activity. Formerly a relatively flourishing small town, Bangabagar's growth and development have been adversely affected. Local trade and businesses have declined as the resource base has shrunk. Areas of previously fertile plains have become barren and many shops have closed.

Most residents see recovery as unrealistic and view migration and resettlement to safer areas as their best option. The growing impact of landslides, rising uncertainty and insecurity combined with frustration and an ineffective government response drive outmigration. Outmigration is common. In Bangabagar 12 out of 35 affected households have now moved away. More plan to do so if the landslides persists.

With respect to both impact and response, women and other marginalised groups are doubly disadvantaged. In practice, women still haven't acquired the right to own land or property. As a result, female headed households face additional problems in accessing government disaster relief. The practice of untouchability also continues. Dalits are not allowed to enter into the homes of higher caste people, while water and some foods that might be available from the Dalits are not acceptable to members of higher caste groups; people from a higher caste are not supposed to come into direct physical contact with Dalits. Dalit families and non-Dalit may live in close proximity, but even in a disaster must avoid contact with food and water that might be available to share. After a disaster event, irrespective of whether rooms in houses are available or not, the Dalit have to live in cowsheds or porches, and make sure that they don't touch people of other castes.

Dalit families are traditionally not farmers and own just a piece of land to live on. As a result, those Dalit whose houses are rendered uninhabitable, unlike other caste groups, cannot

relocate. Despite the risks involved these families build temporary shelters alongside their damaged homes. Yet despite being poorer and socially disadvantaged, the Dalits are more resilient (if at a lower level) than other castes because of their multiple sources of income. Although, unlike other castes, they neither have another piece of land, paid employment or any material or social resources to trade, the Dalit commonly have large families, and many dependent children. Despite this, they sustain themselves, helped by the traditional practice of Riti Magne (begging) and with the help of skills and jobs that society in general label low status.





Key lessons:

The landslide, though recognized even in its initial stages by officials and community residents, spawned no remedial efforts until it threatened the day-to-day survival of the people involved. Repetitive events increased people's knowledge and experience and enhanced their response. Government assistance was slow, often cumbersome and difficult to access. Over time, residents were pushed into increased poverty and need. Most assistance at every level is aimed to sustain lives rather than to promote recovery. The official response is aimed to address only short-term needs. The affected population makes use of whatever available resources they have, or whatever assistance they can access from their community. Weaker groups become more dependent on powerful groups, further reinforcing the normative structure and power relations of the community. For the most part, women and Dalit remain particularly disadvantaged.

Figure 9: The Case of Sera



Legend

-  Disaster event
-  Responses taken by affected households
-  Responses taken by affected community
-  Responses taken by concerned authorities

Boxes with shape  refer to actions taken by the respective actors that extends beyond the given time period

6.3.2 Sera

Sera is made-up of the four smaller settlements of Kholigaun, Devgaun, Shaungaun and Dalit tole, all of which are subject to one large landslide that has impacted the area since 1934. Each individual settlement comprises a small cluster of houses, linked by foot trails through steep and difficult terrain. Each of these settlements share common ancestors. Taken together, however, they form one socio-economically diverse community based on caste.

Since it started, the landslide has extended over more than 32 hectares and this continues to expand (Picture 47). Although there are oral memories, little is known of the damage and response to the landslide prior to the 1970s.

Picture 47: The Sera landslide



Source: Taken by the author, February 2014

Oral tradition describes the landslide as initially starting as a minor crack on the hillside. Since then, around a hundred households have been impacted. Of these, more than half have already moved out of the area, and most of those who have remained have had to relocate at least once (Interviews, local residents, Sera, January 2014). The impact of the landslide on the community is localised and is evidenced in the on-going loss of arable land (>32 hectares), and the damage and destruction of irrigation canals, flour mills, water channels and

foot trails, as well as damage and destruction of private homes, schools (relocated twice) and temples (relocated twice)

Actions taken by the affected households and communities in Sera, and concerned authorities in response to the landslide are described in the following paragraphs are visually summarized in Figure 9.

Response

With decades of experience, the evolution of the landslide is largely understood by the community itself. Householders are aware of which areas and homes are most likely to be destroyed next, and what land is most likely to face erosion, although the scale of erosion is less certain (Pictures 48, 49, 50 and 51). For example, a householder whose home is now only 2 meters from the landslide states that, “without a miracle, we are the next to be pushed out” (Field interview, householder, Kholigaun, 3rd January 2014).

Picture 48: The next to be pushed out



Source: Taken by the author, January 2014

Picture 49: Landslide approaching Devgaun village



Source: Taken by the author, January 2014

Picture 50: Walking up the cliff along the edge of the active landslide, Kholigaun



Source: Taken by the author, January 2014

Picture 51: A landslide area being used as a playground, Sera



Source: Taken by the author, January 2014

The community has developed a number of different strategies to minimise the risk it faces. For the Monsoon months, those most at risk move in with relatives or neighbours who live in safer areas. They also try to ensure the safe-keeping of their belongings, cattle, and other property. Community members help those affected meet emergency needs, and jointly plan the restoration of community property. This commonly includes preparation of one, joint application to government authorities for relief support.

After every disaster government authorities respond following established rescue and relief procedures. After each event, families receive „non-food relief items“, although food relief and compensation cash are only occasionally provided and only when the government recognizes the disaster as a major event. Local residents believe that compared to Bangabagar, they are disadvantaged in their inability to attract outside attention because they have no major highway or other nationally important infrastructure they can use as leverage.

Over the decades, the community has made repeated efforts to get external support for remedial action and resettlement. Since the landslide first started, Nepal has experienced much social, economic, cultural and political change, including several policy and regulatory shifts to address disaster needs. Yet, on the ground, little has changed. In the 1990s there was a government sponsored effort to establish a tree plantation. Since then, there have been

further mitigation activities. Every year government sponsored mitigation is executed, including check-dams and gabion walls. Frequently, however, such efforts are wiped out by subsequent floods or debris flows. This has reinforced fatalism and generated cynicism at such efforts which many locals view as „patchwork“ and ineffective, designed more to keep them quiet, than to provide any long-term solution. Regional and national authorities agree that in the longer-run and in the face of the large, growing and recurrent landslide, that relocation of the community is most likely less costly than any mitigation effort (Interview, Government official, Kathmandu, 18th July 2013). Such perspectives are compounded by local suspicions that the contractors charged with implementing remediation works are corrupt and that the money allocated is not necessarily all used as intended. Despite their inefficiency, the mitigation work continues as before.

Scepticism or cynicism about government efforts to help resolve their problems inevitably impacts on the community's efforts to secure its longer-term recovery. In the last two decades, due to the landslide, the primary school has been flooded twice. On both occasions its functions were quickly resumed, and classes conducted in the open air without chairs, tables or blackboards. Subsequently, the community received government help to construct temporary sheds as classrooms on public land, but it took almost 5 years to obtain funds for full reconstruction.

Delays and frustration have meant that the community has taken more responsibility and adopted a more pro-active approach to reconstruction. Families in houses believed to be at risk from coming Monsoon rains dismantle their homes, remove any reusable material, and build new homes in safer locations.

Mass relocation is common. Dalit tole has been relocated twice in the last forty years. Since then, and in particular after legal registration of land in 1978, such relocation has become more difficult as legislation has restricted the free or forceful acquisition of land for resettlement. Whatever relocation takes place is supported by community labour, that now operates in a similar fashion to the traditional agricultural labour exchange. Construction and remedial work is scheduled outside the major agricultural work periods.

As land pressure has increased, food scarcity has increased. This means greater pressure on resources and more unsustainable land-use. An increased shortage of traditional foods has led to more cattle rearing than before, and the increased production and sale of milk products. This has resulted in the increased destruction of forests and damage of vegetated land.

Managing stock has become more difficult and farmers now face increasing distances to walk, whether to collect fodder or graze their animals (Field notes, local residents, Kholigaun and Devgaun, 3rd January 2014). Around 90% of the families interviewed whose land has been impacted by a landslide stated that they have no choice in the struggle to survive but to continue trying to farm on the eroded slopes, and to borrow money at high interest rates.

On-going loss of farmland and property, increasing debt, the need for reconstruction, and to compensate for other losses have increased household dependence on wage labour. This has obliged young people (even children) to migrate for work elsewhere. In Devgaun and Dalit tole at least one member of each household has gone to India as wage labour. Meanwhile there is an increasing scarcity of land on which to build homes. Till now, at least, households continue to rely on the community's traditional system of land exchange and land sharing to provide building sites. In the past the land was divided and inherited among families. Today, households hard hit by disaster and who individually don't have enough suitable land to move to, commonly obtain building sites by exchanging land with other members of the community, or join part of their land with a neighbour's to allow suitable space for construction. At times the community even integrates small pieces of land belonging to different families to create a suitable area to relocate the whole community to a safer site.

Today, the community's priority is not relief and restoration, but resettlement. The community believes nothing can stop the continued expansion of the landslide. Sera has made several efforts to pressure the government to meet its needs. These efforts have been further promoted by street demonstrations in the District capital and in Kathmandu, as well as by follow-up visits to key official bodies. The Government avoids talk of resettlement because it would require complex, expensive intervention, detailed planning and a coherent national resettlement policy. For the Government, mass resettlement is a last resort and one it supports only in dire circumstances.

Independent migration out of the area is well established. Mass migration to Terai in 1966 and 1979/80 is commonly recalled, even today. Currently, however, those migrating to Terai are mostly richer families who either own properties and business, or have close relatives there. A few poor families have managed to migrate to Terai, usually in small groups. With no land, no income and no relatives to help them, most of these groups have to squat on forest land or on river banks, exposing them to new environmental risks. Today, with the swelling number of squatters in the forest and along river banks, authorities in Kailali District, identify an increased incidence of flood as a direct consequence of migration. Migration by those

who have access to the hills has been followed by an increase in recurrent landslides. Such locations offer living conditions little better than before. The affected families even label these locations as *uninhabitable* but migrate in desperation and because they have no other option. Such land combines multiple risks; it is often too small or steep to construct a house (with porch and cowshed); swampy; provides limited access to drinking water; is no good for agriculture; has no possibilities to irrigate; is too isolated (no foot trails, no houses nearby); is at risk of wild animals; and is vulnerable to disaster (Field notes, local residents, Sera, 2014). The following are some examples that illustrate the hardships they face in the newly area.

Table 7: Out-migration and increased day-to-day hardships

<p>In a community meeting with the people of <i>Devgaun</i> (in Sera), the sole male participant, explained the on-going necessary migration of residents from the community:</p> <p><i>We used to be eight families living in this house alone, and now it's only my family left. The others have moved to Gallegada. That is the village (pointing somewhere in the opposite abandoned looking hill). We all have small huts there. But Gallegada is very dry. It's not a good place for agriculture. Even drinking water is hard to find. One of their children have left school because of the increased work burden. It only grows Bhatmas (soyabean) and Gahat (horse gram), and even that is damaged by wild animals. They still come here because we still have little farm left. If that is gone we too have to flee there. I have no idea how are we going to survive there (Community meeting, local resident, Devgaun, 3rd January 2014).</i></p>
<p>An older lady in the a community meeting in Sera stated:</p> <p><i>Last year my middle son along with his family moved in Dhara (a place in neighbouring hills). What to do? Here the food isn't enough for the whole family. But that place is worse. One cannot find any labour work. In winter my son goes to India. They have also opened a teashop along the foot trail, but no use— that trail is hardly ever used by anyone living (Community meeting, local farmer, Devgaun, 3rd January 2014).</i></p>
<p>Similarly, despite of having an option to move in a nearby place called Machwata, many families still prefer to live with the recurrent landslide. In this context, a local man in his mid-thirties explains:</p> <p><i>It used to be our village decades ago. Now, no people live there, but we still have the houses. We go there three- four times a year to graze our animals. It's not safe anymore especially for children— the jungle is full of dangerous wild animals. Even for grazing we go in groups and not alone. Look, here, all our land is almost destroyed. If we don't get chance to migrate to the Terai, we will have no other alternative than to return to Machwata. There is no market and no schools— at least not within the walk of 4-5 hours, and no trails. It will be really hard (Field notes, local farmer, Devgaun, 3rd January 2014).</i></p>

In Sera, untouchability is not a major issue in disaster situations. Dalit families in Sera are not integrated, and indeed do not live in settlements dominated by other caste groups. The Dalit concentrate in their own settlements and their neighbours are close family and extended family members, therefore, the issue of untouchability is largely irrelevant. However, Dalit families still do not have the option of taking shelter with other members of the community as they are all concentrated in the one settlement (Dalit tole) and the whole settlement is at risk from the landslide. During the Monsoon, the whole community moves to the nearest safer land, with their cattle and household goods, and this allows them what they need to survive for at least a week. They use tarpaulins and plastic to make tents and live until the risk of

disaster is over. Most Brahmins families, despite being equally affected by the landslide, are in better position than others, mainly because family members, particularly the younger ones, are highly educated and mobile and can access good jobs in other bigger towns and cities. Often only the older family members live in Sera, and most of them are only resident there for a short period of the year to work and harvest the land. Fully aware of the risks they face they are reluctant to abandon the land for emotional reasons until there is nothing left. Often former public service employees, they also are entitled to a pension. Unlike poor families who have to look for money to migrate or reconstruct their homes, they are relatively secure.

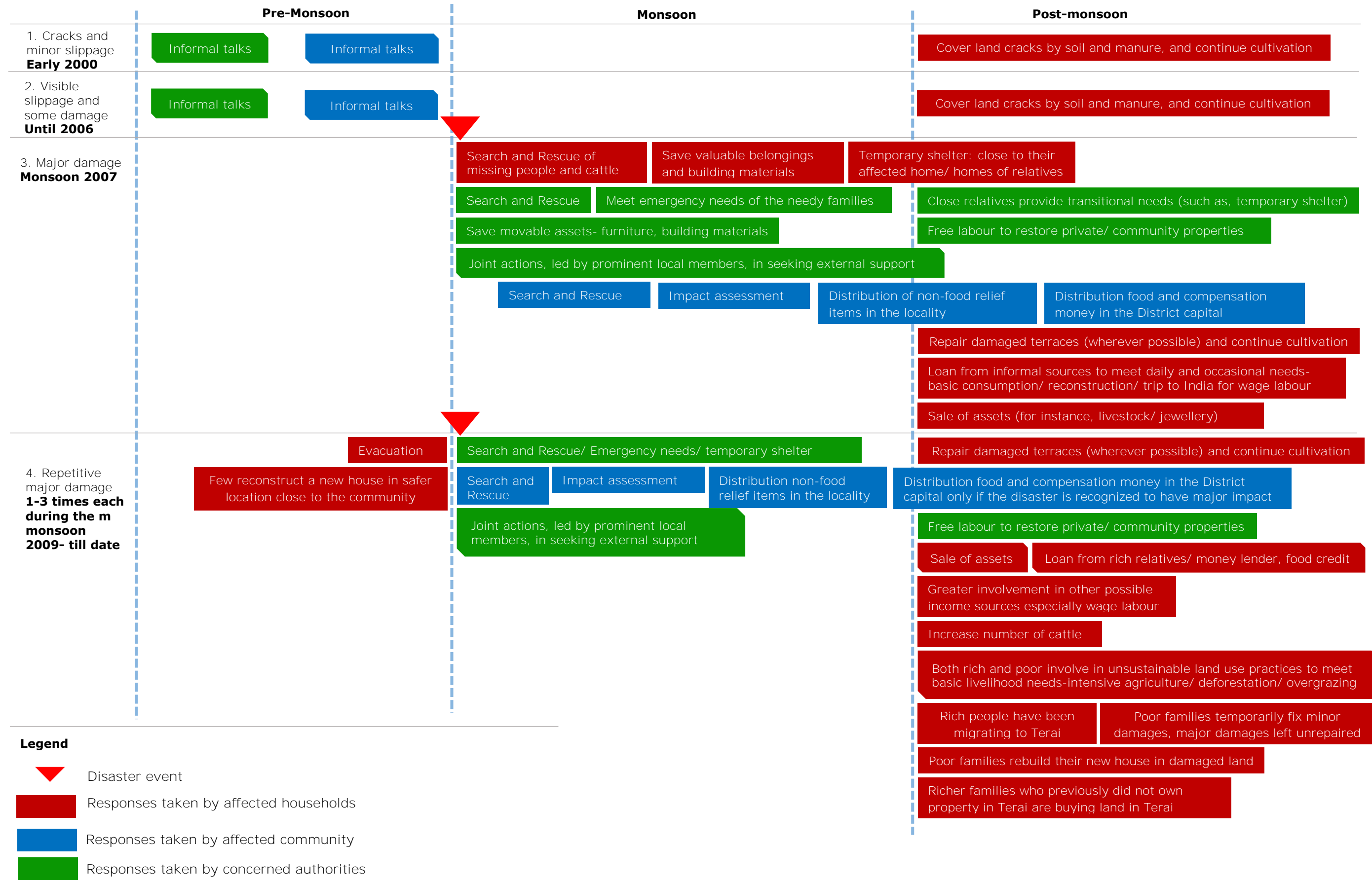
Key lessons:

Householders in Sera demonstrate a considerable capacity to learn from experience as how best to cope with the risk posed by recurrent landslides. This has allowed them to sustain themselves despite worsening conditions, but often at the cost of their decreasing social and economic well-being and increasing (if at times different) environmental threats.

Strong kinship ties and established land sharing traditions have aided household survival. For some, often the better educated, easier access to credit has been a powerful means to aid their survival and recovery. For most, however, migration out of the region is viewed as the only option, but for the poorest families in particular, this commonly involves illegal settlements in high risk areas and increasingly unsustainable land use.

External government assistance has been provided over many decades, but is for the most part short-term and often ineffective. From the Government's perspective such aid is necessarily constrained by lack of funds, and lack of capacity, but for the local population this is more often viewed as a symptom of inefficiency and neglect.

Figure 10: The Case of Kuyadaha



6.3.3 Kuyadaha

Kuyadaha is a small settlement two hours walk along a narrow and steep foot trails from the nearest motor road. The community shares a common ancestor, and therefore all are of the same caste. The community is well-known for vegetable production and is a key local supplier to the local market. Members of many families have jobs in the police and army, and other public services. Many others have migrated to find paid labouring work in India and in the Persian Gulf. This provides some perspective on what is a relatively well educated community, one that is relatively economically prosperous. Some families are, however, poor and depend solely on farming and wage labour both locally and as seasonal migrations to India to survive.

Since the early 2000 Kuyadaha has been repeatedly affected by a landslide, which over time has expanded and the damage increased. Actions taken by the affected households, communities and authorities in response to the landslide are described in the following paragraphs is summarized in Figure 10.

The landslide first emerged in early 2000 as a small patch of erosion on the hillside linked to undercutting and the collapse of the river bank. Subsequently cracks appeared in the agricultural terraces and bank erosion continued. The result was a decrease in soil fertility and a decrease in vegetable yields, and this was the main focus of community concern. The community response was largely limited to covering the cracks with soil and continuing cultivation. The damage was well known to the local VDC office from the start, if only because the VDC secretary is himself a local resident. Despite all this, no remedial action was initiated. The symptoms and warnings of a possible disaster were considered less important than other, more immediate, community needs.

The subsequent Monsoon rains washed away some patches of land along the river directly impacting on a few households. However, they didn't formally report this to the authorities mainly because they believed that the damage was not great enough to generate any meaningful response. In this community members are well informed through their own social networks of the requirements that must be met to receive official aid and support.

In 2007, the monsoon resulted in large-scale damage - the destruction of 2 houses and severe damage to 11 more. Around 8 hectares of agricultural land were severely affected and crops destroyed. Stored grain, furniture, cattle and other belongings were lost (Pictures 52 and 53). There was also severe damage to irrigation canals and the water supply and the temple was

destroyed. For the community this was a catastrophe never before experienced. Since then the threat and damage have continued to increase, although as the expansion of the landslide has been relatively slow, the annual property losses are generally less than in 2007, but the cumulative impact has increased.

(Left) Picture 52: Bank erosion damaging the vegetable fields of Kuyadaha

(Right) Picture 53: Local man pointing towards his house and cracks (which he has covered with mud, stone, and plaster) caused by the landslide, which he has covered with mud, stone, and plaster



Source: Taken by the author, January 2014

Response

The immediate situation after the disaster event in 2007 was dominated by search and rescue activities. Affected families who ran away to escape the landslide quickly returned to look for missing family members, cattle and other valued possessions they had had to abandon. Other community members quickly came to help. Those whose houses were damaged or destroyed collected any reusable building materials and with community help, moved them to safer locations. The emergency activities were a break from established community routine and driven by altruism. Community members provided emergency needs such as food, clothes,

water and medication. The community also provided those in need with space to secure their cattle and other personal property. Life was maintained by group action and the sharing of food which was communally prepared. A local in Kuyadha summed things up saying that they cooked food in the „biggest pot“ available, and didn“t starve as “none hesitated to share” (Field notes, local resident, Kuyadaha, 12th January 2014). Such help from community members has been repeated after every subsequent disaster event.

Pre-existing social boundaries and norms defined by religion and cultural beliefs remained unchanged during the emergency. In this community these were evident in discrimination against those in mourning who following the loss of a family member are considered impure for at least 13 days. During this time they cannot be touched by those not in mourning have to perform special rituals and observe restrictions on their activities, including constraints on where they can and can“t go, and as well as what they can eat and drink. As a result, those in mourning face additional problems in times of emergency and are exposed to a greater degree of risk. As one man mourning his mother explained, “Everyone ran away in fear. I didn“t go, how could I? I was mourning. It is better to die than to go to other“s house, pollute others and destroy one“s own *Dharma*²⁹. It was wet all over; I was cold, scared and hungry. I thought I would be buried– everything was falling apart (Field notes, local resident, Kuyadaha, 12th January 2014).

After every disaster the affected families repair damaged irrigation channels and, if needed, individual families receive help from other community members. Mutual support and aid is commonly provided, especially in the restoration of community property, such as temples and foot trails.

Since 2007, the community has regularly prepared and submitted applications for government relief. After every disaster event the authorities have responded in line with established rescue and relief procedures. However food and cash relief is not always provided.

Although recipients of government assistance are grateful, this was not unqualified. Their criticism of their non-food relief stems mainly with respect to the quality of pots and pans they receive. The authorities view such aid as emergency relief, the recipients want or expect longer-term aid. Like most countries, Nepal also follows Sphere³⁰ standards in humanitarian

29 In Hinduism dharma is the moral law combined with spiritual discipline that guides one's life. Following it enables people to be content and happy, and save them self from degradation and suffering

30 The Sphere Project – or „Sphere“ – was initiated in 1997 by a group of humanitarian non-governmental organisations (NGOs) and the International Red Cross and Red Crescent Movement. Their aim was to improve the quality of their actions during disaster response and to be held accountable for them. They based Sphere“s philosophy on two core beliefs: first, that

assistance which essentially assures the provision of only the minimum level of humanitarian assistance, and so relief items are targeted to meet the basic needs required to survive with dignity during an emergency, but are not designed for regular use.

Similarly, all those interviewed who had been directly impacted by the landslide were angry and dissatisfied with the level of compensation they received and the process involved. Many had had to spend several days travelling to the district capital to collect their money, often at some risk. Public transport was often unavailable. Travelling also involved additional expenditure on food, transport, and lodging, as well as substantial effort and time. People described the money they received as “useless” because it was often less than that spent on the trip. Some families even had to borrow money to make the trip which pushed them into debt. They also believed that the distribution of cash relief was unfair and that they were discriminated against compared to those in a neighbouring village that got more.

Over time the people of Kuyadaha have become more vigilant. When a landslide is suspected the community leaves their homes with their cattle and arrange the safe storage of valuable items including any stored grain. Some families even regularly move away at the start of the Monsoon, taking their cattle and other valuables to the neighbouring hills and live in another house (or shed) they own or in the house of close relatives.

With the repetition of the disaster event, community awareness of the need to control the landslide has increased. They have applied to the government for assistance in this, but have had little response. Concerned, community members also admit that they have been “too busy with agriculture work to follow up their applications” (Field notes, local resident, Kuyadaha, 12th January 2014). There is a degree of fatalism. They know the frequency of landslip recurrence is less frequent than elsewhere and its expansion is slower. Secondly, they are well aware the budget available is too little to have any meaningful impact.

Overtime new problems and challenges have emerged. People find it difficult to validate the damage incurred following each recurrent event and this hinders any effective application for aid. The damage with each event is really an “add-on” to the damage caused by previous landslides, and the relief, especially the compensation money, is based on the scale of damage of the most recent slip. This is viewed as inappropriate and inadequate by those directly affected. One Chhetri farming family repeatedly impacted by the landslide describes the problem:

those affected by disaster or conflict have a right to life with dignity and, therefore, a right to assistance; and second, that all possible steps should be taken to alleviate human suffering arising out of disaster or conflict.

The assessment people record only the new cracks in a house, not the old ones. They tell that you should have not repaired the cracks! How can we leave them unrepaired? During the winter the cold air could easily get in through the cracks, so we have to temporarily repair them if only by filling them with stone and mud. Each year new cracks appear and we do the same. For the few new cracks we got only 500 (NPR, ≈5 USD). It would have been much better if the house had been completely destroyed (Field notes, local resident, Kuyadaha, 12th January 2014).

Families in different income groups over the longer term demonstrate different responses to the landslide. A blunt comment from a local describes this succinctly stating that it is a matter of “Those *who can* and those *who have* are slowly moving to Terai” (Field notes, local resident, Kuyadaha, 13th January 2014). The richer families who own land and property in Terai have already migrated there, and others are purchasing land and property in Terai with the intention of moving if the landslide persists. However, even after moving they still use their land and house in Kuyadaha, often returning to stay during the peak agricultural season.

Many families with members employed in the police or army, have jobs that involve frequent shifts to different locations and this allows them to develop wider social connections and gain knowledge of new opportunities. These families have often been able to at least temporarily acquire farmland abandoned by nomadic ethnic groups. This land was provided to these groups by the Nepalese government in order to improve their well-being. As nomadic hunters these groups often don’t adapt to a settled farming culture and quit. The families from Kuyadah hope that ultimately their hold on their new farms will become permanent.

Many families own some land nearby but despite this intend to continue living in Kuyadaha until all of their property is lost. Many said that they will try to find alternative sources of work rather than live elsewhere. A few argue that they would “very much prefer to squat in the Terai jungles” than move to an alternative piece of land elsewhere (Field notes, local resident, Kuyadaha, 12th January 2014). When they were asked to explain, the usual response is– “that is not a place to live” - the alternative land being considered unsuitable for housing primarily because of social and religious taboos associated with the land, its physical isolation, harsh environment, or lack of fertile soil. A couple of families whose homes have been destroyed by the landslide have rebuilt their houses further downhill which they believe is safer. Some poor families, whose homes were completely destroyed and had nowhere to go, rebuilt their house on the same site – land already damaged by the landslide. The majority of the poor still live in their severely damaged houses which they have temporarily fixed after

some minor damage. Without access to the necessary resources, most poor families are unable to fix any major structural damage. In this situation they can only continue to live in their damaged house, despite the associated risks.

Over time, the landslide has destroyed an increasing area of arable land, decreasing the usable area, and the resultant pressures on the remaining land appear to have reduced its fertility. Vegetable production and milk products are the basis of subsistence for most households. And this is now threatened. Many families now report resorting to credit or borrowing from richer relatives. Others, often the poorest, report borrowing from moneylenders in neighbouring villages even to meet basic consumption needs or to finance trips to India for work. These families now have to rely much more than before on wage labour to survive.

Unsustainable land use increases as resources are squeezed, resulting in observable over-cultivation on eroded slopes, uncontrolled grazing of cattle on the hills, and increased deforestation. After every landslide event, instead of leaving the damaged terraces to recover and regenerate, affected households often of necessity repair the terraces and reuse them for cultivation. Those households who could “manage” to obtain labour (free or paid) to repair the damaged terraces are considered lucky compared to those who cannot. Moreover, due to a lack of resources and time constraints, some families are forced to cultivate without establishing proper drainage, further promoting erosion. Such activities are common among both the poor and the rich. However, their purpose differs. The common justification of the poor is that they need to feed their children, whereas, for the few richer families, it was explained in terms of the need to use the land before it is gone. One rich family in this position already has some land in Terai and intends to move to Terai if conditions worsen. But despite of the risk they continue cultivation in Kuyadaha because this allows them to maximise their returns.

Deforestation also continues. A local man noted that while “Some decades ago the forest was dense. Now we can even see the hills behind, as trees are cleared annually” (Field notes, local resident, Kuyadaha, 13th January 2014). At the same time, families have increased their cattle numbers to increase milk production and balance the losses they facing due to decreased vegetable production. This has resulted in difficulties in obtaining necessary grass and fodder, requiring them to travel further and further to find grazing. In a similar fashion, local trades and businesses have declined as the resource base has shrunk. Once able to fully supply the nearby market and local educational institutes, they can now meet less than half that demand.

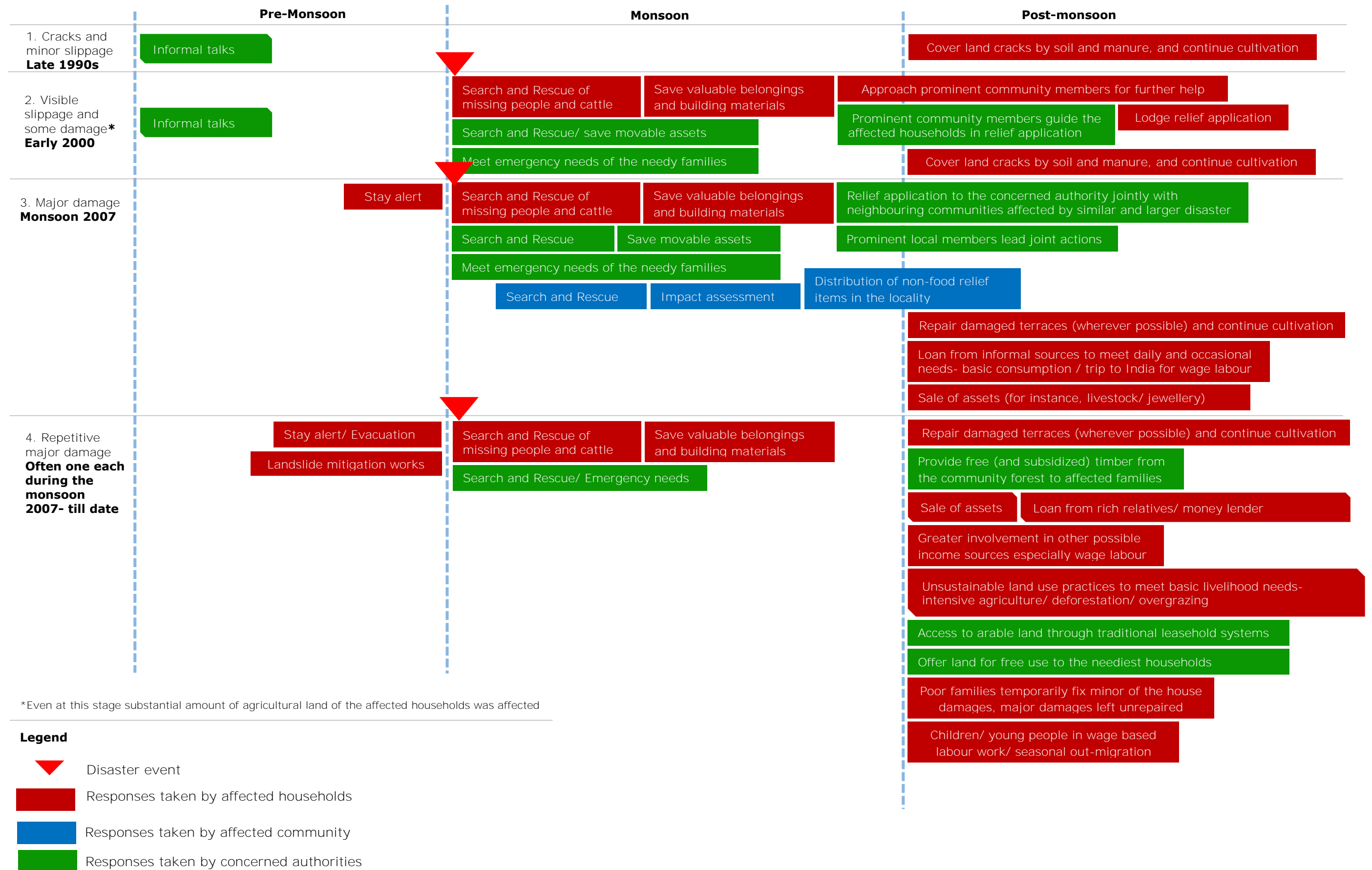
Key lessons:

Repetitive events increase people's knowledge about landslides which helps them take proactive action to save themselves and their belongings. However, such action does not stop the repetitive and cumulative loss of land, homes and property. As a consequence, over time people experience an increased shortage of arable land. In such conditions, people are pushed to increasingly environmentally unsustainable practices.

The authorities' response is essentially limited to short-term relief. The affected population and the authorities have different perspectives with regard to emergency relief. While the former view the materials received as unsuitable for their long-term needs, the latter view them as necessary to meet emergency needs. Such discrepancies in understanding create anger and dissatisfaction. The repetitive nature of the disaster events creates difficulties in assessing the damage due to any one single event, and challenges the criteria used to allocate disaster relief.

Religion and cultural practices put some groups, in this instance, those in mourning, at greater risk in times of disaster. Equally, in the immediate aftermath of disaster the poor and rich suffer similar impacts, although in the longer term, the rich have a greater chance of recovery than the poor. Some, often better educated families involved in service jobs, have better access to a wider social network and information which provides added opportunities to access the resources that facilitate recovery. The uneducated poor have little chance to recover. For them, survival is the overwhelming challenge. For the most part they prefer to continue living in an unsafe environment in the landslide area or to squat in Terai lands rather than resettle to other areas they believe would bring only increased hardships.

Figure 11: The Case of Paladi



*Even at this stage substantial amount of agricultural land of the affected households was affected

Legend

- ▼ Disaster event
- Responses taken by affected households
- Responses taken by affected community
- Responses taken by concerned authorities

Boxes with shape refer to actions taken by the respective actors that extends beyond the given time period

6.3.4 Paladi

Paladi is a remote village composed of houses sparsely scattered over steep terrain. It is made-up of groups mixed in terms of both caste and income. The majority of the population are poor farmers whose livelihoods largely depend on citrus fruit production (particularly oranges) and seasonal migration for wage based labour work in India or Terai. Richer households own large irrigated farms in the river valley.

The landslide started in the 1990s as a few cracks on the agricultural terraces and hill sides. Locals link those cracks with the 1988 earthquake and massive deforestation that occurred, particularly prior to the 1990s. Affected households attempted to cover-up the damage and continued cultivating the damaged land. Although the population recognised the risk, they largely did nothing in response to the threat. Indeed, their repair and continued cultivation of the damaged terraces, increased the risk of disaster. This is not because they were unaware of the consequences of such actions. For those who largely depend on fruit production for their livelihood, maintaining production of citrus fruit is the top priority rather than the threat from the on-going risk from the landslide. Indeed. At this early stage even those households directly affected referred not to a disaster but labelled the symptoms as *Jamin Udarinu* or an „unpicking of the land“. However, in the face of no effective action each subsequent monsoon season resulted in the enlargement, extension and deepening of the initial scars. Actions taken by the affected households, the community of Paladi and the concerned authorities in response to the landslide are described in the following paragraphs and are summarized in Figure 11.

By the early 2000s, the landslip was commonly described as “a flow of muddy water taking away land corners, vegetation, crops, manure and soil and rocks, and mixing with nearby flooding stream, eventually feeding to the river” (Interview, local resident, Paladi, 19th December 2013). Since then the landslide has continued to slowly and gradually, enlarge and extend, year after year. Currently around 2 hectares of land have been destroyed by the landslip and more than 8 hectares of agricultural land heavily damaged (Pictures 54 and 55).

(Left) Picture54: The Paladi landslide;

(Right) Picture 55: landslide affecting the orange trees



Source: Taken by the author, (left) December 2012, (right) December 2013

Two cowsheds and a shop cum cowshed have been destroyed, and two further houses severely damaged. Most damage is concentrated on the land and property of four households, all of whom were already very poor. But the cracks have extended and now affect a much larger area and more households. For those directly affected the major impact is in decreasing soil fertility. Crop yields have significantly dropped and there are increasing difficulties for householders in meeting their minimum needs. The landslide has also destroyed foot trails leading to the local school, so that the children and others now have to use alternative, longer trails or walk over the landslide which is both difficult and risky (Pictures 56 and 57).

Picture 56: School children crossing the landslide to reach the school, Paladi



Source: Taken by the author, December 2013

Picture 57: Locals walking up the damaged foot trail



Source: Taken by the author, December 2013

Response

Though the community helped affected families by providing emergency shelter, food and helped transport goods, the community, prominent community members/community leaders took no initiative to access outside support despite being aware of the processes involved. Thus most of those affected by the landslide prior to 2007 did not apply for any government relief despite, at least in some cases, the loss of significant areas of land and property. The majority of those affected were unfamiliar with the relief application process. This is not surprising because in most important interactions within and outside the community it is usually only a few prominent community leaders who are “knowledgeable” who are involved. Participation of ordinary community members is neither encouraged nor viewed as required. The prominent community members – locally referred as *Thulabada* have higher status primarily because of their wealth (particularly land), and hold a key role in religious rituals and in some instances because of their higher level of education and jobs. Through their role these prominent members gain access to wider social networks, accumulate information and gain knowledge including, in particular with respect to government policies, plan and benefits. The majority of the people, therefore, largely depend on these prominent members for any initiatives including in writing relief applications in times of disaster. Problems were compounded by the difficult physical access to the VDCs and to the other authorities necessary for completing any relief application. Other factors intruded: the event was not a shock to the community because the landslide developed gradually and therefore created less disruption than might otherwise have been the case. Secondly, expansion of the landslide happened during the civil war of 1996-2006, when local government bodies were dysfunctional and access to them difficult. The socio-political environment was unsafe during this period which limited travel. Thirdly, none of the rich and prominent families were directly affected by the landslide. One of the most affected householder stated:

“No one cares about poor, and disabled, no one actually speaks out for them. The Thulabada speak out even when they have problems with herding their animals but not when our land is affected.” (Interview, local resident, Paladi, 18th December 2013).

When the landslide continued affecting the land only then did the households approach prominent members of the community, obtained their support, and were able to submit a relief application. Despite assurances from the authorities the affected families received no relief.

In general, however, even after the civil war people in remote areas did not report small losses. The low profile of the disaster impact, despite its cumulative effect, combined with difficult physical access and other complexities in relation to documentation and the submission process, are key reasons that explain this lack of reporting. The local authorities confirmed that most reports of disaster impacts come from towns and villages; people in remote communities rarely file a report (Interview, local governmental authority, Shivanagar, 29th November 2013).

Although affected households generally describe all recurrent landslide events as large, the community identifies that of 2007 as the largest and it got more attention from the authorities than previous events. This was also a consequence of the fact that on this occasion, some other neighbouring communities were also impacted by the landslides and floods that occurred (Table 6, p 162). More importantly, many residents of Paladi have farmland in Kichan, and the richer groups in particular have large farms in the valley. The damage and destruction experienced had a significant impact on many families in Paladi. Indeed, the Red Cross does not list any landslide incidents as separate events but packages them together with the flood (*Situation Monitoring Report for 10th July to 6th November 2007*). On this occasion, the authorities responded in line with the pre-existing rescue and relief mechanism.

In response to events in 2007, the affected households in Paladi joined with the community of Kichan and other neighbouring communities and jointly applied for relief support. Prominent local community members played a key role in coordinating the relief application. As usual, other community members provided emergency needs to affected households.

Despite effective and necessary community action in the face of disaster, pre-existing social boundaries and norms defined by religion and cultural beliefs remained unchanged during the emergency. As a consequence, women were particularly affected both physically and mentally by the disaster. Because *Chhaupadi* (Chapter Four, Section 4.2.1) is observed even in a crisis. If offered shelter with others these women do not accept in fear of angering God. The Red Cross team members explained that menstruating women are not allowed to live in an emergency shelter because of fear that they might accidentally touch people, food and things as to do so would pollute these people and goods.

The authorities provided affected households with non-relief items and food. However, those affected didn't receive any cash compensation as based on the impact assessment report they were not entitled to this relief.

Local power structures played an influential role in relief distribution. The local authorities believe that the information on disasters from the remote villages is manipulated by prominent community members. Even local residents expressed suspicion at what was claimed in submissions and acknowledged that such reports are manipulated by local power brokers. Some noted that some households received relief support despite being unaffected by a disaster and added that this did not surprise them. It is reasonable to assume that those who have power and status and are well connected may benefit disproportionately.

Over time, with repetitions of the landside event, new issues and challenges have emerged associated with relief application and the distribution of aid. Households affected by the landslide have now stopped lodging relief applications because they find the process so burdensome and the relief received so slight. With reparative damage, the authorities find it increasingly harder to distinguish recent damage from those by past disasters. This has created more chances of disparities and inequity in the allocation of aid.

Despite its cumulative impact, in Paladi the direct impact of the landslide remains largely limited to few houses and a relatively small area of land. At a community level discussion continues to focus on relief and restoration of lost infrastructure, less on longer-term solutions. The search for external help also continues to focus solely on relief. The community still accepts that the need to mitigate the landslide is a lower priority than other community needs. At a household level, however, although long term remedial actions are viewed as unrealistic due to limited resources, they do get involved in short term mitigation work.

Damage and destruction of infrastructure and loss of property, and so loss of resources and investment, increases people's hardship. It increases pressure on them to access the resources to repair infrastructure, reconstruct homes and farm buildings, and re-establish opportunities for paid work. Inevitably, after a disaster, many respondents get into greater debt than before. Those who have lost land and houses in the landslide now face difficulty in meeting their basic food needs. Locals fear that if the landslide continues, ultimately the whole community will face famine. Social conditions are worsening as children and young people, are forced to migrate to India for wage labour. These children consequently get no schooling and some even run away unable to face the hardships of their family.

From the start affected households made significant effort into the repair of their land and continue cultivation. Despite the huge effort involved, the output from the damaged land has decreased with falling soil fertility and incomes have fallen.

Over time the impact of the landslide has severely impacted on households. Unsustainable land use increases as resources are squeezed, and soil degradation has increased with over-cultivation on eroded slopes and deforestation. After every landslide, affected households optimistically or of necessity, make huge efforts to repair the damaged land to plant a food crop and reap a harvest which they tag as “better than having nothing” (Interview, local farmer, Paladi, 18th December 2013). Those who do not have enough labour to repair their terraces express deep grudges at not being able to do so. Many households make repairs without establishing proper drainage and consequently increased erosion results. Deforestation continues. In an essay, one of the students at Kedar Lower Secondary School, r states, “Nowadays they (disaster affected families) have difficulties getting food, shelter and clothes. Therefore, they have been cutting trees and clearing the jungle” (December 2013).

Of necessity, immediate survival needs are prioritised but this often means promotion of unsustainable practices. Yet the people are still seriously concerned at the threat of further disasters. This is evident in their efforts to control any future landslides using the resources they have. In areas where cultivation is not possible, as in the corners of the cultivated terraces, at the edge of the cliffs and on the slopes near the scarp, families plant bamboo and broom grass, but again, the lack of resources limit what can be achieved.

In the absence of any significant assistance some families, who do not have enough arable land left, lease farmland from landlords using traditional leasehold systems. These arrangements are highly influenced by prominent local community members. However, such arrangements while they aid survival do not support recovery. Rather, those who now work under such systems describe them as “more burdensome and less useful”. This is particularly because the leased land itself does not generate income and barely provides subsistence needs. As a result these families face difficulties in repaying the money owing to the landowner and this has led to the selling of their other assets, such as cattle, and forced them to borrow money from others.

The community leaders have also offered land for free use to the most needy. However, since such land doesn’t have any legal status potential recipients may prefer to remain on their own land rather than moving to that area available for lease or risk their long-term security. In the

past the situation was different. Ironically, legislative changes which registered land ownership in 1978 have resulted in reducing the control and power of community leaders to act independently. This has diluted the dominance of powerful groups, and at least in the face of disasters, adversely affected the poorer groups

With no resources and an absence of official aid and support, most households affected by disasters continue to live in high risk areas. To survive they must prioritize food and other basics over fixing structural damage. Without access to resources, most poor families are unable to fix major structural damage.

The recurrent nature of the landslides is a continued barrier to households' efforts to recover. The expanding landslides, their consequences, failed remedial activities and inadequate government action, increasing debt, and lack of economic opportunities have all contributed to fear and uncertainty. As one farmer in Paladi explains:

“Somehow we have been able to survive so far. The hardest part for us is that our future has become uncertain, and I have no idea how to make it better. We cannot cultivate land and neither can we build a better house. I want to borrow money and plant oranges so that we could sell them, but am afraid whether they will get the chance to survive and grow big. Orange trees need 3-4 years to bear fruit, which means they have to withstand several landslides—too risky. It is not only a waste of investment, but a greater debt and more frustration. I am not afraid to work hard, but if the investment is lost I will be nowhere. No one would choose to live in a house like this but again we can't afford greater debt particularly when the house could be wiped away by the next rain” (Interview, farmer, Paladi, 18th December 2013)

Key lessons:

The extent of response at a community level is influenced by the level of disruption caused by the disaster to the community. This in turn is often determined by “how many” are impacted and “who” are impacted – i.e. few affected people generate little community response especially when these people belong to poor and powerless sections of the community, and vice versa.

The government system is difficult to access and largely inadequate. Because official support is aimed only at short term relief, those affected by a disaster have to make use of whatever available resources they have, or whatever assistance they can access from elsewhere. Prominent community members play important roles in helping affected families recover by

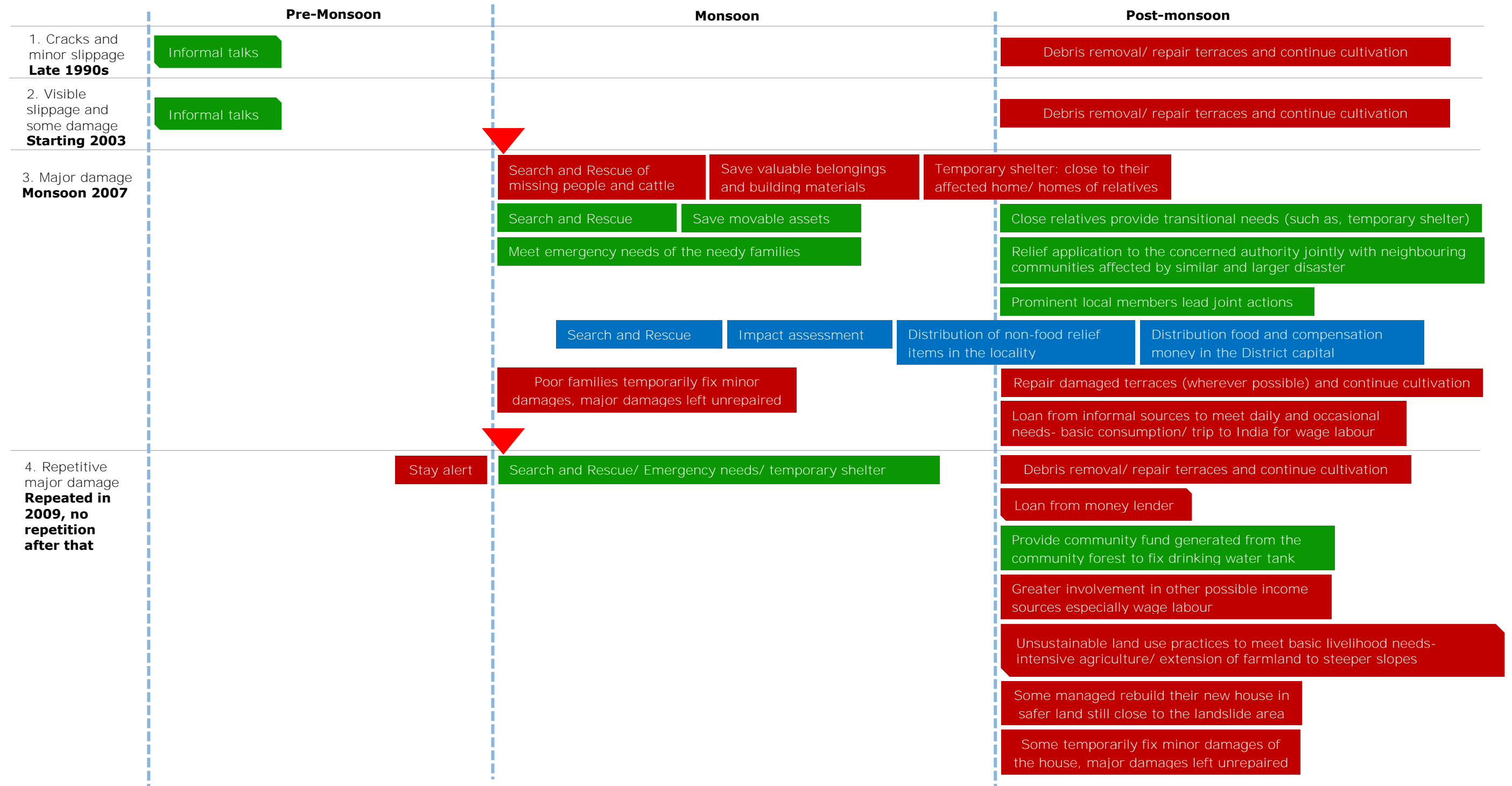
providing them access to community resources. Normative systems, structures and power relations play a crucial role in helping affected families access resources for short and long term recovery. However, in practice, the utilization of such pre-existing systems that are based on uneven power structures do not help the poor and marginalized – thus over time such practices pushes the poor to become poorer and the rich to become richer.

Power relations play a crucial role in accessing external help. The poor are not empowered and therefore lack the knowledge and confidence to approach the authorities for help. Local power is not only important in the allocation and distribution of internal resources but in the allocation of external resources and relief.





Increasingly formal systems and procedures are acting as obstacles to traditional informal arrangements, thus hampering the traditional means people used to access recovery resources.

Post disaster responses are largely aimed to sustain life in the short-term rather than to promote long-term recovery. As resources are squeezed, people increasingly resort to unsustainable practices, despite knowing that such practices will generate further harm. With no effective disaster response, recurrent disasters not only increase poverty and need, but also cause future uncertainty, especially for the poor.

Figure 12: The Case of Patreni



Legend

-  Disaster event
-  Responses taken by affected households
-  Responses taken by affected community
-  Responses taken by concerned authorities

Boxes with shape  refer to actions taken by the respective actors that extends beyond the given time period

6.3.5 Patreni

Patreni is a remote village close to Paladi, and like Paladi it comprises sparsely scattered houses across a steep hill-slope. It is a homogenous community in terms of both caste and income. More than 99% of the residents are Dalit and are poor, although inevitably levels of poverty vary. The main source of income comes from sales of citrus fruit and seasonal wage labour in India.

The landslide started as a few cracks on the land in the early 1990s. Over time it turned into a minor slippage generating watery debris and occasional rock falls. Such events often damage agricultural terraces, crops and fruit trees. In 2007, the landslide turned into a much larger event. One house was completely destroyed and another heavily damaged. Three hectares of agricultural terraces were damaged or destroyed, as were crops and fruit trees. The damage remains limited to two households. Over time neither the scale of the disaster has increased, nor has there been any increase in the number of people impacted. In that sense this community is less affected than many other communities and the landslide has reoccurred only twice in the last seven years. But the impact is still severe given the already poor living conditions of the affected households. Actions taken by these households, the community of Patreni and the concerned authorities in response to the landslide are described in the following paragraphs and is summarized in Figure 12.

Response

Before the major event of 2007 the affected households did not make any effective response to the landslide, but simply cleared debris and rocks, and repaired damaged terraces to maintain cultivation. The social and economic status of the community means that prominent community members pay a crucial role in guidance and leadership in all matters, although this is changing. Certainly prior to 2007, households reported having no knowledge of relief support or how to access support. They didn't attempt to get help. Given the low profile of the disaster, other community members simply didn't prioritise disaster relief over other needs.

Responses changed after the major event in 2007. The magnitude of damage was much greater, and secondly, and more importantly, the effect of the landslip had become much more extensive. It wasn't only Patreni that was impacted, some other neighbouring communities were also affected. The landslide occurred in conjunction with the comparatively larger flood in Kichan (Table 6, p 162). Had landslides not simultaneously

impacted on several small communities and in conjunction with the major flood then most probably the smaller landslides, including that in Patreni, would not have gained such prominence, despite the disastrous implications for individual households. Again, the Red Cross (the *Situation Monitoring Report for 10th July to 6th November 2007*) does not list the landslide incidences as separate events but packages them together with the flood. The authorities responded in line with pre-existing rescue and relief processes, and the community of Kichan and other neighbouring communities made a joint application for government relief. Prominent local community members played a key role in coordinating the relief application. Affected households were provided with relief in line with the magnitude of damage and existing policies.

Neighbours and relatives were the first to provide help, providing food, shelter and other emergency needs. They also helped salvage possessions and rescue reusable building materials. Untouchability was largely irrelevant as Dalit families who required shelter could obtain it in the homes of other Dalit families. Help from the community didn't end when the emergency situation was over, and community members helped the affected households in clearing debris and repairing their damaged terraces. These households also received longer term temporary shelter in the homes of close relatives in the community. The importance of such help from neighbours and relatives was repeatedly emphasized by the affected population.

The landslide recurred in 2009, again impacting more agricultural terraces, crops and fruit trees. However, this time those impacted didn't apply for relief. They realized that the relief process wasn't as easy as it had been in 2007 when they had benefitted by jointly applying with other communities, including some affected by much larger events. Now they had to apply individually and the process imposed cash costs.

Since 2009, the landslide has not recurred. However, the scale of impact (and need) has increased due to population growth in the face of decreased resources, and increased pressure on the land. To survive people have tried to optimize the use of land resources. Wherever possible they have repaired their terraces and patches of vegetation have been removed from lesser slopes to extend the area for cultivation. They apply more manure than before, but still were unable to reconstruct the drainage systems to meet the needs of their steep rain-fed terraces. Their strategies have brought some short-term benefits but imposed a long term risk of soil degradation.

Over time new cracks have appeared on the land. Community members are aware of this but haven't been able to take any action mainly because they lack the resources. They argue all they can do is increase the vegetation cover (including citrus trees) but accept this is probably inadequate.

Management of community resources have contributed to the recovery process. In 2007 the landslide buried the primary water source and the water tank that families used. The community was able to uncover the water source but were unable to restore the water tank. As a result, families faced increased daily hardship and walk as much as a kilometre to get water. Older and disabled community members were and remain particularly affected. The community decided to use the community fund accumulated from the selling of forest resources from the community forest to repair the water tank. The community forest was recently (in 2008) handed over by the Government to the community. In 2007 when the landslide hit the community there wasn't a community forest and this option was not viable. The community forest was only given to the community in 2008.

Despite the landslide not recurring too frequently, impacted families have struggled to recover. With no government help for long term recovery, they have been forced to manage on their own. In the pre-disaster situation these families had limited resources to meet their daily needs. Even for basic needs had had to rely on loans. Any compensation cash they received sometimes simply went to pay-off debts. The landslide redoubled their everyday hardships, reduced their resource base, still further increased their daily struggles, and increased their debts.

Over time, further cracks have appeared and with on-going minor slippage the area poses serious risks. With no options the households remain resident on site. One affected family with many young members who work as paid labourers in India, has managed to reconstruct a house in a safer location, although still very close to the landslide. However, the other household has not even been able to repair the major damage from the landslides (Picture 58).

Picture 58: Temporarily fixed hut just below the landslide, Patreni



Source: Taken by the author, December 2013

Younger members of the family have migrated but return from time to time. In practice only one old disabled man is now living here all the time, managing the land on his own, with occasional support from his children. The family lives in a partially damaged small shed just below the landslide. The landslide has pushed this family to a potentially even more unsafe situation. This is far from recovery.

Despite increased hardship, the two families still have some slight hope of some improvement compared to those in other communities subject to more frequent, repeat events. Although they fear another landslide they are investing much effort in managing their orange trees as the means to earn money to reconstruct their homes in a safer area further from the landslide.

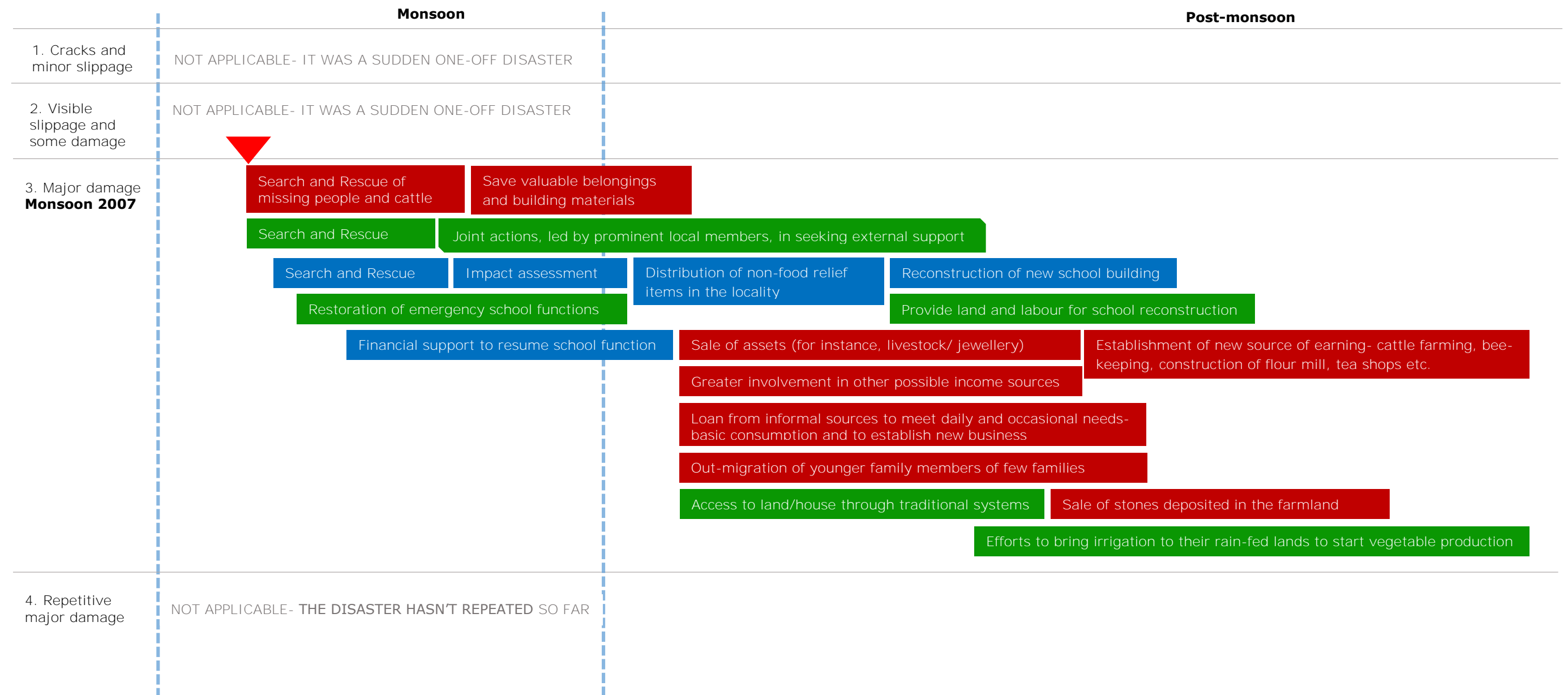
Key lessons:

As in other communities power varies among different socio-economic groups, and this plays a crucial role in their capacity to access external help. The poorest and least educated are least able to seek (and obtain) help because of their lack of self-confidence and knowledge.





Despite minimal damage caused by the disaster, the affected families have been severely impacted by the loss caused largely because prior to the disaster they were already on the edge of poverty and the disaster added an additional burden. Government assistance was cumbersome and difficult to access. Moreover, what assistance was provided was targeted to short-term relief, not long-term recovery. In effect, the affected people, despite of the immense need for relief, realized it to be “useless” to invest efforts in accessing the official relief. The affected people had therefore to fully rely on their own resources for recovery.

Social and kinship relations provide help and are important in the survival of isolated communities. Community funds, where available, can provide a valuable resource to aid recovery. The pre-disaster conditions of affected households, and in particular their access to resources is crucial in recovery. For the many living in abject poverty, this most often means that survival must be prioritised over recovery efforts. Such actions may help sustain their existence, but do not help secure recovery, and may even heighten risk and promote further disasters.

Figure 13: The Case of Kichan



Legend

-  Disaster event
-  Responses taken by affected households
-  Responses taken by affected community
-  Responses taken by concerned authorities

Boxes with shape  refer to actions taken by the respective actors that extends beyond the given time period

6.3.6 Kichan

Kichan is the fertile valley of the Thuligad. It includes extensive farmland that belongs to families in a number of villages, particularly in Sailekh and Haradagada. These two villages are home to a population mixed both in their wealth and caste.

Kichan, stands out as the hazard that impacted was a flood, and to date it has not recurred. Neither was Kichan aware of the on-coming hazard. There were oral traditions of past flood disasters, but as no flood had occurred for some decades, the risk was ignored.

The flood in 2007, was caused by a landslide and mass erosion in the upper streams of the River Thuligad which dammed the river in its upper reaches, forcing it to break its banks and changing the direction of flow over the farmland.

The scale of damage from this single event was massive damage. Twenty-five households were directly impacted. Over 30 hectares of arable land were destroyed, as well as two houses, two small shops that sold biscuits, noodles, soaps, and cigarettes, a primary school, and three water powered flour mills. It also destroyed crops that were ready to be harvested killed cattle, and destroyed other household possessions, including furniture, as well as stored grain (Picture 59, 60). The total loss is estimated at approximately 281,500 US\$³¹.

Actions taken by the affected households and the community of Patreni and the concerned authorities in response to the landslide are described in the following paragraphs and are visually summarized in Figure 13.

³¹ This value is estimated by summing up approximate cost of the individual losses incurred, using the following estimates:
Approximate damage of 272000 US\$: the cost of one Ropani (1ha=19.65 Ropani) of land in Kichan is 45000-60000 Nepalese Rupees 1US\$=100 NPR
Approximate damage of 2500 US\$. One of the houses was one storied and another was two storied and were described as typical of houses in the area. Based on information from local residents, a typical two storied house costs approximately 1500 US\$.
Approximate damage of 2000 US\$. Shops in the area are usually on the ground floor of a home. If not part of a house they are simple one storied structure with some wooden racks. The locals confirmed that one of the shops damaged was a part of the destroyed residence and the other was an individual shed. The monetary value of a shop is from 500-700 US\$, and together with the furniture comes around 1000 US\$ per shop.
Approximate damage of 3000 US\$. The school had six rooms and toilet facilities. The class rooms had basic equipment—benches, and a black board. The staff room had a few chairs, desks and cupboards. School support staff and another local resident, said that the damage amounted to 3,00,000 NPR (approximately 3000 US\$), and looking at the infrastructure of other local schools and construction costs, these estimates seem realistic.
My homestay family in Paladi had a water powered flour mill and the father said that the original construction cost was approximately 1500 US\$. This mill uses water from a natural stream a kilometre away so involves a canal and pipes. In the case of Kichan the mills are close to the river so the cost of construction would be much less. The approximated value of each water powered flour mill is 1000 US\$, giving a total cost of 2000US\$.
(Field data, 2013)

Picture 59: Rocks and boulders deposited from the flood now cover the previously fertile valley of Kichan



Source: Taken by the author, December 2013

Picture 60: The school damaged by the flood



Source: Taken by the author, December 2013

Response

The abrupt larger scale flood in Kichan attracted the immediate attention of the local community and the authorities. In addition, as many people from neighbouring villages own farmland in Kichan, concern was widespread. Most people were aware of the 2004 Asian Tsunami and linked the impact of the flood with that event, describing the flood as the *Tsunami Badi* (Tsunami floods).

The immediate response to the flood by community members and government authorities was support for search, and relief activities. Those who initially had to abandon their homes returned to search for missing family members and cattle, and to salvage what they could, and were assisted by other members of the community.

Despite the nature of the flood and the massive destruction caused there were no severe injuries or fatalities. This was partly because it occurred during a holiday period when the school (which was destroyed) was unoccupied. Secondly, although most of those affected lost property, land, buildings and homes, their permanent houses were not in Kichan itself, but in the nearby villages of Sailekh and Haradagada. There were only a few people living in the immediate path of the flood. The authorities responded quickly with pre-existing rescue and relief mechanisms. Applications for relief were jointly submitted with those in affected neighbouring communities. The affected households received non-food and food relief but in line with the 2007 guidelines, only those whose homes were flooded received cash compensation. Recipients, however were unhappy with their relief items believing they were less well treated than those affected by earlier floods in Terai. Members of those other communities who applied jointly with Kichan for relief were more positive and described the relief process as much quicker and easier than previous, individual relief applications.

Some households were disadvantaged in the distribution of aid which went primarily to land owners, many sharecroppers who were impacted lost out. Yet the share croppers are often poorer and even more dependent on the land to survive than the owners themselves.

In the aftermath of the flood, restoration of the school was viewed by the community as a priority. Before the monsoon ended, and despite the problems and risks of road blockages community leaders met jointly with those of neighbouring communities and consulted with the authorities. Representatives travelled to the District capital to meet government representatives, and to purchase goods to re-establish schooling. As a result schooling was able to resume just two weeks after the disaster, using rented private houses, tents, and

without chairs, tables or blackboards. After two years, with technical and financial help from the government the school was rebuilt using land donated from a community member and with free building materials and labour provided by the community (Picture 61).

Picture 61: Reconstructed school (now moved to safer land)



Source: Taken by the author, December 2013

Official help for individual households was limited to short-term relief. As their farmland was gone many families were largely unable to meet their basic needs. Families faced a substantial increase in expenses to buy more imported foods. Levels of debt increased, although as access to formal credit is difficult people had to rely on rich landlords for cash and kind. To survive, family members, particularly those from poorer households had to seek full-time cash employment as labourers either locally, in Terai or in India. For the poor households the situation in the aftermath of the floods still remains tough today. However, despite on-going hardship, there have been significant efforts towards recovery and, slowly some progress has been made. The flood has not recurred, so any achievements gained have not been destroyed by any subsequent event.

Seven years after the flood many families are rebuilding their lives. The flood deposited huge amounts of sand, stone and boulders on the land. Families have sold such deposits to nearby villages and towns and the money earned provided some relief. It has also provided additional steady employment for poorer families many of whom now largely depend on

wage labour from cutting the stones. Many families have managed to invest in small businesses such as tea shops, vegetable farms, flour-mills, and a grocery store, or have increased their cattle numbers, often in combination with wage labour. They have achieved this by selling resources, particularly cattle, and by getting loans from relatives and money lenders. Some families still are unable to fully repay their debts, but accept that their situation is getting better. Business success has been made possible because Kichan is located close to a market. Similar business developments would not have been possible in other communities in remote hills areas (such as Sera, see, section 6.3.2).

The community is enthusiastic to explore and invest in rebuilding its future. Previously the main source of income in Kichan was in its fertile soils. After the flood, what was cultivated land, is now effectively a large expanse of bare river bank composed of sand, stones and large boulders. What remains is only bari, non-irrigated land, which the local people, however, believe could be good for vegetable production if irrigation could be installed (Picture 62).

Picture 62: Local woman drying turmeric (for sale) produced from her non-irrigated land



Source: Taken by the author, December 2013

To achieve this the community has been making significant efforts to create irrigation channels for the land. They have raised applied to the District authorities for help, and have been offered some aid from the Red Cross if complemented by some investment by each

household in the form of cash and labour, and this has been agreed.

The community, however, has lost much because of the flood. A number of young members have migrated to Terai. Out-migration threatens to break down the social structure. One example is illustrative. A community fund raising activity, in one community ceased because so many families had left. The secretary of the fund raising committee explained:

“It all started in 2057 B.S (English date: 2001). We wanted to create a community fund which could be used for the community or could be borrowed by needy families. The committee used to collect Rs. 10 from every household in every two weeks. It all worked well for few years. But, then some active committee members out-migrated to India. After the flood and the landslide more families moved out and it became hard to keep track on everyone. It does not work anymore.”

(Field notes, local resident, BP Nagar, 23rd December 2013).

The farmland of both rich and poor was washed away by the flood. However, the rich farmers recovered more quickly because they have more opportunities. Seven years after the flood these rich families have already established new lives either in Terai or in Kichan. Poorer families are still trying to recover. Everybody in Kichan mentioned a rich family, Purna Singh Bohara, as one of those most affected by the flood. The family lost fertile land, crops, its home, furniture, a shop, cattle and a flour mill. Indeed the household head tried to drown himself. Yet subsequently this family has done well. This family has used land they held in Terai and invested money earned by young family members who worked in the Gulf countries in restaurants and hotels in the District capital (in Terai). Other rich families have proven equally adaptable and shifted from crop farming to cattle farming or expanded their businesses.

The resources of the rich are not limited to material things, but include social resources. In poor remote communities rich landlords are powerful people with good networks linking them to other influential people, and providing access to information on different opportunities. The rich can trade on their social capital and to better access credit and social support. Such families can capitalize on their social status and networks to access funds. This helps speed up recovery.

Poor families with members in the public service also have better access to credit than the poor. As employees they can apply for loans at lower interest rates and use them to establish new businesses.

For many in Kichan life is still far from what it once was but things are improving and the future looks better.

Key lessons:

The importance of the place in terms of its natural, social and economic value combined with the “rareness” of the disaster helped make this disaster distinct from other similar disasters in neighbourhood villages, though the actual impact on the affected population was relatively less than in its neighbourhood villages.

Government assistance was effective and easy to access. The distinctiveness or scale of the disaster, although it attracted official attention and facilitated relief support, engendered an aid response based on pre-established processes. Distribution of relief based solely on land ownership favoured land owners over those most in need.

The pre-disaster economic and social conditions of the affected households played a significant role in their recovery. Besides money and other material resources, the rich and powerful have social status and are part of networks of other rich and powerful people that assist recovery. Some, often the better educated families and public service employees, have easier access to credit and this has been a powerful means to aid their survival and recovery.

Time for recovery after a one-off disaster allowed a fuller recovery with greater opportunities than when faced by frequent, recurrent events.

6.4 Conclusion

The case studies described are each unique in terms of their degree of remoteness, their socio-economic make-up and the specific characteristics of the disaster involved. These characteristics help shape the impacts of disasters, response and recovery from them. However, these communities also share common characteristics and this is evident in their post-disaster response and recovery.

People in the communities were impacted by disaster because they were vulnerable. The root cause of their vulnerability is ecological collapse, caused primarily by poverty, need, and the resultant deteriorating physical resource base. In none of the case studies has the root causes been adequately addressed in the aftermath of disaster. With recurrent disaster events, the damage caused is increasingly irreversible, and combined with already scarce resources, vulnerability is amplified and increased. Ecological degradation has accelerated. Poverty has increased mainly because of increasing food scarcity associated with the declining resource

base and lack of economic opportunities. Life for most has become harder. Despite some more recent positive political changes and better established systems and policies to address risk and disaster, progress is slight and effective support for long-term community recovery limited. As a result, communities affected by recurrent disasters are now even more vulnerable than before.

The affected communities have not been inactive. They demonstrate a high level of capacity to cope with disasters and overtime they have developed a disaster sub-culture which provides them with increased capacity and knowledge to prepare and respond. Trapped by traditional religious, cultural and social practices, disadvantaged groups face higher levels of risk. However, these same practices can also provide a capacity to help respond. Despite this, the resultant behaviour developed through the disaster sub-culture, actions and learning contribute little to either help avoid recurrent disasters, minimize their impact or ensure full recovery. In the immediate aftermath of disasters, the poor and rich suffer similarly, but in the longer term, the rich manage to access resources that help them recover, while the poor remain marginalized and without access to the necessary resources required for daily survival.

In such conditions, the poor are pushed into increasingly environmentally unsustainable practices and environmental degradation continues at an increasing rate. Degenerating economic and ecological conditions encourage massive out-migration, leaving at least in some cases, the poor and elderly behind. In some cases, migration may involve a move to less hospitable and potentially vulnerable areas that result in further unsustainable practices, and a lack of security.

Communities affected by a one-off disaster, although they have a similar degree of poverty and socio-economic vulnerability and similar levels of external intervention, have had a completely different recovery experience, at least in part because they have had much more time to recover before a second disaster hits (also, see report for Mission East that addresses the recovery process for small disasters in a remote area³²).

The fact that most small-scale disasters are recurrent and ubiquitous means that they do not engender any specific, tailored recovery effort but, rather these disasters and recovery efforts are integrated into the unending struggles of daily life.

³² (see, Belperron & Shrestha, 2014)

Chapter Seven

Building Back Better: Identifying New Pathways to Recovery

Disaster recovery, as documented in the literature, is not a linear process, but shaped by the interplay of many different factors within the social system. The conceptual framework presented at the start of this thesis drew on that knowledge to identify the experience of recovery. In the absence of any prior studies of recovery in the context of small recurrent disasters, to date the factors identified in the recovery process are those associated with large scale disasters. However, as noted above, such understanding is itself limited, and largely understood and interpreted with respect to the visible effects of external aid and support. What happens when any external support and aid ends, how disaster affected communities work to recover lost resources, and how they work to secure new resources in the days and months that follow, remain less understood.

This Chapter uses the findings of the current thesis and the detailed empirical exploration of the recovery process at a household and community level, in the aftermath of small-scale disasters. There is no reason to conclude that the factors identified are limited to small-scale disasters. They may well play a significant role in large scale disasters, but that remains subject to further research and documentation.

7.1 Starting from Scratch: ‘Pre-Disaster Socio-Economic Conditions’

The research literature repeatedly emphasizes access to resources as central to recovery (Blaikie et al., 1994). The socio-economic conditions of households and communities prior to disaster have a major influence on the recovery process. Indeed, such conditions are the key determinant of both *when* and *how* individual households and communities respond.

These points are evident in the priority of needs identified by affected households and communities in the study area. These needs are evident in the reports of those affected in the aftermath of a disaster and highlighted in the documentation submitted for official support. Where such support is not available within a community, external aid is a prerequisite for survival and recovery. With respect to recurrent landslides, those affected did not report them to the authorities in the initial stages of their development. Cracks and minor slippage clearly exhibited warning signs of a potential disaster. Although the households and communities concerned recognized these indicators, they took little action in response. Even when cracks and slippage became enlarged and extended and caused damage to people and property, they were not prioritized. This is not because they were unaware of the potential consequences of a landslide, people simply saw their immediate need for food and survival as more important. A scarcity of food threatens their daily survival and this outweighs any landslide risk. When trapped in already harsh living conditions, addressing the symptoms of an emerging disaster or damage from a landslide are rarely prioritized over existing day-to-day essentials.

People's priority of ensuring their daily necessities is also the key reason behind the continued (and increasing) practice of unsustainable land-use activities as observed in the study area after a disaster. Again, it is not because the population lacks awareness or understanding. Indeed, affected households and communities are well aware that such unsustainable practices accentuate long-term risks rather than contribute to recovery. They feel forced to fall back on the adoption of unsustainable practices because they believe that they have no other means to secure their survival. In the study communities poverty is rife. After a disaster, communities face increased pressure to meet their basic needs at the very time when their resource base is severely reduced or constrained. Without the necessary support from the authorities, their only option is to maximise their output from the remaining resources they have, whatever the long-term cost.

Other pre-disaster conditions such as access to authority and the capacity of the affected population to communicate with these authorities, similarly affect the response to disaster. This is evident in the responses of individual households. It is further highlighted when disaster impacts on only a very few households and the

onus to apply for assistance falls on these individual households directly impacted when community leaders are not prepared to assist. Official data for 2013/2014 collected at a District level show that 70% of recorded events were for the District capital, and areas close by, and only 30% were for distant, remote communities (Account records of District Administration Office, Baitadi, January 2013). Affected households in remote communities don't report damage because they believe the level of support they might get is outweighed by the resources they would spend to access such support. This is compounded by the costs associated with their problems of physical accessibility. Their capacity or ability to take action is also a crucial factor. Those impacted by disaster also frequently are unaware of how to submit an application for aid, what to say, how to say it, and to whom it should be submitted. Lack of awareness is closely associated with wider problems related to unequal power relations between different social groups. As described in Chapter 5 (Section 5.1.3) the majority of people in remote rural communities are largely subject to the power and influence of a few prominent community members (the power structure and power relations in relation to recovery are discussed in more detail in the next section). Such power, in terms of information sharing, networking, and interaction with outsiders, is in the hands of this small group of prominent community members that commonly includes landlords, Hindu priests, and educated community members with important roles in the community, such as teachers, government officials, and health workers. The majority of community members are largely dependent on these individuals in any important decision making including interaction with outsiders. When a disaster causes limited damage that impacts on a very small number of households, community leaders are generally unwilling to get involved. The affected households are left to their own initiatives. Commonly these people, who have never been empowered, are not only unaware (or less aware) of the nature of the bureaucratic system, but lack confidence to speak up on their own behalf. This further hinders their ability to act independently and file any application for aid.

Householders' economic resources (and access to resources) under pre-disaster conditions directly influences their recovery. Arguably, one might conclude that the impact of a disaster on different income classes is essentially the same; all suffer the loss of goods and property. However, the scale and nature of loss

inevitably varies with the scale and range of resources held by each household. In the longer term, however, and in efforts to recover, rich households with greater resources than others, have many more opportunities than the poor. As discussed in the previous chapter, in some instances, the rich have been able to shift to Terai where they already owned land, or property, or/and had family or other forms of social support. Poor families, out of necessity, more often had to compromise their well-being, whether by moving to some other unsafe area, or by moving to areas with harsher conditions, or they are forced to live on their home site in increasingly harsh conditions. As explained in the previous chapter, many such families end up squatting, as for example, in flood prone areas in the Terai. These people now face recurrent floods; many others who moved to land in even more remote, harsher and isolated areas than before, experience increasing day-to-day hardship.

The advantages faced by the rich are evident in the fact that some of those households in the case studies have recovered from disaster, or are moving towards recovery. For example, seven years after the Kichan flood, rich families have already established a new life in Terai or have done so in their original home community. Likewise, some rich families have shifted from crop farming to cattle farming or have diversified their business. There are similar stories of other rich families in other parts of the study area. Poorer groups, affected by the same flood, still struggle to recover (and survive).

As discussed previously, the resources of the rich include social resources. In remote communities landlords are often highly respected because of their donations to schools, temples and health services, and gifts of land and materials to the poor. They also have access to a network of powerful people through family ties, and through their social and business activities. The case studies demonstrate that in the process of recovery they can trade on their social capital, and as respected members of society have ready access to credit and social support.

The social networks of wealthy households are useful in helping them find land at good prices and their networks enabled them to re-establish their businesses. This helps secure their recovery. This is evident in many of the case study communities. After disasters, social status and social networks are also important in accessing other livelihood resources. Rich families benefit from low-interest

and interest-free loans from relatives; they face low charges in leasing land and houses; moreover, they receive substantial social support from the wider community to help re-establish their livelihoods. The poor have no such access.

In some instances the poor are “unintentionally” cut off from the standard relief support provided by the authorities. Sharecropping is common practice in rural Nepal. Land on the hills and in the river valleys often provides a resource base for landless farmers and sharecroppers, who are often from poorer families. Their dependency on the land is greater than those who own land. Floods and landslides damage or destroy land indiscriminately. Relief, however, goes almost only to landowners; sharecroppers are usually left out.

Social resources, particularly, kinship ties and traditional mutual aid (including inter-community support) play a crucial role in disaster recovery. The significance of such factors as described in the case study communities is well recognized in the literature at least in the context of large disasters (Anderson, 1965; Quarantelli, 1978; Blaikie et al., 1994; Ingram et al., 2006; Gaillard, 2008; Wisner et al., 2012). In the examples examined in this thesis, mutual help was identified as particularly important both in normal times and under disaster conditions. Social resources not only helped households access emergency needs, but livelihood resources.

Neighbours and members from nearby villages were the first to assist in the search and rescue of missing community members and cattle, and in attempts to recover other belongings. They equally played important roles in helping affected members meet their immediate needs, including food, clothes, and shelter.

Mutual help and inter-community help were widely observed across all households and communities regardless of whether these communities had a homogeneous or heterogeneous social structure. Kinship ties were more powerful in the recovery process in homogenous communities where families are bound together by extensive inter-family links. In response to a scarcity of land for farming or the destruction of homes, some households even shared their land and opened their homes to those in need. In these communities, people operated as groups whether on issues of evacuation or out-migration, whereas in heterogeneous communities (with mixed social groups) other than during the

emergency phase, households mostly respond to their needs on an individual basis.

Mutual help among neighbours and within a community was an important resource in the restoration of community infrastructure. In all cases, infrastructure, such as schools, irrigation, water channels, and foot trails, was re-established through the joint contribution of community members both through the provision of labour and construction material. Better educated households, with members who hold jobs in the public service are entitled to a pension. This allows them to take a more relaxed view of the hazard posed by landslides. A pension offers security and options. Recipients of such pensions commonly enjoy easier access than others to credit and other forms of aid and assistance.

Pre-existing conditions related to income level and material resources are crucial in community recovery. As illustrated in the case studies, the natural resources available within a community, such as timber and stones, offer building materials to restore community infrastructure such as schools, and to repair and reconstruct homes and privately-owned flour mills. In Paladi and Patreni, community funds were accessed from the sale of forest resources, and used to repair damaged private and community property to an extent that was unrealistic if they the community had been forced to rely solely on the resources available at an individual or household level. Community forest resources also provide free (and subsidized) timber and other materials to households that would not otherwise have been able to afford them. Other communities do not have comparable common cash or material resources. After a disaster such communities need financial help, and have no alternative than to seek help from external sources. Communal resources (such as community forests) – properly managed would allow communities to be more self-reliant, and more resilient.

Help from external authorities is largely limited to short-term relief and there is no support to help people access longer-term livelihood needs. In effect, people's recovery, particularly in the long-term, is determined solely on the basis of their pre-existing socio-economic conditions. Such conditions as faced by affected households and communities in terms of natural resources (such as, access to arable land and forest resources), economic resources (such as, access to credit and paid employment opportunities), and social resources (such as, social

networks, kinship ties, mutual help, and inter-community help), all play a crucial role in their recovery. As a result, it's not surprising that the majority of community members, who prior to disaster were vulnerable because of poverty and their socio-economic condition, failed to recover.

7.2 Normative Social Systems: Structure and Power Relations

Normative social systems (and structures) and power relations amongst individuals and households strongly influence recovery. This is particularly the case for traditional remote communities where external intervention and support is minimal or non-existent. Lack of external support to help access resources that would aid recovery, combined with often recurrent, small-scale disasters force many poor families to rely on traditional practices grounded in the established normative social systems and structures. As described in Chapter 5, unequal power and relationship structures that existed prior to disaster, were evident especially in class, caste and gender differences among different socio-economic groups. As the literature suggests, this results in unequal access to power and is a key determinant both of vulnerability to disaster, and ability to cope and recover (Bolin, 1976; Blaikie et al., 1994; Nigg, 1995). This is equally true in the case of small scale, recurrent disasters. Use of normative systems and practices (such as informal loans and leasehold systems) to access resources in the aftermath of a disaster, reinforces pre-existing unequal power relations.

As evident in the case studies, there is no significant external help for an affected population to access lost livelihood resources. Such needs must be met by the affected households and communities themselves. Prior to disaster, the majority of the study population were already poor. Their conditions were worsened by disasters which swept away their cultivable land, and damaged or destroyed their crops and stored grain. Disaster meant that these families faced increased difficulties to meet their basic food needs. People used-up any remaining stored grain and sold cattle and other valuables to buy food. This, strategy was, however, not available to most. Moreover, besides a shortage of food, people also faced additional pressure to obtain cash and material resources to repair infrastructure, and reconstruct homes and farm buildings. As a result, after a disaster, most poor families faced a desperate need for money to obtain the necessities to survive.

Formal credit is inaccessible to most families. As in many other parts of Nepal there are special programs managed by the Government to support low-interest loans for long-term agricultural improvement and immediate consumption needs. However, these programs barely impact on the poorer groups in the study area, in particular because of the demanding requirements that must be met to obtain credit (see, for example, Levine, 1988). These issues are compounded by the availability of these programs only in physically accessible areas and almost everyone who wants to access these programs has to travel to the District capital to apply and obtain any loan they hope to receive. As a result, rich landlords (who often are moneylenders) remain the main source of credit. After a disaster many families get cash loans and borrow material supplies from landlords. For the most part, these loans are used to finance immediate consumption, and to repair and rebuild houses and other key infrastructures. However, many households are already in debt before a disaster (see chapter 5, section 5.1.3); further borrowing compounds their debts. On average, one of three households interviewed was identified as in debt.

The interest rates on loans are often very high and depend on the relationship between debtors and lenders, but commonly exceed 25 percent. Interest rates are solely decided by the creditor and usually based on current community practices, regardless of existing legislation aimed to control customary rates. Unlike official loans, interest rates vary and can be paid back at least in part in the form of labour. Labour service is commonly attached to private loans from landowners (who are often part of community leadership groups). In such cases, the interest rate is reduced proportionately, according to the amount of labour pledged. Some debts may be set at a specified high interest rate, while others are set at a lower rate, when accompanied by heavy labour obligations or other requirements, such as the provision of firewood, hay and the like.

Loans generate extraordinary profits for a small number of creditors, while simultaneously, eroding the earning capacity of the poor, and cutting deeply into their already inadequate reserves of food. When debtors are unable to keep up with their payment, they must renew their loans or take out additional loans. Unpaid interest attached to earlier loans is added to any new loans. Any delay in repayment or inability to pay, requires debtors to either sell assets, or repay

creditors with labour, further lessening their capacity to meet their own subsistence needs. If this situation continues, it may lead to temporary mortgage their property and may progress to the permanent alienation and loss of their land. Members of the households that lose their land have limited choices: either leave the region or become bond servants who work to slowly pay off the debt on their former property.

The situation is no different regarding land/property leasehold systems commonly practiced in the region. Families severely impacted by the loss of cultivable land are offered land leased from local landlords. This is an internal community affair and there is no involvement of the authorities. The normative social structure is the key to such initiation. The lessee has to pay an amount of cash to the owner on an instalment basis, or hand-over a percentage of crops raised. On the one hand, lack of ability to pay the rent may force a household to borrow money from a moneylender (who could be the lessee) often at a high interest rate. On the other hand, any delay in repayment may oblige debtors to provide free labour to their creditors if, as often the case, they are asked to do so.

Such arrangements are long established and have been reported in previous research (Bista, 1976; Seddon, 1987; Levine, 1988). Unlike in the past, however, debtors now prefer to find wage employment, commonly involving their temporary migration, rather than work for their creditor without pay. Repayment of debt was commonly cited by respondents as the main reason for their seeking wage work and for out-migration. Indeed, repetitive landslide damage and the increased incidence of debt in Gokuleshwor VDC is probably one of the key reasons behind the doubling of the number of community members migrating to India for wage labour in the last five years (Gokuleshwor Village Development Committee, 2010).

As illustrated in the case studies, many households are in serious debt. Such situations are frequently worsened by the recurrent nature of the disasters they face. Despite their continuing efforts and involvement in multiple income-generating work, overtime these families are less and less capable of clearing their debts. Given the high-interest rate on loans, cumulative losses from disaster events, and the increased need for cash, these families are continuously pushed deeper into debt. Evidence of serious indebtedness, evident in particular in the

threats issued to debtors by landlords, in the extent of free agricultural labour provided by families, and by the increased involvement of families in wage labour to pay off interest and debt. Indebtedness, generated by the informal credit system and leasehold agreements, promotes increased economic dependency, increases exploitative relationships, and widens pre-existing divisions among social groups.

Indebtedness has even wider implications. Past research has identified indebtedness as a major phenomenon behind the continuous impoverishment of poor farming families in remote Nepal. These studies repeatedly emphasize how such indebtedness creates dependency and political weakness in the poor, while reinforcing the power and political dominance of the few rich households in the community. Previous studies in remote Nepal have also demonstrated that indebtedness is not limited to matters associated with the monetary economy (Bista, 1976; Seddon, 1987; Levine, 1988). Economic indebtedness may carry with it social obligations, as when debtors are called upon to provide political support for their „patron“ and creditors. As Bista reports “a large number of other poorer families are not independent or even neutral, because they are sharecropper tenants of one or other of the rich family groups or factions. Thus a large degree of partisanship is not out of choice but due to economic dependence on the faction leaders who happen to control larger areas of land and other resources (Bista, 1976; pp. 8). Similarly, Conlin and Falk (1979: 149) in their study of the socio-economic conditions in the Koshi hill area of Nepal, state, “it is through credit, or debt, that food deficits have the most lasting consequences for the socio-economic status of different groups of farmers” (cited in Seddon, 1985, pp. 68). Importantly, the dominance these richer groups over their communities is not only based on their economic strength, although this is the main reason. Landlords are often prominent community members and, as illustrated in the case studies, play important roles in the socio-economic life of their communities. Donations for schools, temples, health services and land and material help to the poor, as well as leadership to mobilize the community and channel external resources during a crisis are common forms of help provided by prominent community members. Their roles are particularly significant in times of crisis, because at such times they provide knowledge, guidance, leadership, and access to social networks that help communities to access resources to restore private and community property.

Such actions and roles reinforce their power in such a way that the poor and weak (the majority), are dependent on landlords and other prominent individuals or groups, not only economically but on almost all social and political terms. This is well illustrated in the case of Paladi, where when a minor slippage affected the community, but affected families didn't apply for relief support because they didn't know „where“ or „how“ to lodge an application or „what“ to tell to the authorities. Previously, when a major adverse event had occurred the prominent members led the relief application process, not the individual families. This highlights the lack of empowerment of the poor and their high degree of dependence on the few prominent groups for each and every matter.

The dominance of a few richer groups is equally evident in the study communities. This is why District and Regional authorities are distrustful of many disaster relief applications and of the assessment reports from remote communities and VDCs. The authorities are well aware of the dominance exerted by a few prominent community members. They are equally aware of the lack of empowerment of the majority of the population, and the extent to which that majority are dependent on local leaders in filing any applications. They assume that any relief documentation is highly influenced and manipulated by these community leaders. They assume that those who are „well connected“, or „favoured“ by the prominent members of the community may benefit disproportionately, and that others with less power and influence will lose out. However, they also recognise that such applications often include some of the poorest families, whether or not they are impacted by the disaster, as part of a strategy to maintain the power of the leadership group or advance some other (possibly political) agenda. The authorities similarly explain the many false claims they receive. All these factors adversely impact on the amount of relief available for distribution to those most affected. Those most affected often miss-out. Unequal power relations in the local area are again the key reason why the authorities, despite fully understanding the difficulties people face in travelling, centralise the distribution of food relief and cash compensation in the District capital and do not distribute it at a local level believing if they did, that its distribution would be further compromised.

Discussion on normative social structures and systems and unequal power relations in Nepal is incomplete without discussing caste and gender. These are factors embedded in Nepal's unequal power relations and have implications for disaster recovery. Historically, the caste system has limited the Dalit people's access to a range of resources, including land ownership, education, and social relationships. These limitations have significantly contributed to the impoverishment of this group. As shown in the case studies, caste and income do not coincide, however, caste does have implications for income, and no Dalits in the study area was rich or owned land. Most Dalit households are poor often extremely poor, heavily in debt and increasingly vulnerable. Trapped by traditional religious, cultural and social systems and practices the Dalits are particularly vulnerable to disaster risk and in the immediate aftermath of a disaster, are limited in their access to support and relief.

As demonstrated in Banagbagad, traditional systems and practices also provide the Dalits with unique abilities to survive. In the study area, Dalit groups have maintained a diverse livelihood structure, hinging on the traditional custom of *Riti Magne* (begging) and specific occupations that in traditional Nepalese society are generally viewed as low status (see, Chapter 5). In recent decades, with the legal abolishment of untouchability, and the Maoist conflict that supported Dalit rights, there have been some positive changes. Dalits are now allowed to own and farm land. Most Dalits in the study area now have some involvement in farming. However, Dalit farming tends to remain at a relatively basic level, partly related to the Dalits lack of experience, lacking a farming background. Their farming is basic and they do not have any *Khet* or *bari* land (see, Chapter 5, section 5.1.2). They remain involved in other activities, including begging. As a result, the Dalits are less dependent on the land than other non-Dalit subsistence farmers, and retain multiple skills. They are adaptable, with little to lose in terms of social respect or status. After disasters and the destruction of agricultural land, farming is no easy option for anyone and, as in the past, Dalit have fallen back on their traditional roles. Begging, in particular, has substantially increased. For non-Dalit whose farms are their sole or primary source of food and income, a disaster can result in increased poverty or destitution, For the Dalit, their traditional occupations

provide a means to survive and sustain their large families, if at a very low level. As explained:

These families wouldn't have survived if they weren't Dalits. The only way they are surviving is through begging. It's a socially expected (and accepted) occupation for Dalits, just as farming is for others groups. They also make money from skinning, and playing music at weddings. If it was a Brahmin or Chettri they would have an extremely hard time to survive

(Interview, representative of local ward forum, Bangabagar, 14th January 2014).

What helps Dalits survive is their traditional occupations, particularly begging. Higher caste families in their position are blocked by their caste status from begging or taking other low status jobs, or risk being cut-off from their family and social ties. While this persists, the Dalit are able to recover from disaster. Their struggle, however, remains one of survival, and forces their involvement in degrading activities such as begging. This in turn further reduces their social status (already precarious) and by promoting their greater dependency on higher caste groups, helps reinforce pre-existing power structures and unequal relationships.

Everyday discrimination against women in traditional patriarchal societies restricts their access to the resources necessary for recovery. In practice, women in the study area still haven't acquired the right to own land or property. Their access remains solely through male family members. Out-migration by women seeking work as labourers is deemed inappropriate, firstly because they are not expected to leave their children with others and secondly because it requires „socializing with men“ which is inevitably framed negatively. Compared to male members of the community, women's access to livelihood resources is disproportionately limited, making families headed by women more vulnerable than others. In effect, after a disaster, they are comparatively less able to cope and recover. As the normative social system and structure is maintained after a disaster, female headed families face additional challenges.

However badly affected by a disaster, female headed households are unable to access formal relief. Any entitlement is either taken by their male siblings or other relatives because they don't have legal (and social) ownership of the house in

which they live or of the land they farm. At the same time, while most men have the option of migrating to obtain work, female headed households have no option other than to seek local, extremely low paid agricultural labour. Such circumstances pushes these women and their families into conditions of increasing vulnerability, contributing further to their incapacity to recover.

Social processes driven by unequal power structures and relationships assure the on-going domination and impoverishment of weaker groups by the rich, while allowing the rich to increase their wealth and power. In the study area, where normative systems portray unequal power relations between different socio-economic groups, the implementation and extension of these normative systems and practices adversely influence recovery and hit the poor and weakest groups most of all.

In times of disaster, traditional practices (such as untouchability, those associated with menstruating women, and those in mourning) that result in discrimination, expose different groups to a higher degree of risk. Such practices remain an important issue concerning people's safety and well-being during a disaster. While these practices do not seem to directly influence the recovery process as a whole, it is in fact the lasting consequences of systemic discrimination and the resulting lack of access to resources that perpetuates vulnerability. The long-term recovery of those discriminated against is hindered as a result of pre-existing prejudices and traditional practices. These block marginalized people (including women) from getting well-paid jobs, even long after the emergency recovery period is over.

7.3 Power from Within: 'Local Disaster Knowledge'

The scholarly literature repeatedly emphasizes the importance of local knowledge in shaping people's response to disasters (see, Anderson, 1965; Wenger & Weller, 1973; Quarantelli, 1978; Gaillard et al., 2009; and Mercer, 2012) and its influential role in the recovery process. The findings presented in this thesis illustrate how cumulative knowledge, developed through generations of direct experience, is embedded in community culture.

The case studies illustrate how, over time, people gain increasing understanding of landslides and develop critical insight on local, recurrent landslide events. Such

understanding is not limited to the physical characteristics of these landslides, but to rescue and relief mechanisms and other support structures, and how best to access them. The case studies equally show that such learning allows people to develop appropriate short and long-term strategies to aid their recovery. These allow them to minimise harm to themselves and their property and to optimize use of the resources available. Short-term strategies include self-evacuation to safer areas prior to a landslide event, and the safeguarding of cattle and other moveable property, and even include the dismantling of houses, allowing the re-use of material to build new homes in safer locations. Long-term strategies include integrating recovery efforts (mitigation work) into the seasonal agricultural calendar, and the development of a new labour exchange culture for house reconstruction. These and other response and recovery strategies are variously illustrated in earlier discussion. They illustrate how affected communities develop a high level of ability to respond to disasters and how, over time, as this knowledge increases, a community's capacity to prepare and respond is further strengthened.

Despite community learning, the behaviour adopted and actions that result contribute little to help avoid recurrent disasters, minimise their impact, or ensure recovery. Two parallel and simultaneous processes stand out in the community recovery process. First, communities continuously develop knowledge and strategies to reduce disaster losses and their impact. Secondly, repeated disasters result in an on-going erosion of available resources. The one process does not feed into the other. Local knowledge develops as a shield against disaster, and works well as a survival strategy. However, it contributes little to improve people's access to resources – which is what, in particular, they need.

7.4 Bridging the Gap: 'External Intervention'

External intervention, as previously described, is important in determining the disaster recovery process because it is one of the main channels through which a disaster affected population can access the resources needed to survive and respond. Regardless of the variations among the study communities in terms of their remoteness and socio-economic conditions, and the extent of damage experienced, external intervention did reach all of them in some form, and it influenced their subsequent actions. The official disaster response, however, was

heavily conditioned by established, pre-existing policies and mechanisms. No unique response plan was developed or implemented as occurs in many large scale disasters. Nepal's processes and policies emphasise short-term rescue and relief, the reconstruction of important community building, and activities to „manage“ disasters through different forms of preparedness (including early warning systems), as well as mitigation. Little attention is directed to the social causes behind disasters which must be addressed if long-term recovery is to be secured. This situation is not unique to Nepal. Indeed, Nepal's approach to disaster risk reduction is largely shaped by the international framework common across 196 UN member states.

The short-term rescue and relief support that reached all the affected communities examined in this thesis was useful in helping meet the emergency needs of the affected populations. The level of this support was influenced by several different factors. Those factors that attracted external attention and positively influenced the degree of relief support provided were: the importance of the place or community including its size, location and political or economic significance; the extent to which the disaster impacted on the wider population (evident in the case of Bangabagar); and the „unusualness“ or scale of the disaster (evident in the sudden one-off flood in Kichan). Authorities are perceived by local households as prioritising some communities over others, and one event over another, and this generates significant anger and bitterness among members of communities that feel discriminated against. However, any such bias in terms of relief support did not appear to impact on communities in terms of their long-term recovery.

The external attention and support received by communities is often determined by the magnitude of physical damage reported. Commonly this is the sole criterion used to assess the impact of a disaster. This is again not unique to Nepal, but is common worldwide. Such an approach, however, does not take into consideration the scale or impact of a disaster on the affected population and communities, whether in terms of economic loss, number of households affected or the like. For example, the magnitude of physical damage caused by the flood in Kichan was much greater than that caused by any single event in any of the recurrent disasters. However, its impact on the population was much less than that resulting from recurrent landslides. This was mainly because the flood was a one-

off event and there was no accumulation of losses (as caused by recurrent events). The consequences of the one-off flood might usefully, therefore, be described as acute, rather than chronic. The chronic consequences of recurrent events are particularly critical in terms of impact and response. Over time, cumulative losses and the uncertainty involved in recurrent landslides, does not allow affected families the opportunity to invest in any new endeavour that could help recover. Regardless of such differences, the mechanisms used by the authorities were the same and ignored the accumulation of loss and damage associated with recurrent events. The magnitude of damage in each small-scale recurrent disaster event is generally so slight that any relief or aid received in response to an individual event is inadequate to support effective recovery. The use of scale or magnitude of damage as the sole criterion to measure the impact of a disaster is misleading and incomplete. This is particularly the case with respect to recurrent disasters. It also distracts the attention of external authorities from any effort to understand the true impact of a disaster on the people concerned and their recovery needs.

Another typical external intervention takes the form of hazard mitigation. This is promoted and supported by the authorities in response to frequent and old landslides (such as in the case of Sera), and rapidly growing landslides (such as in the case of Bangabagar). They are designed to control the spread of a landslide and reduce its impact on communities. However, as described in the previous Chapter, mitigation measures undertaken are inadequate and ineffective. The complexity of government bureaucracy, particularly between different agencies, inadequate funding and limited organizational capacity are among the key problems. In consequence, despite repeated efforts by external authorities, their interventions do not help people to recover, but do lead to widespread cynicism and frustration.

Such cynicism and frustration are widely shared across communities and are particularly evident in those situations where either no official support is provided to help households access the resources necessary for long-term recovery or where none of the external support provided is aimed to reduce pre-existing vulnerabilities. Short-term support is aimed solely to save lives and provide short-term relief; any mitigation activities are aimed solely to reduce the long-term impact of landslides. Indeed, in the absence of appropriate action, pre-existing

vulnerabilities increase after a disaster and continue to increase as a disaster recurs. In the absence of the resources necessary to recover, people are forced to live in unsafe areas and follow unsustainable land-use practices.

In Nepal, a comprehensive plan exists the District level to facilitate early recovery³³, in effect to lay the ground work for longer term recovery by facilitating access to basic resources, such as shelter and income. Such plans are based on the international humanitarian coordination system (District Disaster Relief Committee-Baitadi, 2013). The rescue and relief mechanism as applied in the case study communities is directly based on this system, and involves a cluster approach³⁴ integrating and coordinating all necessary agencies. The focus of such clusters range from immediate and short-term needs to supporting longer-term requirements such as food, shelter, and water supplies. In practice, however, these plans function only as an emergency strategy without any integrated recovery component. This is at least in part due to a lack of institutional capacity and training of staff in the agencies involved. The official explanation is budgetary constraints and lack of capacity. However, empirical evidence from field work suggests the failure lies deeper and relates in particular to an official perception of landslide disasters as individual, unique events, rather than as an on-going process.

As illustrated in the case studies, small, recurrent disasters are part of a long-term process. Scarcity of agricultural land and lack of alternative economic opportunities are core reasons why people are forced to adopt unsustainable land-use practices that result in intensive hill erosion. Such erosion is not unique to the study area, although the intensity of erosion in the study area is almost certainly greater than in most other parts of Nepal. Erosion in the Nepalese hills has been

³³ Early recovery is a term used to explain an approach to humanitarian work that ensures a humanitarian response to an emergency, while focusing on the immediate lifesaving needs of a population, such as providing clean water, sanitation, food and shelter. It also contributes to longer-term objectives and more resilient communities, and lays the best possible ground work for longer-term development beyond the immediate emergency.

³⁴ The basis of the current international humanitarian coordination system was set by General Assembly Resolution 46/182 in December 1991. The Humanitarian Reform of 2005 introduced new elements to improve capacity, predictability, accountability, leadership and partnership. The most visible aspect of the reform is the creation of the Cluster Approach. Clusters are groups of humanitarian organizations (UN and non-UN) working in the main sectors of humanitarian action, e.g. shelter and health. They are created when clear humanitarian needs exist within a sector, when there are numerous actors within sectors and when national authorities need coordination support. Clusters provide a clear point of contact and are accountable for adequate and appropriate humanitarian assistance. Clusters create partnerships between international humanitarian actors, national and local authorities, and civil society.

discussed for many decades (see, for example, Eckholm, 1976; Blaikie et al., 1980; Uprety, 2001). Population growth, a shrinking resource base and poverty have long been identified as the key reasons behind increased soil degradation. The steep, eroded hills, when subject to heavy and prolonged Monsoon rains, become destabilised. Given the unequal power relations within communities and between communities and external authorities, relationships rooted in traditional norms and systems, a majority of residents in small rural communities are particularly vulnerable to natural hazards of all kinds.

The phenomenon of disaster occurrence is crucial in understanding the causes of these disasters. Understanding is important in shaping the appropriately response to landslides. However, existing external interventions do not recognize the driving forces behind risk and disaster. Existing external interventions recognize disasters as specific, unique events, and are different from regular day-to-day conditions (UNISDR, 2015). Efforts for landslide response include gabion walls, check dams and other engineering techniques to stop their advance, but the underlying factors of daily life that promote risk are largely ignored. As a result, instead of contributing to recovery, the policies implemented after a disaster commonly worsen the already harsh living conditions of local residents. With no appropriate external support to meet long-term livelihood needs, the pressures on land resources increase, promote increased unsustainable land use, and in turn, continued land degradation and increased disaster risk. The recurrence of landslides becomes almost inevitable.

Affected communities remain somewhat deterministic of their environment and official policies – or gaps in these policies - and how they are implemented. Meanwhile national resources that could be used to support the recovery process are absorbed for inappropriate and inadequate interventions that make no positive contribution to recovery.

7.5 The Nature of Disaster: Frequency and Scale of Growth

People's responses to disaster are strongly influenced by their experience of past events, the build-up of risk over time, and their perception of future risk. As illustrated in recurrent disasters, responses to a landslide in its earliest stages, whether by the population at risk or by the appropriate authorities, differ from the

responses after damage has occurred, and from when the risk (and damage) has increased, it differs too from that after a disaster has occurred and after a disaster has become a repeat event. The impacts of recurrent disasters and the extended time period involved affects people's responses and shapes the recovery process. Compared to one-off disasters, the frequent and growing nature of recurrent disasters has a chronic impact on the affected households and communities. Recurrent disasters (and increasing risk) limits the recovery time available. Combined with an on-going loss of resources, the result is a challenge of much more complexity than that faced after a one-off disaster. Recovery following one-off disaster is not constrained by time, and there are no issues associated with cumulative loss. This gives those affected more options for recovery. The thesis demonstrates how a community impacted by a one-off disaster and with a similar degree of poverty, socio-economic conditions, and level of external help as other communities, is much better positioned to recover than these communities subject to recurrent disaster events.

The example of Kichan is illustrative. The immediate impact of the flood in Kichan was greater and in a sense more chaotic than that following any of the recurrent disasters examined. Today, Kichan has recovered to an extent not evident elsewhere. Kichan, has not lost a large proportion of its population through migration. Indeed, the population is rebuilding, investing in new businesses and land development. This has occurred and is still occurring despite significant problems in accessing credit. Recovery extends across all economic groups. A large part of the recovery success is that there is only the most limited risk of a further major flood. When there is little or no risk of recurrence there is time to recover and a minimum risk to the investment in labour, time and finance that recovery requires. In the case of communities subject to recurrent landslides, conditions continue to worsen. Cumulative losses reduce a community's capacity to recover and increases uncertainty. In such cases, investment, replanting and rebuilding risk being wiped out by a further disaster, leaving the community deeper in debt.

Interviews of residents in communities subject to recurrent disasters highlight the uncertainty the landslides bring, and how this uncertainty thwarts any efforts to move on. At the same time, recurrent, small disasters also increasingly undermine

economic activity and increase the degradation of the resource base. In such circumstances, many have no option but to migrate. The poor remain the most vulnerable and for them, finding a safe place to migrate to, is often impossible. Consequently they often migrate to a location where they face new threats of disaster, and even greater hardships than before..

Today, with a swelling number of squatters in the forests and on the banks of the Terai, new, immense socio-economic and environmental problems are emerging (Seddon, 1987; Regmi, 1994; Massey, Axinn, & Ghimire, 2010; Regmi, 1994). Elsewhere, migration has also contributed to greater environmental degradation. For example, authorities in the Kailali District (one of the study districts), have identified an increased incidence of floods as a direct consequences of migration. Similar consequences are evident in other regions. Those who move to the hills clear the forest to create farms and build homes, only to promote increased land degradation. These problems become a part of their daily experience. Families label these locations as „uninhabitable“ because they are too limited or steep to construct a house with a porch and cowshed; swampy; have limited access to drinking water; unsuitable for cultivation; offer no possibility for irrigation; are too isolated (no foot trails and no houses nearby); at risk from wild animals; and vulnerable to disaster. Their decision to migrate is solely because they have no alternative.

Out-migration by disaster refugees has generally increased people’s vulnerability rather than reducing it. Such migration also has a negative environmental impact. In addition, out-migration has left source communities with only its older residents who are reluctant to leave because of their emotional attachment to the place and the comfort they find in the community in which they grew-up. These circumstances threaten the survival of many rural communities, the core strength of which has long been their unity, knowledge and joint participation, characteristics that require a balanced social structure and range of age groups.

Today, most households and communities affected by recurrent and growing disasters are more vulnerable to disaster than before. Instead of recovering and moving forward, they are trapped in greater misery. This is different from those who experience one-off disaster events because the impact of such events, though they may be great, is not chronic and allows time for people to move on and create

opportunities to recovery. The recovery process in the aftermath of a recurrent disaster is very different, largely shaped as it is by the frequency of the event and its cumulative impact over time.

7.6 Conclusion

This chapter has identified five “pathways” (or factors) that are key influences in the recovery process in the context of small-scale disasters. These are: pre-existing socio-economic conditions, normative social systems, structures and power relations, local knowledge of the disaster, external intervention, and the nature of disaster in terms of its frequency and growth.

Disaster is not a unique, isolated event, neither is recovery. Both disaster and recovery are deeply embedded in the social system in which they occur. The normative system and structure of the affected communities and the pre-existing socio-economic conditions of the affected populations carry the possibilities for their recovery or failure to recover.

Local knowledge of disasters generated through past experience and accumulated over time through repeated experiences (in the context of the repetitive disasters) can increase people’s capacity to effectively face disasters and minimize damage. However, on its own, such knowledge makes only a slight contribution to recovery.

External intervention can play a major role in recovery by channelling resources that people and communities need to secure recovery. However, the usefulness of external intervention in the recovery process is determined by whether disasters are treated as an external (or separate) hazard to be managed (and mitigated) or as a symptom with underlying causes. It is these causes, and whether these are addressed, that obstruct and most certainly challenge recovery.

The complexity of the recovery path depends significantly on the frequency of a disaster and its cumulative impact. Recurrent disasters and their chronic impact pose major, multiple and unique challenges compared to one-off disasters. Understanding these differences is essential in extending the support necessary for the long-term recovery of those affected.

Chapter Eight

Forging new conversations on disaster recovery

Several gaps in knowledge and understanding were identified in the literature with respect to disasters and the disaster recovery process. These provided a platform to frame and develop this thesis. A focus on large-scale disasters continues to dominate in the literature, at the expense of more frequent, if less dramatic, but devastating small-scale disasters. As a result, understanding of small-scale disasters remains limited despite increased recognition of their significance to those directly affected and to society as a whole.

Knowledge of disaster recovery equally remains based largely on the experience of large disasters. Globally, these remain the basis of practice and policy for risk reduction and management. Despite the acknowledged importance of small-scale disasters there is no theoretical framework to explain and support recovery intervention in the context of such disasters. Although small-scale disasters are acknowledged as different from large disasters, particularly in terms of the external attention and support they generate and the frequency of their occurrence, there is a continued reliance on evidence drawn from large scale disasters to address small-scale disaster conditions. This seems misguided and potentially unwise. This thesis was designed to help fill the gap in understanding of small-scale disasters and the subsequent recovery process. This Chapter locates the study findings in the context of existing knowledge and concludes with a recovery framework developed to address small-scale disaster conditions.

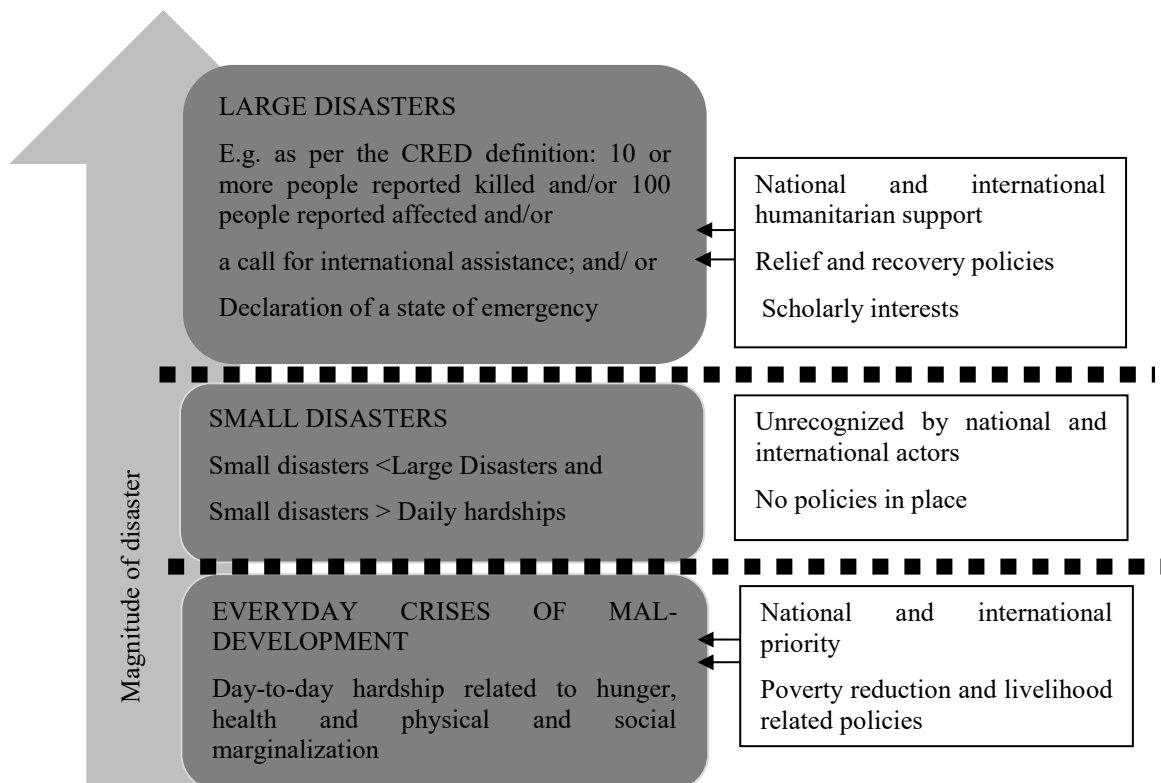
8.1 Conceptualization of Small-Scale Disasters

Increasing evidence of the serious socio-economic impact of small-scale disasters has repeatedly highlighted the importance of these disasters for those people and communities impacted. However, as elaborated in previous chapters (see, for example, Chapter 2, section 2.4) understanding of small-scale disasters remains in its infancy. The findings of this current study, which focuses on the recovery

process following small-scale disasters, offers insights which contribute to a better understanding of such disasters, and so to the broader discourse on disasters as a whole.

Initially, this study conceptualized small disasters from an understanding of different scales of crises, needs, or response (see, Figure 14).

Figure 14: A conceptualization of disasters.



(Shrestha and Gaillard, 2013, pp. 47)

As shown in Figure 14, two well recognized levels of disasters are large disasters, and the everyday crises of mal-development. Internationally reported disaster losses are heavily concentrated on the small number of infrequently occurring large disasters. One reason for this is the operational definition of disasters as huge, unusual catastrophes. For example, CRED (*Centre for Research on the Epidemiology of Disasters*), which maintains the EM-DAT database, describes a disaster as ‘a situation or event which overwhelms local capacity, necessitating a request to national or international level for external assistance; an unforeseen and often sudden event that causes great damage, destruction and human suffering’.

CRED also offers operational disaster criteria, and states that for a disaster to be entered into the EM-DAT database, at least one of the following criteria must be fulfilled: 10 or more people reported killed; 100 people reported affected; a call for international assistance; and/or declaration of a state of emergency (Guha-Sapir et al., 2011 pp. 7). Similarly, the UNISDR defines a disaster as “a serious disruption of the functioning of a community or a society causing ‘widespread’ human, material, economic or environmental losses which exceed the ability of the affected community or society to cope using its own resources” (UNISDR, 2004, p. 3). These definitions emphasise large-scale events and concentrate on external aid and support (Figure 14). Large disasters stir huge interest and the attention of national and international actors. Similarly, everyday crises as identified in Figure 14, refer to those crises associated with mal-development, evidenced in such phenomena as poverty, hunger, health and physical and social marginalization. Such issues are expressed in, for example, unsafe motherhood, discrimination against women in rural Nepal, and every-day hunger in Malawi (IFRC, 2006); elsewhere on the globe they are evidenced as food insecurity, poor health and sanitation and social discrimination. Everyday crises stir massive interest amongst governments, national and international NGOs and other institutions, all of which have specific policies, strategies and interventions to address these situations.

Small-scale disasters are conceptualized in Figure 14 as falling between the two extremes of crises, i.e. large events and the everyday crises of mal-development. However, Figure 14 does not offer any precise definition of the threshold between these different forms of crises or hardships. In the early stage of this current research, details on the threshold for small disasters were not included, or left absent, and it was anticipated that this would provide the understanding necessary to fill this gap. Initially small-scale disasters were simply conceptualized as events that cause damage, destruction and suffering in people’s lives at a scale greater than that of their usual daily hardships (associated with poverty, poor health and food insecurity) but lesser than those associated with major disasters (see, Figure 14).

The findings of this current research clearly show that the scale of disaster or the thresholds between these different forms of hardship and disaster are highly

contextual — they vary in time and space in relation to people’s ability to address both daily hardships and other hazards. Moreover, the perception of ‘which’ disaster event is significant, which is less significant, and which has no significance differs among different actors.

From the perspective of affected households the significance of a disaster largely depends on the overall severity of its impact on their lives and livelihoods. Severity depends on many different factors. Firstly, it depends on a population’s capacity to cope and recover from its losses. This capacity is itself contextual as it is largely dependent on the population’s pre-existing socio-economic conditions. For example, for a poor farmer, who lives at subsistence level and is subject to food scarcity, damage to even less than a quarter of their crop, may result in a severe food crisis for the whole family. As shown in the case studies, increased food scarcity among poor families not only impacts on their economic condition but has a run-on impact on their children’s education. For a rich land holder’s household the same loss (in quantitative terms), though inevitably lessening their overall volume of production, does not have as severe an impact on their livelihood. Rich landowners, in the case study communities, were profoundly affected by disaster but not to the extreme level of the poorer families. Moreover, rich families had greater access to a range of social and economic resources that gave them opportunities to recover in the long run, whereas this wasn’t the case for poorer families.

Secondly, from the perspective of affected households, the severity of a disaster depends on the nature of its long-term impact on the household – for example, as shown in the case studies, compared to one-off disasters. In the long-term, frequent disasters cause chronic, and often increasingly, adverse impacts on the livelihoods of those affected. Over time, if not properly addressed, the impacts of such disasters keep increasing, to the extent that it generates uncertainty and discourages any sense of optimism among the affected population. Ultimately, those impacted may be forced to migrate and resettle in places and in conditions that involve a compromise between their over-all well-being and their survival. This is exemplified in unsafe and harsh living conditions (and the adoption of environmentally unsustainable activities, often branded illegal, such as clearing forests, trading timber to earn money, and squatting on flood prone river banks).

Such situations result in the construction of new disaster risks at the new location and the cycle of disaster and destruction continues. To the population affected that experiences the long-term impact of recurrent disasters, they are properly recognized as significant.

The perspective of affected communities is similar to that of affected households. The only difference is that for communities the severity of disaster impact is more dependent on its impact on the community as a whole, rather than individual household. Firstly, the severity of the disaster depends on a community's capacity to cope and recover – i.e. it is dependent on the pre-existing socio-economic conditions of the community. Secondly, it depends on the intensity of the disruption caused by the event (such as the number of affected households and the severity of impact on these households), loss of key community infrastructure (such as schools), and the impact of any other disasters in the locality that occur at the same time (for example, in one of the study cases many neighboring communities were simultaneously hit by floods and landslides and the overall disruption caused by those events heightened the significance of the disaster losses experienced in each community). Thirdly, the severity of a disaster is dependent on the nature of the long-term impact of that disaster on the communities concerned (for example, recurrent disasters that cause increasing, chronic damage are of greater concern to an affected community than a one-off event).

The perspectives of insiders - the perspectives of disaster affected households and communities - differs significantly from outsiders. Outsiders' perspectives are primarily dependent on the perceived magnitude of disaster, the socio-economic and political importance of the country or community concerned, the perceived capacity of the local/other domestic authorities to respond effectively, and the unusualness of the disaster. The magnitude of a disaster impact is related to the number of individuals/household involved or at least the perception of the numbers involved, including the number of people killed, injured or otherwise affected, and the amount of property lost and damaged. The socio-economic and political importance of the place concerned refers primarily to how a disaster in a particular location impacts on the socio-economic development of the wider region or area. The capacity of authorities refers to their ability to respond

effectively to the disaster. For instance, if they are unable to do so, then outsiders will view the disaster as large because they believe higher-level assistance is required. If this higher-level authority has the necessary capacity, then for that authority the disaster will not be considered large; if it does not, the same disaster will lead to a request for help from a higher level authority, and this could extend to still higher levels, and the perceived magnitude of the disaster would increase. Different authorities within any one country and among countries have different capabilities to respond to disasters. Such ability is a dynamic entity— it changes with time and with the situation concerned.

That small-scale, repeat disasters are common-place is another important factor that influences external perceptions of their significance. Disasters associated with the Monsoon floods are not unusual in Nepal. Hundreds of such incidences occur every year. Moreover, recurrent small scale disasters are for those directly affected often so frequent or regular that overtime they become a part of normal life and those affected learn to cope. Yet, such disasters gradually push a population into a condition of ever greater vulnerability and misery. Unusual, sudden, disastrous events of the same or even of lesser magnitude than a recurrent event, generate greater external attention. External perspectives on recurrent events contrast with those of affected households and communities that often view frequent disasters as a greater threat to their livelihood than unusual disasters of comparable or even of greater scale.

Table 8 illustrates how insiders' concerns are different, and at times stand in sharp contrast to those of outsiders. The primary factors which shape outsiders' perspectives on disaster are at odds with the actual severity a disaster has on an affected population, and deflects the focus of outsiders from the true impact of a disaster on those households and communities directly affected. Relying solely on the perceptions of outsiders to shape a disaster response and recovery interventions is dangerously misguided.

Table 8: The factors influencing insiders' and outsiders' perspectives on the significance of a disaster event

Insiders' Perspective (affected population and communities)	Outsiders' Perspective (external authorities)
People's (and communities') capacity to cope and recover from the disaster losses	Immediate magnitude of disaster impact Death, injuries and destruction
Intensity of disruption caused by the event. This primarily depends on: The number of affected households and the severity of the impact on them, Loss of important community infrastructure, and, Other disasters in the locality that happen at the same time	Socio-economic and political importance of a place (or community) (For example, a community providing important service to other towns are perceived as socio-economically important, because the damage has a wider impact
	Capacity of authorities to respond to disasters
Nature of the long-term impact on affected households and communities (For example, frequent and increasing recurrent disasters in the long term cause have a chronic impact on affected households and communities	The unusualness of the disaster In contrast to the insider's view, outsiders give less attention to recurrent disasters and more to less frequent (unusual) disasters

Source: Author

The dominant role of the outsiders' perspective is a key reason why previous knowledge of disasters, as articulated in most academic discourse, remains limited largely to the experience of infrequent large scale catastrophes. This is changing with the growing recognition of the importance of small-scale disasters. Credit for this goes to the limited number of scholars and organizations who have attempted to understand the significance of disasters from an insider's point of view (LA RED, 2002; IFRC, 2006; Wisner & Gaillard, 2009; Marulanda et al., 2010, 2011; UNISDR, 2009, 2011; GNDR, 2013). Despite such recognition, the insider perspective remains largely excluded in disaster research and practice. For instance, recently, with the aim of analyzing extensive disaster risk at a global level, a team of researchers developed a new threshold to identify intensive from extensive disaster risks. The threshold used is "30 people dead, and (or) 600 houses destroyed", i.e. any disaster event that includes fewer than 30 people killed and (or) 600 houses destroyed is considered as a small-scale disaster with an extensive disaster risk (UNISDR, 2009, 2011). Although this analysis generated fascinating results and strengthened recognition of small-scale disasters, it

reinstated the importance of an outsider's perspective over that of an insider's, and in doing so rejected the very reasoning that had first highlighted the importance of small scale disasters. This is well depicted in the newly defined threshold which glosses-over or neglects the reality on the ground. The new proposed threshold is based on a single indicator determined by outsiders who considers neither the true severity of the impact of disaster as experienced by the affected population nor incorporate the contextual diversity associated with different places and different situations.

Based on the defined threshold for a disaster event as described above, it is useful to consider a hypothetical situation involving 20 deaths and (or) where 200 houses are destroyed. This would be classified as falling within the category of extensive disaster risk. As previously noted, such a level of risk, is commonly associated with the exposure of a dispersed population to repeated or persistent hazard conditions of low or moderate intensity. The risk is often highly localized and can lead to debilitating cumulative disaster, i.e. those events associated with recurrent small-scale disasters. Potentially the example illustrates the result of recurrent small-scale disasters. But, this is a big assumption and is potentially, seriously misleading. Firstly, for a remote region as depicted in the study communities - sparsely populated scattered communities - the threshold is incredibly high and could only be met as a result of a colossal catastrophe. Secondly, the number of dead and scale of destruction alone do not reflect whether or not the disasters concerned were, or were not, recurrent events.

When categorized based on the threshold set by the UNISDR (2011) (i.e. any disaster event with fewer than 30 people killed and (or) 600 houses destroyed is a small-scale disaster with an extensive disaster risk or one involving recurrent events, and those with a greater impact are considered intensive disaster or related to large disasters) the disaster in question is automatically classified as involving extensive disaster risk, implying an association with recurrent disasters. But this may not be the case. It is equally possible that such an impact could result from an infrequent, one-off disaster. The impact of an infrequent or one-off events may be serious, but not chronic, and therefore does not exhibit the characteristics of extensive disaster risk. Such observations indicate that the use of scale as the single threshold criterion solely reflect an outsider's perception and disregard the

necessary context. Reliance on any one single criterion is inappropriate to either categorize or understand disasters. Moreover, the criterion as described above reflects only the outsider's point of view and ignore the insider's perspective, which might reasonably be expected to be of greater significance.

Proper recognition of such definitional and categorization issues is important as they directly influence understanding of disasters. Such issues influence practice in disaster response and recovery. In the modern world collective action in response to disasters is being promoted and implemented, premised on the basis that there is a solid foundation of disaster knowledge. This in turn assumes an understanding that integrates the complexities associated with geographic and cultural diversity and economic variability. This cannot easily be achieved using any one single criterion or narrow perspective. Obtaining such understanding necessarily must combine those other criteria that expresses insiders' concerns, in effect, it must include those factors which distinguish disasters in terms of how they impact on the affected population, irrespective of how these same factors resonate with outsiders.

Based on the long-term recovery experience of disaster affected populations as analysed in this study, "disaster frequency" is a key criterion for understanding the significance of a disaster event. Disaster frequency reflects an insider's perspective and experience of disaster and its significance to them. The thesis findings demonstrate that disaster frequency is directly related to the severity of the long-term impact of a disaster on the population affected. Secondly, the communities affected by recurrent disasters experience a completely different recovery scenario from those impacted by one-off or infrequent disasters – whether large or small. One-off disaster events effectively occur only once (or rarely) and so only recur after an extensive time lag. Recurrent disasters occur frequently at short and at times regular intervals. In effect, recovery is frequently interrupted by further disasters which add complexities to the recovery process. 'Disaster frequency' fundamentally changes the long-term impact of a disaster, changes the household and community response and changes the recovery process (This is explained in greater detail in the following section on disaster recovery). A community's challenges and needs during recovery differ between large scale and small scale disasters. Disaster classification based on disaster frequency

would distinguish between the different recovery needs of the affected populations in different kinds of disaster, and would better inform and help shape the most appropriate interventions to support response and recovery.

Recent studies recognize that extensive disaster risk is more closely associated with inequality and poverty, than with earthquakes, fault lines and cyclone tracks (UNISDR, 2015). According to the UNISDR, hazard, exposure and vulnerability are simultaneously configured through underlying drivers of risk, such as badly planned and managed urban development, environmental degradation, poverty and inequality, vulnerable rural livelihoods and weak governance. The findings presented in this current thesis confirm and reinforce such understanding, and extend this thinking to better understand the post-disaster situation in the context of small, recurrent disasters.

The findings of this current thesis show that the occurrence and severity of small-scale recurrent disasters is closely linked to fundamental weaknesses in the societies concerned. In other words, small-scale recurrent disasters are the physical manifestation of prolonged and unaddressed everyday crisis of mal-development. Moreover, such disasters often are not premised on any “unusual conditions”. For example, in the case studies, recurrent small-scale disasters are not the result of unusual conditions hitting a vulnerable population. In fact, on no occasion was any external hazard involved, rather the disasters were the result of decades of soil erosion, a consequence of a lack of access to adequate land resources to support livelihoods and lack of other, alternative economic opportunities. These factors are rooted in the long history of underdevelopment in the region. The Monsoon rain isn’t unusual. Intense and prolonged rain is a regular characteristic of seasonal change. Erosion causes the formation of cracks and gullies. The regular Monsoon rains get into the cracks and gullies, destabilize the slopes and cause landslides. These issues are quite different in the case of infrequent disasters – whether large or small. These disasters include an external hazard such as extreme weather conditions, a disease outbreak, or an earthquake. In the case studies, even with the one-off flood, the communities were impacted not because they were living on flood prone river banks (indeed they were living on the banks of a river which rarely floods and which hadn’t flooded for the previous 4-5 decades). The flood occurred because the river changed direction in

response to a landslide in the upper catchment. The communities living on the unprotected river bank were vulnerable to floods, but would not have been flooded if the river hadn't changed direction. Such one-off events involve unique, or unusual conditions. Such circumstances are not found solely with respect to one-off small-scale disasters or even in the context of large-scale infrequent disasters. They may occur linked to an unusual condition, such as an extreme weather event.

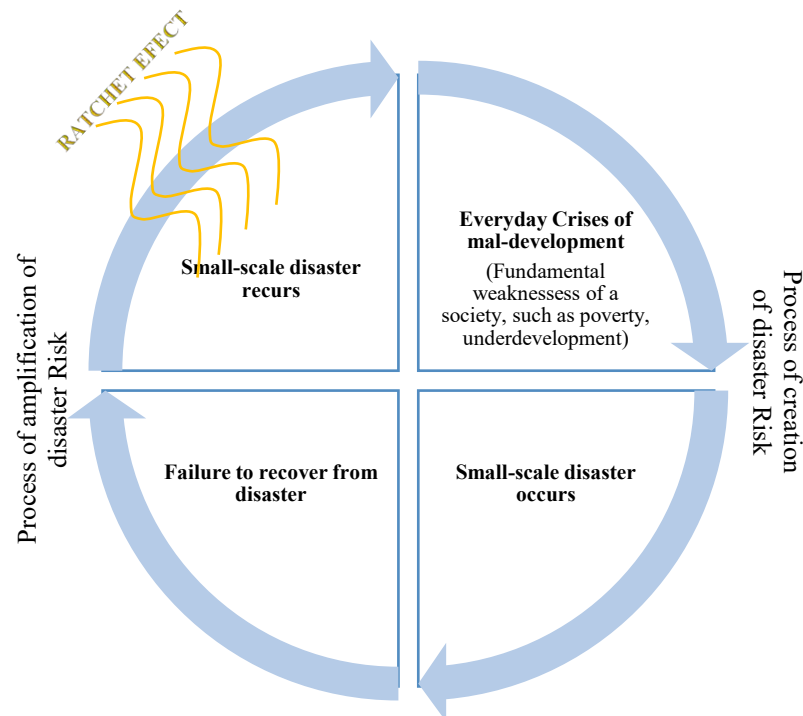
The literature on natural disasters has commonly perceived disasters as an extension of everyday life and has emphasized the need to understand the day-to-day interactions of people with their environment because it is in these interactions that threats are created (see, Hewitt & Burton, 1971, O'Keefe & Westgate, 1976; Maskrey, 1989; Susman et al., 1983; Wisner, 1993). The findings from this current thesis closely support such understanding. In the case studies examined, environmental degradation is the main reason underlying recurrent hazards and environmental degradation is clearly the outcome of the everyday conditions of poverty existing in these communities. The thesis findings go further. As discussed above, previous research emphasised the cause of disasters. It linked disaster occurrence and its severity with the everyday interactions of people with their environment. But, it provided limited detail on the significance of such interactions in the post-disaster scenario. This study has exposed the importance of conditions after a disaster and analysed the role of such interactions in the post-disaster period.

The thesis findings, as elaborated in previous chapters, show that the fundamental weaknesses of a society are not just the cause of both the occurrence and severity of disasters, but continue as a fundamental challenge for the affected population during the response and recovery period. For those impacted in the case study communities, the key challenges remain poverty, food scarcity, access to arable land, lack of economic opportunities, and weak local government structures that cannot effectively meet the community's basic needs.

For the disaster affected communities examined, the only difference they face in the post-disaster situation, compared to their pre-existing conditions, is that conditions have worsened, compounded by the additional burdens the disaster event has imposed. Although the recovery efforts made by the community and the

authorities concerned had some success in reducing the damage imposed by disasters, they completely failed to address the underlying everyday causes that had led to the initial disaster risk. The underlying risk factors were left untouched, unmodified by recovery efforts. This contributed significantly to the failure of the communities to recover in any meaningful terms. Failure to effectively address the underpinning, everyday crises and their drivers, increased the fundamental pre-existing weaknesses in these communities and contributed to the creation of greater risks, ultimately generating a further disaster, and so the sequence of disasters continues. When such situations persist and disasters recur again and again, the ratchet effect comes into play, compounding the population’s vulnerability, decreasing its capable to recover, and substantially increasing its vulnerability to future hazards. Recurrent small-scale disasters are therefore intrinsic to the everyday crises inherent in mal-development. In such contexts recovery can never be achieved as long as disasters are addressed as separate entities from existing everyday crises. This relationship between everyday crises of mal-development and small-scale recurrent disasters is summarized and illustrated in Figure 15.

Figure 15: The relationship between everyday crises of mal-development and small-scale recurrent disasters



Source: Author

Understanding how small-scale recurrent disasters grow out of the conditions of everyday concerns not only reaffirms and demonstrates how disaster risks are socially constructed, but also is indicative of practical actions to reduce these risks. There is a need for holistic interventions though relevant and effective policies and actions that address the everyday concerns of communities in conjunction with established disaster management activities. This highlights the key reasoning behind the complete failure of external intervention as demonstrated in the case study communities. Despite the increasing resources spent by authorities in providing response and recovery support, affected communities are increasingly becoming more vulnerable. The reasons are many. The level of support is frequently inadequate and support focused solely on relief but with no recovery component is unsustainable. Slow and bureaucratic processes, weak local government, and physical constraints compound inefficiency in distribution and supply. The main reason, however, is the inappropriateness of the recovery approaches used by government authorities. These solely concentrate on controlling landslides, and fail to address any of the underlying causes of land degradation. The landslides are a physical manifestation of underlying problems in the communities. When these problems aren't addressed, they are amplified. This is clearly seen from the increasing risk of disaster faced by the populations concerned. The common approach implemented reflects the view of disasters as external threats and shocks. This is clearly seen in the five flagship priorities³⁵ developed by the Nepal Risk Reduction Consortium (NRRC)³⁶ that primarily focus on preparing communities and authorities to face an external event. Such an approach is not unique to Nepal, and indeed is the established approach in most parts of the world. In fact, response and recovery policies and approaches in Nepal, and many other countries, are strongly shaped by international frameworks of action for disaster risk reduction, specifically the Hyogo Framework of Action (HFA) 2005-2015, and its recent successor the Sendai Framework of Disaster Risk Reduction (SFDRR) 2015-2030. These frameworks were adopted by 168 UN member states to substantially reduce the disaster risk to the lives and social,

³⁵ Five flagship priorities: school and hospital safety; (ii) emergency preparedness and response; (iii) flood risk management in the Kosi river basin; (iv) community based disaster risk reduction; and (v) policy and institutional support for disaster risk management (DRM)

³⁶ NRRC is a unique arrangement that unites humanitarian, development and financial partners with the Government of Nepal to reduce Nepal's vulnerability to natural disasters.

economic and environmental assets of communities and societies. Although HFA includes the need to address the underlying risk drivers as one of its main objectives, it lacks detailed guidelines to do so. In effect, disaster risk reduction operates essentially through an acceptance of disasters as unusual extremes to be managed (see, UNISDR, 2015). This approach includes appropriate and effective actions to strengthen disaster preparedness and early warning, as well as to reduce disaster impact through the appropriate response. More importantly, and unfortunately, the recent framework SFDRR has completely removed “managing the underlying risks” from its main objectives and integrated it with other approaches that take disasters as unusual extremes to be managed. The reason, for this shift is most probably because responding to a disaster as a separate event is less complex than responding to a disaster in conjunction with everyday crises. Responding to disasters with an approach that focuses on unusual, extreme situations, may work well in terms of managing disasters, but not in terms of reducing disaster risks (or addressing everyday crises). In particular, such an approach is of limited use in the case of small-scale recurrent disasters where there is no involvement of any unusual (rare) external hazard.

Everyday crises of mal-development are manifest in poor and difficult living conditions. The survival challenges caused by poverty and marginalization are the underlying causes of disasters. The intensification of crises of mal-development over time can lead to extreme conditions, expressed in recurrent disasters. Such crises gradually increase people’s vulnerability. When vulnerable populations are exposed to that risk, disasters occur. These disasters may be one-off events or recurrent, for example an earthquake can cause a one-off tsunami, but may also destabilize hill slopes and cause recurrent landslides. Whether a one-off disaster or a recurrent disaster, the significance of the losses sustained is contextual and conditioned in turn by the different perceptions of insiders and outsiders. Based on the findings presented, disaster frequency stands out as of paramount importance to understanding and to the subsequent community recovery process. Taking this into consideration not only helps explain the severity of disaster impact on an affected community and avoids any misinterpretation regarding the significance of a disaster, but also helps identify community recovery needs and challenges in the context of recurrent events. This does not, however, diminish the importance of

integrating the facts associated with the magnitude of disaster impacts, particularly in the context of designing relief and recovery interventions. External perspectives, especially on the magnitude of impact as determined using a single criterion, may be dangerous, yet this remains an important criterion because it helps in the designation of responsibilities to different levels of authority, helps in the estimation of need, and how best to channel relief, rescue, and recovery support.

8.2 Disaster recovery in the context of small-scale disasters

Recovery, in this thesis, is understood not as a process to return to some original status or to return to the status quo (which embeds and fosters risk) but as a moving forward, involving addressing and reducing the vulnerability that led to the initial disaster. Accordingly, resilience is understood as the ability of the affected population and communities to cope with disasters.

The scale of disaster significantly affects the recovery process. The key element is the scale of “external response” or level of interest and involvement of external authorities in the recovery process. The literature repeatedly suggests that the localised impact of small disasters attracts little external attention or support (see, ECHO, 2013; IFRC, 2006; Wisner & Gaillard; Marulanda et al., 2010, 2011). Such external interventions are described as mainly limited to the actions of local authorities and neighbouring communities. The presence of higher level national authorities is rare, and the direct involvement of international agencies is minimal. This situation has been the subject of criticism by many scholars (IFRC, 2006; Wisner & Gaillard, 2009; Marulanda et al., 2010, 2011) and been described by some as “the neglect “of small-scale disasters (IFRC, 2006; Wisner & Gaillard, 2009). Reasons identified to justify such neglect include the scale of these disasters and their less sensational nature that fail to create political interest and media attention, and the limited understanding (or misunderstanding) of small disasters in terms of their impact on human well-being. The findings presented in this current thesis provide some partial, if not unanimous support for this stance. In particular, that small disasters can be labelled as ‘neglected’ is demonstrated as an oversimplification of a complex issue, and a sweeping generalisation that may well limit understanding of the particular problems small-scale disasters impose. This thesis offers a deeper, more insightful perspective that identifies some of the

key factors that influence and shape external aid and support in terms both of the short and long-term community recovery process.

The external attention and support generated and provided in emergency situations needs to be distinguished from that provided to help longer term disaster recovery. External attention and support in the emergency situation that exists in the immediate aftermath of small scale disasters is very different from that provided in the aftermath of large scale disasters. Small scale disasters generate an impact that is localised and affects relatively few people. Such situations rarely require the mass assistance necessary in mega disasters. Looking back at the case study communities, and the physical, socio-economic and political constraints they face, external attention and support *was* provided. In relative terms, the support was insignificant compared to that provided in response to larger events, but such large scale assistance was not required (at least in the initial emergency period). There is an intuitive logic that the external support during an emergency phase should be proportional to the scale of the disaster concerned and the associate level of need. The level of attention and support demonstrated in the study communities in the aftermath of small-scale disasters was measured and reasonable, and cannot and should not, be labelled as neglect.

In terms of longer-term recovery from small scale disasters, the external support from government and other authorities is largely inadequate. In particular, support at a household level is completely lacking. Limited external attention and support for longer term recovery, however, results in a much greater dependence on available family and community resources (financial, human and material) for reconstruction and improvement for substantial periods of the recovery process. In this context, as discussed in some detail in the previous chapter (Chapter Seven) social structures, systems and relationships have an added significance in the provision and distribution of resources and provision of support. In the case studies, the social system, including traditional systems of landholding, land sharing, and property leasehold, as well socio-cultural norms (such as strong kinship ties and mutual help), and the social structure that existed prior to the disaster, were generally re-invigorated in the aftermath of disaster and played an essential role in recovery.

As demonstrated and supported by the empirical findings, in small scale disasters the capacity for self-organization and planning at a community level dominates the recovery process. In both the emergency situations and in the longer-term it is the traditional, established set of social relationships and community structures that guide the community, support those most directly impacted, and facilitate and support the collection, management and distribution of resources for recovery and reconstruction. This is very different from the practices observed in large scale disasters. In such cases, communities are seldom the sole planners and decision makers in the recovery process, where plans and decisions are more commonly assumed by multiple actors and the community itself may play a relatively minor role (see, Oliver Smith, 1986; Ingram et al., 2006; Lizarralde et al., 2009; Jha et al., 2010; Practical Action & IFRC, 2010; Amaratunga & Haigh, 2011). Economically weak communities that lack the necessary resources for recovery (as in the study communities) may strive to access external resources to secure their recovery. Such efforts are not a major theme in the disaster literature although a few researchers such as Quarantelli (1978) and Nigg (1995) discuss related issues. This neglect may be a consequence of the fact that previous studies rarely observed those in the context of large disasters, or because they are overshadowed by the influence of external aid, or simply, because the greatest attention was paid to external intervention rather than community recovery.

It is important to recognise that whereas in a large scale disaster the country impacted, together with global agencies such as the UN, commonly establish a specific large scale recovery project (plan) and within this current framework funds, and acquires and distributes material aid. In such circumstances, the recovery process is less dependent on any pre-existing, established relief and recovery system, than on a specially tailored recovery system or process designed to meet specific emergency needs. This is not the case in response to small scale disasters. While in the emergency phase the level of external attention and support for small scale disasters generally mirrors the scale of the emergency, and level of need, in the longer-term, the recovery process, and the level and nature of support provided by national authorities is very much contingent on pre-existing relief and recovery (and development) systems and processes. These include the strength and clarity of established recovery policies, the availability and accessibility of

resources, and the efficiency of management and distribution of resources. Lack of strong, effective, internal (domestic) policies can result in poor/inadequate external support for community recovery. These factors are particularly important and pronounced in the case of small disasters. In the case studies, the lack of clear, effective policies for long-term recovery mean that there is no support available for households to assist in re-housing, restoration of jobs and businesses, or resettlement. Establishing a separate recovery programme for each individual (often recurrent) small scale disasters is unrealistic. This leaves a heavy responsibility on the capacity of the country concerned and the recovery policies it has in place. This is a particular challenge for countries that may already lack effective national systems of governance, and lack the necessary resources or management skills.

Small-scale disasters impact on a population in a similar manner to major disasters, in terms of loss of life, injury, loss of property and jobs (as described in Chapter 6). But as described in previous chapters, in the case of small-scale disasters, external support for long-term recovery is very much dependent on the institutional and policy arrangements of the country concerned. Lack of effective domestic systems and policies may mean that little external assistance is provided. Few countries in the developing world are able to develop, provide, or maintain the processes necessary to facilitate the supply of aid for communities affected by small scale disasters. Even where appropriate policies are in place, these are rarely sufficient to meet the needs of the most severely marginalized within individual communities, or within the country as a whole. The result for such marginalized groups is that their need for long-term recovery commonly remains largely unsupported, forcing them back on their own (and their local community's) resources for recovery.

Housing is a case in point. Support for rebuilding private homes destroyed by disaster is typically a key component of any external intervention in the aftermath of large scale disasters. There is an extensive literature on this topic. Theoretical and empirical research has allowed many scholars and practitioners to come up with a range of approaches for agencies to support the re-housing of disaster affected populations (see, Oliver-Smith, 1986; Ingram et al., 2006; Lizarralde et al., 2009; Jha et al., 2010; Practical Action & IFRC, 2010; Amaratunga & Haigh,

2011). All suggested approaches include a substantial degree of support from and involvement of external agencies. While the efficacy of many externally funded re-housing projects may be questioned (see, for example, Jha et al., 2010; Practical Action & IFRC, 2010) approaches, backed by external aid, commonly do not exist with respect to small scale disasters. The study communities provide no examples of externally backed housing projects and all external support involved was limited to emergency relief. All housing reconstruction was owner-driven and owner (or community) financed.

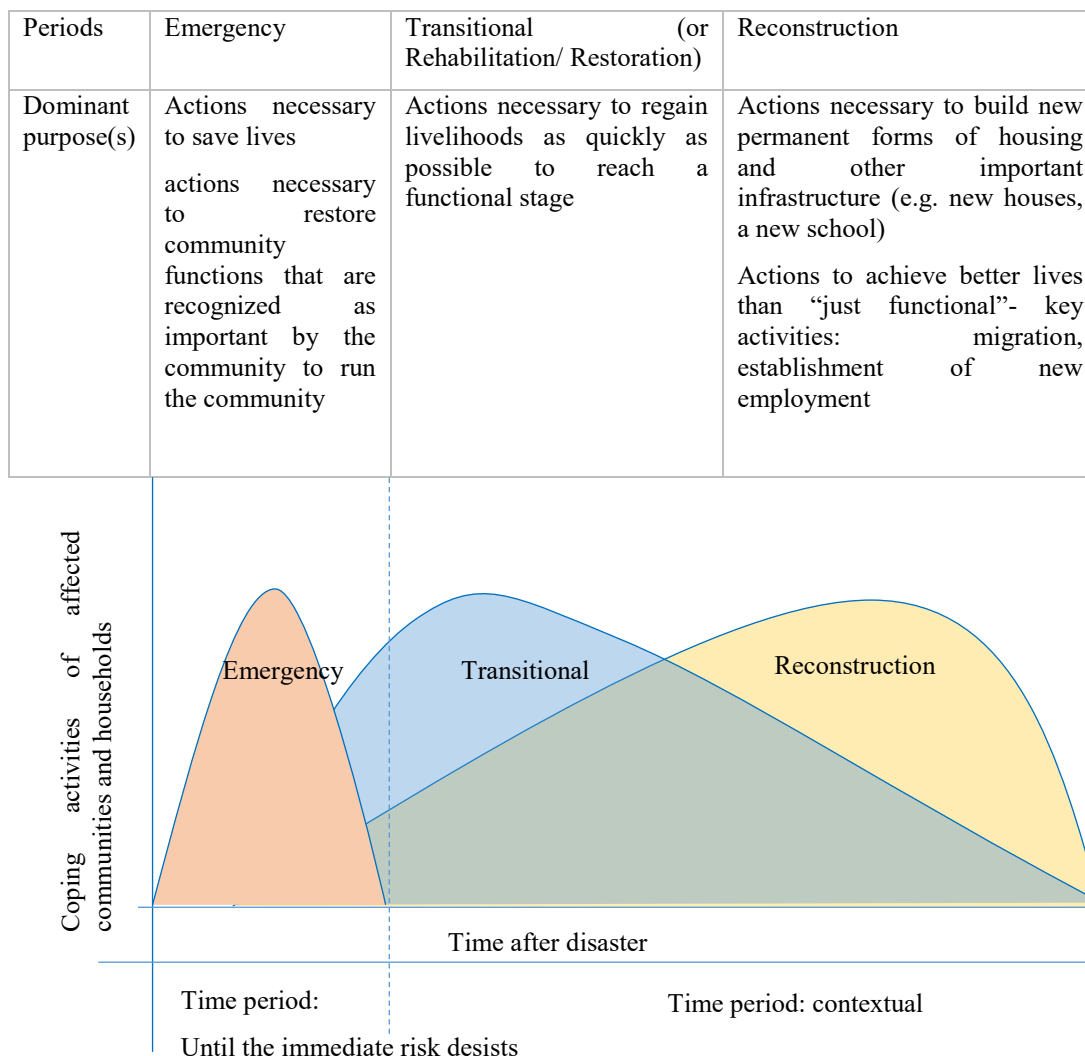
In effect, although scale is a determining factor in whether a country develops an appropriate, coherent recovery plan, external support for long term recovery from small scale disasters is less dependent on the scale of these disasters, than on a country's underlying, pre-established policies, structures and capabilities for recovery. In such circumstances, until and unless the countries concerned recognise the risks inherent to natural hazards and the need to have effective recovery mechanisms in place to facilitate external support and assistance, the potential to improve the level of external support to secure long-term small scale disaster recovery is likely to remain severely constrained. National level pre-emptive actions could be a major asset in the context of large disasters, however in the longer term the major challenge remain more substantial efforts to address the underlying root causes of disasters.

Yet, while scale undoubtedly influences the processes of community recovery (as discussed) scale is not the major factor shaping that recovery. Scale, in particular, influences aspects of recovery that require or would be facilitated by external attention and support. But the recovery processes in the aftermath of small disasters varies – such disasters are not all alike. All the case study communities were impacted by small scale disasters. All were subject to similar degrees of remoteness, shared similar socio-economic conditions, including poverty, and geographical and resource constraints, yet the recovery process experienced by all these communities were dissimilar. As described in the previous chapters, the only reasonable explanation for such differences is the frequency of the disaster involved - communities hit by *one-off* small scale disasters undergo recovery differently from those hit by *recurrent* small scale events.

8.2.1 Disaster recovery in the aftermath of one-off small-scale disasters

The recovery process in the context of one-off small scale disasters exhibits several similarities to that identified in established recovery models, particularly those of Kates and Pijawka (1977) and Cuny (1983). In particular, the recovery process identified in the case studies closely resembles the sequence of recovery identified in these models (Figure 16) – emergency, transitional (or rehabilitation or restoration) and reconstruction. These phases, as illustrated, match the description of local residents in telling their stories. The characteristics associated with each of these phases also have close similarities to those described in the established models. As in the models, a range of activities take place in each phase. A precise, clear cut sequence of periods or phases does not exist in practice, rather there is an iterative process with each sequential period characterised by the dominant activities within each period, but other complementary activities remain ongoing.

Figure 16: The Recovery Process in the aftermath of one-off small-scale disasters



Source: Author

While there are parallels between the characteristics of the recovery process following small and large-scale disasters as described above, there are also interesting, and important differences. A major difference arises as a direct consequence of the relatively slight external attention/intervention that occurs in the aftermath of small scale disasters. This shifts (or places) the major responsibility for recovery onto the shoulders of the affected population itself. A distinguishing feature, therefore, is the extensive and intensive role of affected households and communities, throughout every phase in the recovery process, in accessing resources for recovery. One result for this is that the emergency period in the aftermath of small disasters in remote communities is dominated not just by the usual search and rescue and relief activities, but to an equal, or even greater extent, by the community’s own self-organization and planning activities (see,

Figure 16). These activities start immediately after a disaster occurs and in tandem with search and rescue activities. Existing recovery models based on the experience of large disasters don't identify this as a dominant activity during the emergency period. Indeed these models identify actions to save lives (including search and rescue, and relief) as the only dominant activity during this initial period. Another study on disaster recovery in the context of small disaster in a remote area in Nepal demonstrate the same findings as found in the case studies examined in this current thesis (Belperron & Shrestha, 2014).

Lack of external support, particularly lack of external support for individual households, means that pre-existing social relationships, normative social systems and resources play a crucial and dominant role throughout the recovery process. A limited number of earlier studies have identified the pre-existing social structure and fabric of the society impacted as important in determining how recovery proceeds after disaster (Bolin & Patricia, 1978; Quarantelli, 1978; Nigg, 1995). These scholars highlight the influence of the power structure, inter-group dynamics and relationships and their political influence on long-term community recovery. However, all these issues have only been discussed in the context of large scale disasters. Importantly, discussion has been limited to decision-making in reconstruction – how pre-existing power structures, inter-group dynamics and relationships influence how reconstruction decisions are made, who is involved, and what consequences these conditions have on different groups within disaster stricken communities, and which (or who) benefits or does not benefit from these decisions. Such factors have engendered limited attention, most probably because of the disproportionate emphasis in research and practice on the role of external interventions, rather than on what happens to the individual households and communities. This current thesis on long term recovery in the context of small-scale disaster has provided a detailed picture that links the disaster recovery process in impacted communities to its pre-disaster normative structure and systems. As clearly demonstrated, the normative system and structure of affected communities and pre-existing socio-economic conditions hold the key to either recovery, or failure to recover, because they shape access to the resources for recovery. The need to access resources in the aftermath of a disaster reinforces pre-existing power structures. This may well (and most frequently does) prove

harmful to the poorest and the powerless in a community, pushing them into conditions of greater vulnerability.

In the established, standardized classification proposed by Cuny (1983), the reconstruction phase is described as a mere “physical reordering of the community and the physical environment” (p. 40). When examined from the perspective of the affected population, however, this presents an incomplete picture. The model by Kates and Pijawka (1977) extends understanding by the inclusion, within the established three phase model, of an additional phase, Reconstruction II. This additional phase relates to “actions for betterment, future growth and development”. Although this model is largely aligned with situations associated with external intervention and identifies activities in each phase in terms of the activities implemented by external agencies, these activities match or are similar to those implemented in the reconstruction phase by the population directly affected and where external intervention is absent. This last (reconstruction) phase is not only about a transition from a functional stage towards a “concrete” phase (i.e. upgrading from temporary shelters to permanent housing, rebuilding and infrastructure development) but also about a transition towards the betterment of the community and its future growth. In the case studies examined, this includes the out-migration of affected households in search of better opportunities and a better future. In other words, the actions are future oriented in line with what Kates and Pijawka describe in their two reconstruction phases.

The time involved in each phase is another consideration. Based on the recovery process observed in large disasters, Kates and Pijawka set (relative) time frames for each phase. As noted previously, Kates and Pijawka emphasize the actions of external actors in the aftermath of large disasters. On the other hand, Cuny’s model which is based on the recovery activities of the affected communities themselves (although in the context of large disasters) identifies different time scales for recovery. Cuny acknowledges the difficulty of setting firm time frames for each phase (Cuny, 1983). The findings presented in this current thesis closely support Cuny’s perspective on this and suggest that the time limits involved in each period will vary from one disaster to another, from one community to another, and from one household to another. Yet, at least to some extent, it is feasible to set time limits, particularly for the emergency phase. For example, in

the case study communities, the threat of disaster commonly persists, even after a specific disaster event, because the Monsoon rains continue and the threat remains. The risk of landslides and floods persists and people cannot return to their shelters, homes or work even if physically able to do so. As a result, they are not able to turn to recovery activities as quickly as one might expect, but remain caught up in what amounts to an extended emergency situation. Similar results were found in examination of recovery in another remote area in Nepal (Belperron & Shrestha, 2014). Equally, the same occurred with respect to the 2015 Nepal earthquake (OCHA, 2015). Despite most people's ability and desire to return immediately to normal life, repeated aftershocks thwarted their efforts to initiate or implement recovery activities. (The experience of the Christchurch earthquake of 2011, when severe aftershocks continued for over a year, exhibited similar conditions). In Nepal, people were forced to live in emergency conditions until the aftershocks subsided (OCHA, 2015). Where the threat of disaster persists, recovery activities often cannot take place to the extent and as quickly as desired, the emergency phase is extended (see, Figure 16). Compared to the emergency phase, the other two phases (the transitional and reconstruction phases) are difficult to distinguish from one another, and setting a time limit for either of these phases is at best problematic, even in similar contexts and involving similar types of disasters (see, Figure 16).

8.2.2 Disaster recovery in the aftermath of recurrent small-scale disasters

There is a common belief that the process of community recovery is unobstructed. This is well depicted in the established recovery models and associated discourse (Kates & Pijawka, 1977; Cuny, 1983). Descriptions of community recovery are primarily as a single, uni-directional process comprising efforts by the community to recover from the losses caused by a disaster and assume the disaster is a single event, and that there is no repetition of the disaster or any intervening crisis. Such understanding is conceptually useful in so far as it presents a simple pattern of community recovery, but it largely underestimates the complexities where a disaster does not occur in isolation and is often followed by, or associated with, other forms of crises. This is highlighted in the context of repetitive events. Such events often occur almost regularly, and this is particularly the case in disasters

which involve climate related events (such as Monsoon generated landslides, as occur in the study communities). Community disaster recovery in such a context is interrupted frequently (and often on a regular basis) by recurrent disasters. In such situations, the recovery process involves a complex and multi-directional processes (see, Figure 17).

The concept of the ratchet effect introduced by Chambers (1983), and used widely in disaster discourse (see, for example, Rahmato, 1991; Blaikie, 1994; Twigg, 2001; Pelling, 2003) links a community's failure to recover from its most recent disaster with an increasing vulnerability to the next disaster and connects this to a never ending process of increased marginalization among poor, vulnerable groups. The ratchet effect is a particularly useful concept in the context of recurrent events because of the long temporal frame involved and because the ratchet effect is itself framed in the context of a series of disasters. In such a context, the affected community is hit not just by one isolated event but by a series of recurrent events, as a result, a community's recovery in the aftermath of disaster is repeatedly interrupted. The affected population has limited time to recover before the next disaster strikes. In the case studies explored in this thesis and disasters triggered by the Monsoon, the total recovery time available is usually only 8-9 months. This imposes added hardships and constraints on the population concerned. When that population fails to recover within a given time, it becomes even more vulnerable to the next disaster. This condition is not unusual in the small scale disasters examined and is particularly acute in the case of poor and marginalized populations that have limited resources to aid their own recovery. Overtime the situation worsens. As shown in Figure 17, the vulnerability of an affected population after a second disaster is considerably greater than after the initial disaster, despite an observable positive recovery in the wake of the first event. Over a series of disasters, vulnerability increases, the ratchet effect intensifies, and the affected population experiences increased difficulty in recovering after subsequent disasters, and is pushed into greater vulnerability (Figure 17).

While the ratchet effect is useful in helping understand the overall recovery process in the context of recurrent adverse events, it risks oversimplifying the complex dynamics involved. Chambers (1983), Rahmato (1991) and others offer a simple equation of how failure to recover from a disaster increases vulnerability to

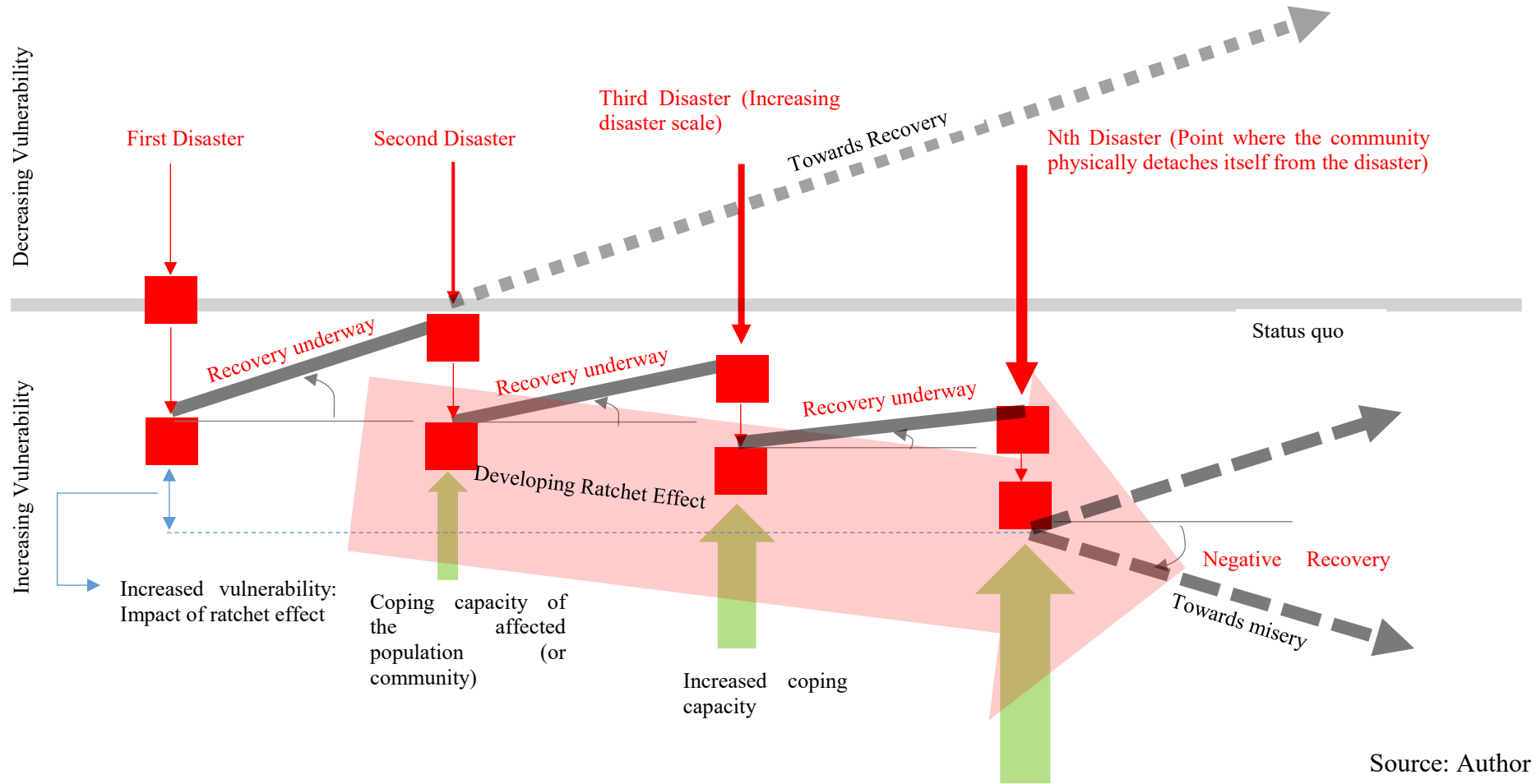
the next disaster, leading to community's decreased ability to recover. As described, however, the concept seems to assume that community members, the key players in the recovery process, are a stable entity with a fixed degree of access to resources. It fails to accept or express the fact that a community is a dynamic entity and its degree of access to resources changes, and with it its ability to cope with disasters, and that this ability changes over time. While on the one hand repetitive events rupture community resources, on the other, the affected communities increasingly learn to address such events. As community capacities accumulate, communities grow stronger – this represents a sub-culture in the making. This is clearly evident in the recovery actions of the case study communities. As shown in Figure 18, a community's coping capacity increases with every disaster, and this provides a protective shield against future disasters, reducing the impact of disaster on the population concerned. With every disaster, this shield gets stronger, and so the impact of the next disaster is reduced.

Regardless of the interplay between a community's coping capacity and the repeated impacts of repetitive events, the conceptualization of the ratchet effect still holds true. A community's vulnerability continues to increase despite a parallel increase in its ability to cope (see later in this Chapter). As a result, the community is continually pushed towards an increasingly miserable and perilous state. What follows? Will the community perish and disappear? The conceptualization of the ratchet effect offers no clear resolution as it again rests on the assumption that the affected community will do nothing and remain forever trapped in worsening conditions. This study offers a few insights on this issue. Whether or not the community is able to pull itself out of the trap described depends on its ability to cope. Communities under stress never stop trying to cope, and over time their coping strategies themselves change.

When the situation a community faces worsens to a point when it is deemed by the community as no longer tolerable (the Nth disaster point in Figure 17), the affected population may attempt to 'detach' itself (or dislocate) itself from the conditions they face – out-migration is identified in the study communities as a common a response. In the case studies presented, out-migration is primarily driven by environmental conditions, but is intricately bound to economic conditions and needs. Some communities disintegrate and the affected individuals

disperse, adopting a variety of survival paths. In such cases, some communities fail to cope and are plunged into a state of further risk, other populations collaborate and enhance their capacity to survive. The fate of such communities largely depends on the new environment to which they are exposed, including the constraints and opportunities and the extent and nature of the vulnerabilities and capacities community members achieve as part of their recovery process. Where the state is incapable of providing appropriate opportunities for these migrants then they often make use of existing “loop holes” in the formal system – as in the case studies, a weak legal system concerning forest land management – this is exploited by the migrants to squat in forest areas while they search to establish new lives, although such activities may create new hazards and risks.

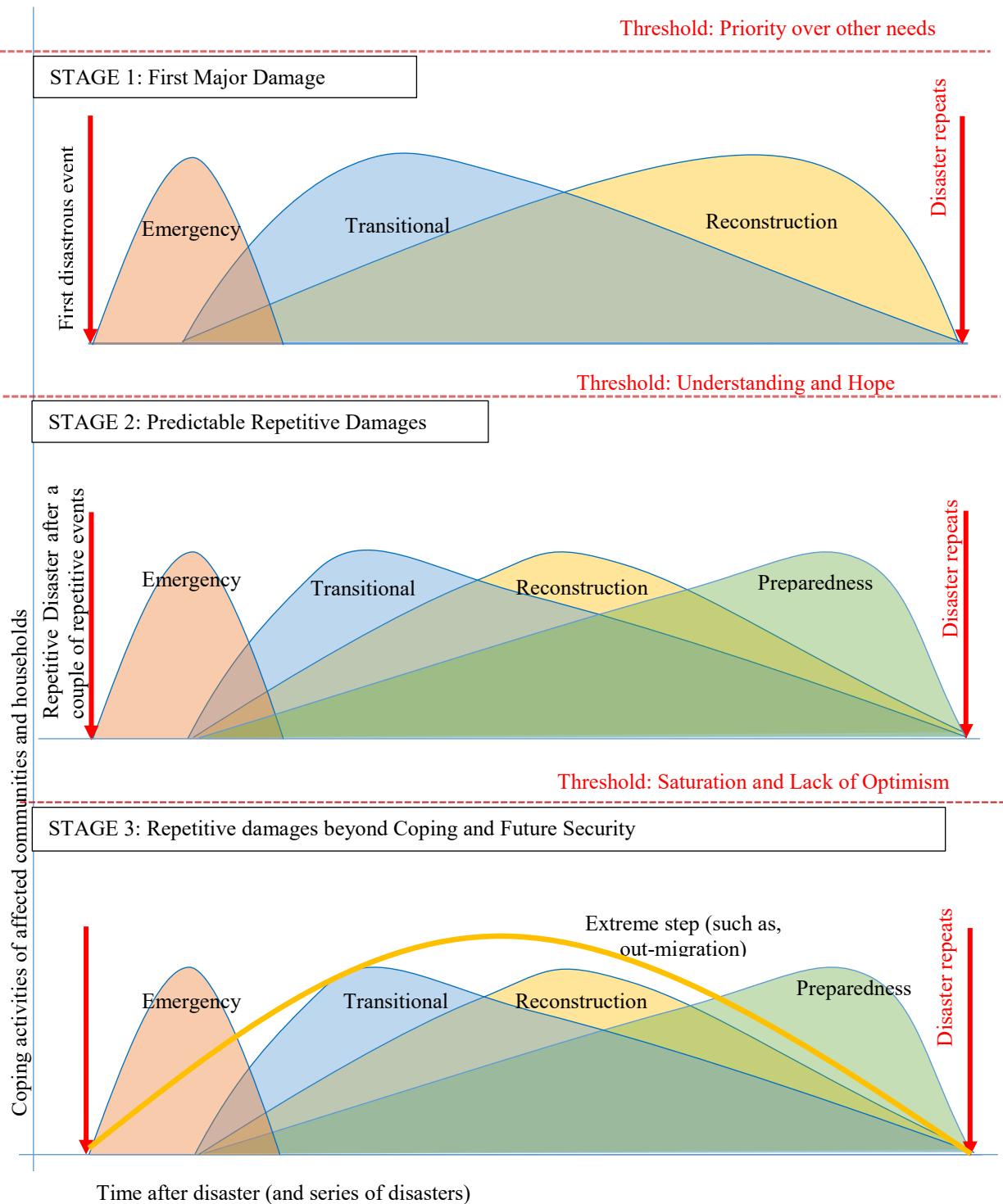
Figure 17: Recovery context in the case of recurrent small-scale disasters



Understanding of the disaster recovery process, as depicted in the established recovery models and as evident in the associated discussion, presents community recovery in a context that persists and extends throughout the recovery process. This is a possible scenario in a relatively stable physical environment, where the community is assumed to be hit by only one disaster, and no subsequent crises. However, in a rapidly changing dynamic context, as occurs in the case of repetitive adverse events, and where the affected communities are repeatedly subject to increasing risk, the scenario described is not only inappropriate, but wrong. The recovery process experienced by a population in the aftermath of an initial disaster differs significantly from that faced by the same population faced by recurrent disasters associated with the same hazard on repeated occasions. In such circumstances, the recovery process differs with each subsequent disaster. The recovery process in the context of recurrent events changes over time. In such a context three specific stages can be observed (Figure 18). Defining the precise threshold between each of these stages is unrealistic because they are context dependent and closely linked to pre-existing levels of vulnerability, the scale and frequency of the repetitive events, and a community's coping capacity and resilience.

Despite the constraints described, the stages experienced over time by households and communities afflicted by repetitive disasters can be identified using threshold levels identified by people's changing priorities, capacities and aspirations in the face of growing risk. The three thresholds can be best characterized as: *Priority over other needs*, *Understanding and hope*, and, *Saturation and Lack of Optimism*. *Priority over other needs* refers to when the disaster is the top priority facing the affected community or household. Similarly, *Understanding and hope*, is when the affected population, after being subject to the impact of a disaster for some time develops an understanding of the disaster and hopes that it can be stopped or controlled. *Saturation and Lack of Optimism* refers to that point when an affected population believes it has reached the limits of its ability to cope in its existing environment, and (or) has lost hope for a future in that environment. Using these thresholds and stages, it is possible to discuss how the recovery process of a population changes against the backdrop of repeated recurrent disasters.

Figure 18: Recovery processes over time in the context of recurrent events



Source: Author

Stage 1: First Major Damage

Repetitive hazard events as described in this thesis usually exhibit visible symptoms or warning signs before disaster strikes. In the case study communities, landslips commonly present a warning with cracks on the land, and little slips and scarps on the hill sides; these symptoms could differ in other contexts. In the communities examined, the populations, although recognising these signs, initially largely do nothing significant in response. This is particularly so in poor communities where the hazards are embedded in daily life – this finding is in line with those identified in previous works by Bankoff (2003). Harsh living conditions (and hazards) constitute a major part of normalcy. Trapped in these conditions, the symptoms of emerging disasters (although recognised) attract little attention and generate little response. Any response/recovery actions take place solely at a household level and to some extent at least, these households often find it hard to differentiate any particular recovery action from any of the other social and economic priorities and choices they make as part of everyday life.

The recovery process becomes visibly distinct from normal every day activities only when the concerned population cross the threshold *Priority over other needs*, i.e. when the impact of a disaster grows to the extent that it is considered “significant” by the community (or households) concerned, and recovery actions become prioritized over other needs – this is the point of entry Stage 1 (First Major Damage). The threshold is strongly related to the everyday conditions of the communities concerned and it is the conditions (and extremes) of normal hardships that determine this threshold. In poor and marginalized communities, where everyday life is already full of hardship, the response to disastrous events is prioritized only when it takes the form of a severe crisis. This is clearly evident in the study communities. Despite awareness of the disaster risk, the households and communities concerned only start to respond when they start to fear for their survival. This may well differ in more comfortable, affluent communities, where even a minor crisis, or symptoms of a disaster may evoke attention and response.

As shown in Figure 18, the populations in the case studies make significant efforts to recover from disaster losses, but because the same disaster is, initially at least, not expected to recur they often neglect to invest in actions that might reduce potential losses from any future disaster.

The recovery process followed by the affected populations in the case study communities at this stage in the recovery process (and in the context of recurrent disasters) is comparable to

that discussed in the literature with respect to large one-off events (as described in the previous section).

Stage 2: Predictable Repetitive Damage

This stage is when repetitive events become recognised by a community as a frequent or regular phenomenon to the extent that the next disaster and its probable impact is largely predictable. Stage 1 moves to stage 2 (i.e. Predictable Repetitive Damages) when the second threshold, *Understanding and Hope*, is crossed. This threshold comes from a better understanding of the nature of the disaster and its impact, yet the affected population remains hopeful that it may be thwarted or controlled. Such knowledge and aspirations encourage the population to take positive action to reduce potential losses (Figure 18). As described previously, the recovery process beyond this threshold is dominated by actions focused on preparedness and mitigation.

During this stage, the recovery process followed by the population differs from that of communities in the context of large disasters. Unlike recovery in stage 1, recovery in stage 2 comprises four distinct periods: emergency, transitional (restoration or rehabilitation), reconstruction, and preparedness and mitigation. The last phase is an addition to that in the established models and dominated by actions aimed to reduce loss in the face of any further potential disasters.

Although in practice the actions associated with preparedness and mitigation take place throughout the recovery process they reach a peak when the likely time of the next disaster draws close. At this point, the remaining initial phases: Emergency, Transition and Reconstruction share more commonalities than differences with the three recovery phases identified in stage 1. Compared to stage 1, the emergency phase is less dramatic than before because the disaster is anticipated. As a result, people take precautions to keep themselves and their belongings safe when disaster strikes, although inevitably, immovable property remains vulnerable and subject to damage because appropriate mitigation measures are difficult to secure. Another important difference is with regard to the reconstruction of private housing. Here, actions are proactive – people whose homes are exposed to hazards often don't wait for them to be damaged or destroyed, but dismantle and reconstruct their homes before disaster hits. As a result, a major amount of reconstruction of private houses takes place before disaster strikes. People also tend to rebuild and relocate their homes further

away from the original hazardous location. Such relocation is uncommon in the earlier stage (i.e. *First Major Damage*) where people often rebuilt in the same place as before.

Stage 3: The Disaster in Perpetuity? Repetitive Damage beyond Coping and Future Security

The third threshold, *Saturation and Lack of Optimism*, divides stage 3 (Repetitious Damage beyond Coping and Future Security) with the previous stage (*Predictable Repetitious Damage*). This 3rd and final stage refers to when the affected population has been exposed to the impact of disaster as a result of the same hazardous event for a longer period of time and has reached the point where it either can or cannot cope, and (or) realizes that it can no longer secure better conditions than in its current environment. This is when the community starts to take radical action. The resultant out-migration described in the case study communities, is economic migration, but it is also forced migration, necessary to secure survival and to achieve security and avoidance of the never-ending impacts of recurrent disaster. However, by its very nature, the quality of life achieved by this type of out-migration is often compromised.

The recovery process experienced by the affected population at this 3rd stage, *Repetitious Damage beyond Coping and Future Security* is different from that in stages 1 and 2, because the key activities, or at least the key intent of the affected population, is now to avoid further loss and reach safety. Often the only option is out-migration. In such extreme circumstances it is in particular the young who move, leaving the older people, who are more often obliged to stay and surrender to events. Out-migration does occur earlier in the recovery process, but it is more often in this latter stage that out-migration becomes accepted as the most preferred (or indeed inevitable) option.

The findings from this thesis provide some useful insights that contribute towards a fuller understanding of resilience. Despite an extensive literature, understanding has remained confusing and problematic. As noted in earlier chapters, there is no common understanding of resilience. In fact, as discussed in Chapter 2, resilience has multiple origins and meanings and is used across many different disciplines in different ways. Resilience lacks specificity and even within disaster discourse there is no common understanding. This is clearly stated by Klein, Nicholls, and Thomalla (2003)

“After thirty years of academic analysis and debate, the definition of resilience has become so broad as to render it almost meaningless” (pp. 42).

With respect to poor and marginalized communities as examined in this current thesis – people living in poverty with low food security and difficult access to resources - many writers suggest that these people are, in practice, resilient (Burton et al., 1978; White & Kates, 1978; Wisner, 2003; Canon, 2007) because they have adapted their way of life to their harsh environmental and everyday social and economic conditions, and as a consequence have developed a high level of flexibility in response to the extreme situations disaster risks create. As a result, bouncing back is arguably easier. What is also believed to add flexibility is a lack of “sophistication”. More specifically, such communities are directly dependent on locally found natural resources for their way of life. For example, their homes are simply constructed and farming or fishing are central to their economic well-being. Referring to such characteristics Sudmeier-Rieux (2014) states: “In case of a hazard event, they [such communities] are usually the first to be affected and may actually be the first to “bounce back to their normal state” since their simply constructed homes are much easier to rebuild than more sophisticated ones, in addition to having experience and knowledge about recovery” (Sudmeier-Rieux, 2014, pp. 68).

Such understanding is open to debate. Whether a specific community can be termed resilient or not depends on what one understands by resilient, and who’s understanding is accepted. When resilience is defined narrowly as “returning to a normal state”, i.e. the ability of a community to withstand shock and adversity, whether related to environmental variability or social, economic, or political upheaval, and return to its original state (see, for example, Timmerman, 1981; Turner et al., 2003), then poor marginalized communities (such as the study communities) are indeed correctly described as resilient.

Other scholars and practitioners (such as, Ostrom, 1990; Carpenter, Walker, Anderies, & Abel, 2001) and the Resilience Alliance, define resilience in terms of a community’s stability, self-organizational ability, learning and adaptability in the face of extreme events. Viewed in such terms, the resilience of a community relates to the amount of disturbance a system can absorb and still remain in a stable state. Arguably, poor marginalized communities often are accustomed to survival in harsh conditions. Less (or no) external help in recovery, and with their own social structure and systems in place, facilitates recovery in times of crisis. Accepting this definition of sustainability, the living conditions of poor, marginalised communities require on-going learning and adapting to changing environmental and socio-

economic conditions to survive. In effect, it is argued, they are good at it. In this context, poor marginalized communities are again viewed by many commentators as highly resilient.

A third group of writers, such as (Manyena, 2006; Practical Action & IFRC, 2010; Manyena et al., 2011; Sudmeier-Rieux, 2014) conceptualize resilience in the context of vulnerability. They view resilience as the ability to ‘bounce forward’ i.e. to change in a positive manner when faced with adversity. These scholars view resilience not as the capacity to return to an original state or to return to the status quo, (which embeds fostering risk) but to move forward. This involves addressing and reducing the vulnerability that led to the initial disaster. If this understanding is accepted, then the poor, marginalised communities examined in this thesis are not resilient. Rather than recovering, they simply fight for basic survival. What the harsh environment, difficult living conditions, poverty and marginalisation produce in the face of recurrent disasters is an increased capacity to survive, but not to thrive.

Though both of the first two definitions of resilience discussed above are persuasive and widely used in research and practice, they are problematic. They tend to shift the focus from vulnerability, which is the underlying cause of disaster (and ultimately the key to disaster risk reduction). The third definition presented directly addresses vulnerability. It provides a very different understanding of ‘resilience’– in both general use and as used across different disciplines. Definition of resilience requires careful use to avoid confusion and misinterpretation.

There are other problems associated with any understanding of resilience. Coping is in general, understood as a tool to build resilience. This current thesis shows that coping may, however, be a distraction. Coping mechanisms d in response to disaster loss are not always positive. In particular, poor marginalized communities often have no choice other than to respond to loss by exploiting their environment. In the case study communities, deforestation, and over-cultivation on already eroded hills are explicit examples of what may result. It can be argued that such responses are positive in so far as they allow a population to bounce back, but at the same time this is at the price of the environment’s further degradation and an increasingly likelihood that the population will never secure their safety.

Equally out-migration, used by the study communities as their ultimate coping strategy in the face of disaster, may threaten the long-term survival of those members of a community left behind. It may also generate or accentuate environmental risks elsewhere. The out-migration of young people in particular threatens the survival of the communities they leave –

ultimately threatening community resilience. As noted above, the thesis also demonstrates that such out-migration often accentuates existing risks or even creates new risks elsewhere. In the case study communities out-migration from the Hills often creates squatter settlements in the forests and on flood prone river banks – ultimately resulting in more flood related disasters and other forms of severe environmental deterioration leading to still more disasters.

Resilience, whether understood as bouncing back, bouncing forward, or as a concept based on the attributes of a community's stability, self-organization and learning in the face of extreme events, requires that a community has integrity and cohesion. These attributes are all the more important in the case of poor marginalized communities with limited access to state resources and power networks. On the one hand, a community can be described as coping well by means of out-migration to escape potential disasters (although it could face another disaster or some other form of hardship in its new location). On the other hand, a community, by losing its young people, loses resilience. This poses a dilemma as to exactly who is resilience, and who is being referred to. The same issue arises when we discuss resilience in terms of the environment. With respect to poor marginalized communities in remote underdeveloped areas, coping often results in the greater exploitation of natural resources. Though, arguably these communities cope well and are resilient, from an environmental perspective this is not the case, as its actions harm and undermine the natural ecosystem and eventually the security of the community.

When resilience is used to describe “returning to a normal state,” many scholars have concluded that poor and marginalized households may be resilient, but remain simultaneously vulnerable and at risk (Lewis & Kelman, 2010; Levine et al., 2012). This is contrary to understanding resilience and vulnerability as at the opposite ends of the same spectrum (Cannon, 2007; Bahadur et al., 2010; Sudmeier-Rieux, 2014). These views and observations carry an important message. Prioritizing resilience does not automatically reduce vulnerability and does not necessarily ensure that a community is protected from the risk of disaster. This implies that poor marginalized communities, although they may be resilient and able to bounce back from disaster quickly and with little or no help, continue to be vulnerable and at risk until and unless the causes behind their vulnerability are addressed. The example of recurrent adverse events reinforces such understanding and provides a more nuanced understanding of the connection between vulnerability and resilience in the long-term. As shown in Figure 17, the vulnerability of affected communities increases in the wake of every disaster, demonstrating clearly the ratchet effect. But, simultaneously, the same process

supports an increase in a community's coping capacities. When resilience is defined in the sense of 'returning to a normal state' (as commonly used in research and practice) resilience parallels coping capacity (or recovery strategies for dealing with disasters). This implies that with every recurrent disaster there is an increase in community resilience (Figure 17). As a result, there is an ongoing increase in both vulnerability and resilience in the aftermath of repeated disaster events.

As shown in Figure 18, with each subsequent disaster, an increase in community resilience reduces the impact of a disaster, but does not reduce vulnerability. The communities remain at risk. Increasing community resilience decreases the intensity of any future disaster impact (without community resilience the impact of future disasters would be greater). At the same time, since building resilience does not address or reduce vulnerability, subsequent disasters are often of greater magnitude and have a greater spatial spread, and consequently a greater impact. Therefore, a decrease in disaster losses as a result of increased resilience has little impact on the overall impact of any subsequent disaster (Though again, the impact of that disaster would be even greater if there had been no increase in resilience).

In the longer term, due to the increased impact of the ratchet effect on vulnerability (so that vulnerability increases over time and with every repeat and intensified disaster) communities not only remain at risk, but are at increasing risk despite their increased resilience and despite the decrease in damage with each subsequent disaster. This shows, though connected, vulnerability and resilience are separate entities. Vulnerability is closely linked to the cause of a disaster – a disaster occurs only if people are vulnerable to a specific event. Resilience is closely linked to disaster impact – increased community resilience decreases the impact of a disaster but it cannot stop the occurrence of a disaster because it does not influence vulnerability.

If disasters continue and if the affected population fails to recover, as illustrated in the case studies, there comes a point when the affected population is so trapped in a vicious circle of increasing hardship that it is impossible for it to recover in its current environment – certainly without proper external support (see, Figure 17).

8.3 Conclusion

The Recovery Framework in the context of small-scale disasters

The findings and discussions presented in this and in the previous chapter (Chapter Seven) provide the basis for a recovery framework to meet the needs inherent in small-scale disasters (Figure 19). As with large-scale disasters, the origins of small-scale disasters lie not in environmental or other natural conditions, but in the characteristics of global, national and regional political, economic and social systems. These external forces influence how well or how badly both people and their local situation or site are positioned and integrated within the broader systems in which they operate (for example, Nepal's national economy and political system plays a key role in the marginalization and vulnerability of the study region). The consequences of such linkages shape the dimensions of vulnerability as experienced at a local level. The marginalisation of the study region – its poverty, lack of secure food supply, and low levels of education and health service provision, low levels of well-being, and vulnerability to disasters - is determined in large part by pressures and controls outside its local/regional control. Global, national and regional political and economic factors influence internal (regional and local) power structures and social systems. These further determine the allocation and distribution of resources among individuals and social groups within any community and determine their (unequal) access to power and resources.

Both external and internal factors result in people living and working in unsafe conditions; why, for example, some are obliged to live and farm in unprotected river valleys and on steep, eroded slopes, or to survive, of necessity by degrading their environment through unsustainable land use practices. Such conditions ensure that many people are not only vulnerable to relatively rare small-scale hazards such as floods and droughts, but to frequent hazards (such as those generated by the Monsoon) (see, Figure 19). Small-scale disasters are the common experience of many. A major hazard event is often a one-off occurrence, but risks and disasters in conjunction with frequent weather events and the like, are often repeat occurrences.

In Figure 19, A, represents a community affected by a rare hazard event; B, represents a community affected by frequent hazards. These communities face very different recovery scenarios. The recovery process for A is quite similar to that experienced subsequent to a large disaster. The recovery process experienced for B is completely different. Communities subject to recurrent events are repeatedly subject to (increasing) risk and must repeatedly

change their priorities and recovery response. Their recovery cannot be understood within the context of established recovery models which involve a set of explicit recovery periods and a set sequence of events. These models apply only to one-off disasters (see, sections 8.2.1 and 8.2.2).

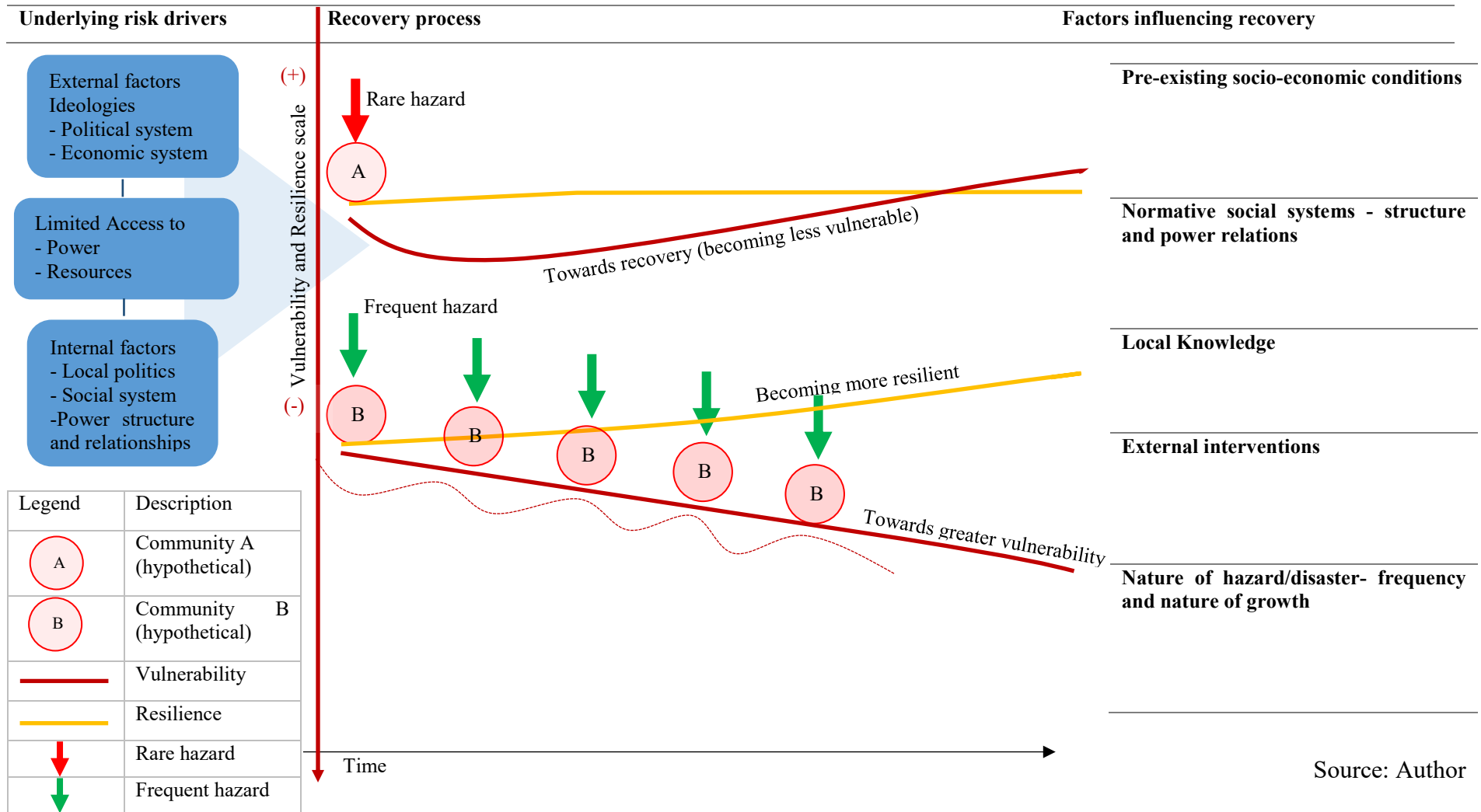
The recovery process following recurrent disasters, as shown in Figure 19, involves two key processes that run in parallel and influence recovery. These processes are: increased vulnerability (associated with the ratchet effect) and resilience building (associated with the increased ability of the affected population to cope with disasters). With each repeat event people's resources are further depleted. The implication in the context of poor families (including those living at a subsistence level) is an increase in their level of poverty and need. Where repeated adverse events occur, on the other hand, experience of disaster contributes to resilience, allowing people to develop and enhance their knowledge and skills to cope with disaster. These two processes do go hand in hand, but they also act independently (and at cross purposes). Figure 19 demonstrates that increasing vulnerability (the ratchet effect) continuously obstructs or undermines recovery and directly impacts on the level of recovery possible. With the increasing vulnerability associated with decreasing resources, the poorest often are left with no choice to survive other than to adopt activities that generate conditions that further increase their vulnerable to future hazards and further reduce any possibility of recovery. Where resilience building is comparatively slight or weak and remains limited to the control of damage by preparedness and mitigation, it necessarily contributes little to recovery. In such circumstances recovery from recurrent small-scale disasters without adequate external support, is slight – especially for the poorest. This again highlights the fundamental fact that vulnerability and resilience are two separate entities – people can become increasingly resilient, but at the same time be pushed towards greater vulnerability. Efforts to increase resilience do not necessarily reduce vulnerability. This is contradictory to the understanding of resilience and vulnerability as opposite ends of a continuum (Canon, 2007; Bahadur et al., 2010; Sudmeier-Rieux, 2014). This new understanding, as demonstrated in this thesis, inevitably throws into question current policies and practices to reduce the risk of disasters which rest on vulnerability and resilience as part of a continuum. (This is discussed further and the policy implications elaborated, in Chapter 9).

As described, the recovery process, in the context of small-scale disasters, is subject to many different influences (see, Figure 19). These influences go beyond those discussed in the context of large-scale disasters and include local *knowledge* and *external interventions* (see,

Figure 19). Indeed examination of recovery in the context of small-scale disasters reaffirms and highlights the fact that a disaster and the recovery process are deeply embedded in the social system in which they occur. Recovery from small-scale disasters is largely determined by the interplay of many different factors within the social system. In this, factors and processes associated with *pre-existing socio-economic conditions* and *normative social systems (structure and power relations)* play crucial roles. This emphasises many fundamental aspects of development (such as health, education, physical access, and safety) and underscores the importance of “everyday conditions” in disaster recovery. Similarly, as shown in the Framework, the *nature of a hazard/disaster*, particularly in terms of its frequency and increasing scale, is another key factor in shaping the recovery process.

The Framework presented outlines the key concepts, phenomena and factors highlighted in the thesis that shape the recovery process in the context of small-scale disasters. It not only identifies the co-relationship of the different concepts, processes and factors in the recovery process and provides academic insight, but offers practical support to local and external actors in their development of recovery strategies, plans and policies.

Figure 19: A Recovery Framework in the context of small-scale disasters



Source: Author

Chapter Nine

Underlining the ‘Norm’: Bringing Small-Scale Disasters into the Mainstream Disaster Recovery Discourse

The origins of this thesis lie in the rising concerns of the international community at the increasing impact of disasters, including their disproportional impact on the poorest countries, and the increasing urgency to make the world safer from natural hazards (see, for example, IFRC, 2001; Marulanda et al., 2010, 2011; Guha-Sapir et al., 2011). International frameworks for disaster risk reduction (*The Hyogo Framework of Action* (2005-2015) and *The Sendai Framework of Disaster Risk Reduction* (2015-2030) highlight the prevention of disasters, and the reduction of disaster risk by *Building Back Better*, as an effective and sustainable means to increase the resilience of nations and communities (UNISDR, 2015b). At the same time, this thesis was initiated because of the increasing recognition of the importance of small-scale disasters and accumulating evidence of the serious social and economic impact of such events (IFRC, 2006; Wisner & Gaillard, 2009; Marulanda et al., 2010, 2011; ECHO, 2013; GNDR, 2013).

There are significant gaps in our knowledge of disaster recovery and in particular of small-scale disasters. High profile, large-scale disasters, such as the 2004 Asian Tsunami, the 2005 Kashmir Earthquake, the 2008 cyclone in Burma, and the 2010 Haiti Earthquake, all overshadow small-scale disasters. Despite their recognised importance, small-scale disasters remain largely overlooked in research, practice and policy (IFRC, 2006; Wisner & Gaillard, 2009; Marulanda et al., 2010, 2011). More recently, however, they have attracted increased concern and some increase research attention (see, UNISDR, 2009, 2011, 2015a; ECHO, 2013). Such research, however, is largely limited to increasing awareness and pointing-out the need to better address such disasters and include them in national and international policy and practice. There has been little research to better understand such disasters, and the research that has been done relies almost totally on secondary

sources. Importantly, research remains limited to an examination of the impact of such disasters. To date, this current thesis is the only study that has collected and examined empirical data to increase understanding of small-scale disasters.

Disaster recovery, although well established as a major research theme, remains largely incomplete and inadequate. Most existing studies focus on short-term disaster recovery, emergency response and disaster relief, rather than long-term recovery, despite the fact that long-term recovery is recognized as important, even more important, than earlier phases in the post-disaster period. At the same time, of the work available, there is a disproportionate focus on recovery in terms of external intervention (in the form of aid and relief) (see, for example, Cuny, 1983; Smith & Wegner, 2007; Rubin, 2009). The long-term recovery experience of the victims of disaster and the wider community remains comparatively less researched, while there is evidence that the impact of external aid and support in such cases is less important than once believed (Cuny, 1983).

Knowledge of disaster recovery, including models of the recovery process, is based on that garnered from large disasters. Perhaps predictably, such disasters get most attention from the mass media, governments, national and international donors, relief agencies and research scholars (Cuny, 1983; IFRC, 2001; Rubin, 2009; Wisner et al., 2012). Previous studies suggest that small-scale disasters differ from large disasters, particularly in terms of the level of external support and attention they attract, their scale, coverage, and frequency (Wisner & Gaillard, 2009; Marulanda et al., 2010, 2011). Based on the inherent differences between large and small-scale disasters, further differences can be projected, especially with respect to the ratchet effect. As explained previously, this is understood to occur as part of the process of marginalization, which links the increasing vulnerability of those affected to their decreasing access to resources. Reduced access or no access to the resources necessary to recover from disaster results in further marginalization and a higher degree of deprivation. Given that small disasters are often frequent occurrences, the probable impact of the ratchet effect is indisputably increased. All these considerations give no reason to assume that recovery from small disasters is the same as in the context of large disasters.

This thesis aimed to fill existing knowledge gaps. It has attempted to produce qualitative data that uncovers the features and processes of disaster and disaster

recovery that to date have been largely „missed“, „neglected“ or „less-prioritized“. Most notably, this is the first empirical study to develop a fuller and deeper understanding of small-scale disasters. It was designed from the start to help understand the long-term recovery process - particularly from the perspective and experience of those most directly affected, and, in the longer-run, to support recovery. To meet these goals it was necessary to understand how poor remote communities, those recognized as most impacted by small-scale disasters, experience recovery. This allowed the testing and evaluation of established models and key theoretical understanding of the recovery process, and the development of an appropriate recovery framework, specifically applicable to small-scale disasters.

Research for this thesis uses ethnography as a key approach to generate qualitative data. To secure a broad, in-depth understanding of the multi-dimensional nature of small-scale disasters, this approach was extended and complemented by other research tools ranging from semi-structured interviews to mapping. These tools were designed and introduced prior to or during the fieldwork to effectively handle the challenges encountered. These multiple research methods also proved beneficial for data triangulation and strengthened its value at a global level, methodologically conceptually, and at a policy level.

This final chapter summarises the key thesis findings and discusses their implications for disaster risk reduction policy and practice. It also sets-out some of the limitations inherent in this thesis and outlines needed further research.

9.1 Key Research Findings

9.1.1 How can small-scale disasters be conceptualized and defined?

The first question addressed was designed to better understand small-scale disasters from the perspective and experience of those directly affected, and to understand why these events have been neglected (if indeed they have) by outside stakeholders.

The evidence collected suggests that small-scale disaster can be broadly classified as falling between two extremes of crises, i.e. large disasters and everyday crises of mal-development (see, Figure 14). Determining a fixed, universal threshold between these different forms of hardships is demonstrably unwise. Any threshold would be highly contextual and vary both in time and space in relation to people's ability to face such hardships. Moreover, the scale of a disaster (or the magnitude of damage) would not determine the significance of that event for those affected.

The findings presented indicate that disaster classification and any general understanding of disasters based on the single factor of scale is inappropriate and unwise. Different, and often contrasting perspectives exist. The perspectives of insiders (i.e. the perspective of disaster affected households and communities) differ significantly from those of outsiders (see, Table 8). Insiders' perspectives primarily depend on people's (and a community's) capacity to cope and recover from the losses incurred, the intensity of disruption caused, and the nature of the long-term impact on them of the event. Outsiders' perspectives are primarily dependent on the perceived magnitude of the impact of a disaster, the socio-economic and political importance of the communities concerned, the capacity of the authorities to respond, and the unusualness of the disaster. An outsiders' perspective, in fact, takes little account of the severity of the disaster on the population concerned and therefore often deflects attention from the true impact of the disaster on the affected population and community.

The findings suggest that small-scale disasters can be broadly divided into two types: one-off and recurrent. These vary significantly in terms of their occurrence, and in the significance of the impact and the recovery scenario faced by those affected. The findings show that the occurrence and severity of small-scale,

recurrent disasters is closely linked to fundamental weaknesses in the societies concerned, to the extent that the development of disaster risk becomes a part of their functionality (see, Figure 15). In effect, where the level of vulnerability is particularly high a disaster event may not be consequent on any unusual conditions (a rare hazard) and even the regular Monsoon may readily result in a disaster. In the case of one-off events (whether small or large scale), the situation is different. Although the pre-existing vulnerability of a society affected by a one-off disaster is undoubtedly linked to prolonged and unaddressed everyday crises of mal-development, vulnerability does not necessarily result in a disaster as a consequence of regular events (frequent hazards) such as the Monsoon; rather the occurrence of a disaster is more often linked to exceptional circumstances, such as extreme weather conditions, a major disease outbreak, or an earthquake. Similarly, this current thesis demonstrates that recurrent disasters commonly have severe and chronic impacts on the population to a far greater extent than one-off events. Equally, the recovery scenario faced by the affected population in the aftermath of a one-off disaster is significantly different from that in the aftermath of frequent, repeat disasters. This holds true irrespective of whether the disaster is a small or large-scale event. The challenges faced by a population affected by recurrent disasters and their need to secure recovery varies significantly from those affected by one-off disasters. Disaster frequency stands-out as a key criterion to understand the significance of a disaster on those affected. It therefore is an important criterion in distinguishing, classifying, or understanding disaster events.

9.1.2 What actions or steps (recovery activities) do affected communities take in seeking recovery?

The second question was designed to better understand the process of recovery - the actions and the sequence of activities following small-scale disasters. Actions taken both by affected households and communities in response to disaster were examined.

The findings demonstrate that the recovery process experienced by the population impacted by one-off, small-scale disasters is significantly different from that associated with recurrent, small-scale disasters. In fact, the recovery process in the context of a one-off small disaster (see, Figure 16) exhibits several similarities to those identified in the established recovery models based on the experience of

large disasters (Kates & Pijawka, 1977; Cuny, 1983). The recovery process identified is characterised by three periods: emergency, transitional (rehabilitation or restoration) and reconstruction. The focus of actions during the emergency period is on saving lives and restoring important community functions. The purpose of the transitional period is primarily to restore livelihoods (employment) as quickly as possible and so restore the functioning of individuals, households and communities. Reconstruction ranges from building new, permanent housing and other important infrastructure, and in achieving better lives beyond „just functional“.

The disaster recovery process associated with recurrent, small-scale disaster is frequently interrupted, often on a regular basis, by recurrent disaster events and therefore takes the form of a complex and multi-directional process (Figure 17). Primarily, this process involves a dynamic interplay between the changing abilities of people and their changing vulnerabilities in the face of repetitive events. On the one hand the affected population develops an increasing ability to face disaster, as repetitive events make them both more experienced and knowledgeable. On the other hand, frequent interruptions in the recovery process and increased disruption and losses from repetitive disasters creates a ratchet effect, making those affected less able to recover and more vulnerable to the next disaster.

What adds to this complexity is, as the findings suggest, the changes over time which occur in a population's response to recurrent disasters. Where communities are repeatedly subject to increasing risk, the recovery process cannot be understood or explained by the single set of phases associated with the conventional recovery model. In situations of repeated disasters and increasing risk, the priorities and aspirations among the population affected change. This makes responses formulated in the aftermath of an initial disaster are very different from those taken when a disaster event becomes repetitive. Based on these changing priorities and aspirations the findings identify three thresholds that frame the stages a community moves through in the aftermath of recurrent disasters. Each of these stages presents a unique sequence in the community recovery process (see, Figure 18). Communities in the initial stage of recovery are at a comparable phase to that in the case of one-off disasters (and, therefore

comparable to the findings presented in the literature with respect to large events), namely emergency, transition and reconstruction. When a community enters stage two (in effect, when an event becomes more frequent and repetitious) the recovery process changes, becoming dominated by actions aimed to reduce loss in the face of the possibility of any further disaster. When a population is exposed longer to the impact of a disaster caused by the same hazardous it and comes to the point where that population realizes it can no longer cope or secure better conditions in its current environment, they then enter stage three. The recovery process again takes on a different format, and becomes dominated by actions to escape further loss, and to reach a position (and place) of safety.

The results presented demonstrate that in the recovery process associated with small-scale disasters (both one-off and recurrent events) the level of external support is slight, and that during the emergency period external aid provided is concentrated largely in short-term relief. Only a small amount of external help is made available for the reconstruction of important community buildings and short-term mitigation. In effect, the whole of the recovery process in the case of small-scale disasters is dominated by individual, household and community action to access the needed resources to sustain and recover.

9.1.3 What socio-economic factors (such as income, access to land, and power), cultural factors (such as disaster sub-culture, caste, cultural relationships, and gender) and other factors (such as external support) influence the recovery process?

Question 3 aimed to identify these key factors that influence the recovery process of affected households and communities.

The findings demonstrate that pre-existing socio-economic conditions, normative social systems/ structures and power relations play a crucial and dominant role throughout the recovery process. With no long-term external help available, affected households and communities must rely on their own resources to recover their losses and sustain their lives after disaster. As noted, in large disasters, affected communities receive more outside help than those subject to small-scale disasters. Equally, those affected by large-scale disasters are less conditioned by

pre-existing conditions in their response than those affected by small-scale disasters.

Pre-existing socio-economic conditions, particularly poverty, income and caste, play important roles in shaping people's response to small-scale disasters. Richer groups, though equally impacted by disaster, have greater opportunities to recover by using their pre-existing resources. The poor, on the other hand, find it hardest to recover, confirming the findings of other researchers such as, Blaikie et al. (1994). Compared to the rich they have limited recovery opportunities as they do not have adequate, pre-existing resources to draw on. They necessarily must depend largely on others to access needed resources.

The findings extend the understanding generated in earlier work. They show that the resources of the rich are not limited to income or property, but include social status and the associated power and social networks. They can trade upon these resources and this gives the rich the greatest opportunity to recover, even if the initial effect of a disaster has a similar impact on rich and poor alike. The poor neither have adequate pre-disaster resources nor any powerful alliances or networks to trade on. The thesis findings suggest that similar circumstances prevail at a community level: richer communities with better community reserves (collective funds, such as those generated from community forests) and resources, have better chances of recovery than those who do not.

Education and skills are also shown to provide people with recovery opportunities and these skills are particularly beneficial for poorer families who, despite not having adequate material resources may be able to use their education and skills to obtain jobs and associated benefits (such as formal credit) and use social connections to gain information about new opportunities. All these facilities can contribute to their recovery.

As shown too, social resources, particularly kinship ties and traditional mutual and inter-community links play a crucial role in disaster recovery. These findings again confirm earlier work (see, Gaillard et al., 2008; Chamlee Wright & Storr, 2011; Mercer, 2012).

Social systems that exist prior to a disaster (including traditional systems of landholding, land sharing, property leasehold agreements, and traditional practices

that cause discrimination) are re-invigorated in the aftermath of disaster. Lack of external support to access livelihood resources, combined with often recurrent, small-scale disasters, force people, especially the poor, to access needed resources through the implementation and extension of these normative systems and practices. This suggests that such situations reinforce any pre-existing normative systems (and structures) and power relations. Where such systems are grounded in unequal power relations, after a disaster such conditions are likely to worsen, resulting in increased poverty and misery for the poor and the weak. The findings also suggest that traditional practices that cause discrimination (such as untouchability, those associated with menstruating women and those in mourning) expose different groups to higher degrees of risk in times of disaster.

Experience allows those impacted by a disaster to develop and accumulate knowledge of disasters. Over time, such learning helps minimize harm to themselves and to their property. It also helps optimize their use of resources through the effective integration of disaster preparedness and mitigation into their day-to-day lives. This corresponds with the findings of others (Anderson, 1965; Wenger & Weller, 1973).

The thesis findings indicate that while external intervention is not only an important factor influencing community recovery after large disasters, it is equally important following small-scale disasters. Indeed, it is even more important in small-scale disasters, but in such circumstances, its role is heavily dependent on pre-existing policies and mechanisms.

External aid commonly recognizes disasters as special circumstances, different from the day-to-day conditions of everyday life. This is in broad agreement with international understanding (UNISDR, 2015a). However, this current thesis expands such understanding. The findings presented here suggest that the inefficiency of external aid, as exemplified in the study communities, relates to several different factors. The main reason, however, remains the failure of such interventions to recognize disasters, particularly recurrent disasters, as a „process“, but as an event. By viewing disasters as an event the focus of such intervention deflects attention from the need to address the social processes which underpin, create and foster disaster risk.

The results presented also demonstrate that the nature of a hazard, in particular its frequency and the nature of its origins and growth, greatly influence the recovery process. The characteristics of a disaster expose the affected population to different levels of complexity that challenge recovery. Those affected by recurrent and increasing disasters are forced to deal with the cumulative and chronic impacts. This often traps them in deteriorating conditions and with little prospect of creating a better future. This is different from one-off events where, although the impact of an event may be substantial, it does not result in chronic circumstances, but offers opportunities to recover and allows time for people to move forward (this was elaborated in the previous section, 9.1.2)

9.1.4 How do the actions or steps for recovery taken by affected populations, communities, and other concerned actors contribute to recovery?

Recovery, as used in this thesis, is understood not as a process to return a community to its pre-existing status, (which embeds the original risk) but as a moving forward, involving addressing and reducing the vulnerabilities that led to the initial disaster. From this perspective, resilience gives individual households and communities a greater capacity to cope with risk and to minimise any potential damage from future disasters.

The thesis has generated some compelling results. People's coping mechanisms stimulated in response to disaster do not always guarantee recovery. Undoubtedly poor and marginalized individuals and communities have great ability to cope with adversity. Living in a harsh environment and in difficult living conditions, enduring poverty and marginalisation, people are forced to hone these abilities to survive. Such abilities are often enhanced by repetitive disasters and allow them to sustain their lives despite worsening conditions and in the absence of effective help from government authorities. However, as the findings suggest, it is equally clear that such coping abilities do not extend to, or allow, the addressing or reduction of the root causes of the vulnerabilities which led to disaster. Many coping mechanisms or responses used by affected households and communities are aimed solely to secure survival. Mutual help grounded on social and kinship ties is one coping mechanism. Quarantelli (1978) and Gaillard et al. (2009) have all made the point that such mutual help aids household survival. As the findings

of this thesis show, however, such support remains largely inadequate to ensure long-term recovery, especially of households that were, even prior to the disaster, poor and marginalized.

The findings also show that rather than contributing to recovery, coping mechanisms may even accentuate the future risk of disaster. For the many in abject poverty, survival must be prioritised over any recovery effort. Poor, marginalized communities often have no choice other than to respond to the losses they incur by either the further exploitation of their environment or by increased dependency on systems and practices that will ultimately increase their vulnerability. Unsustainable land-use practices and out-migration to unsafe (and unstable) areas, possibly with even harsher living conditions, are common examples of the circumstances and results experienced by those struggling to survive. This not only increases the vulnerability of the affected population but often may damage and undermine the resilience of their social framework and natural ecosystem.

Previous research has identified unequal access to power and resources as key determinants both of vulnerability and the ability to cope and recover (O'Keefe et al., 1976; Susman et al., 1983; Blaikie et al., 1994). The findings presented here are broadly in agreement with these earlier findings and provide further insight on the recovery process. As the findings demonstrate, many, in particular the poor and weak, often have no choice other than to cope with disasters by becoming more dependent on systems and practices rooted in unequal power relations. Social processes, driven by unequal power structures and relationships, assure the on-going domination and impoverishment of weak groups by the more powerful, while also allowing the more powerful (often the rich) to increase their wealth and power. In the study area, where normative systems involve unequal power relations between different groups, the implementation and extension of these normative systems and practices adversely influence recovery and hit the poor and weak hardest of all. As explained, such mechanisms, allow the affected population to survive, but often at the cost of their decreasing social and economic well-being and increasing threats from their environment.

As discussed above, pre-existing resources at a household and community level, including income, property, access to power, social networks, and education, all

contribute to long-term recovery. Where they are found, these factors are fundamental strengths enjoyed by households and communities as part of their daily existence. In other words, the fundamental level of well-being of a household and a community facilitates (or limits) their recovery from disaster. This affirms the key role of pre-existing living conditions in recovery (and disaster risk reduction).

The thesis provides crucial insight to long-term recovery in the aftermath of recurrent disasters. In particular, it suggests that the frequency of disasters is a central factor in the recovery process. The findings also identify other recovery processes generated following recurrent disasters, and demonstrate a relationship between vulnerability and resilience. The ratchet effect is identified as a dominant phenomenon associated with repetitive disasters. The concept, introduced by Chambers (1983), and subsequently widely adopted (Rahmato, 1991; Blaikie et al., 1994; Twigg, 2007; Pelling, 2012) links a community's failure to recover from its most recent disaster with its increasing vulnerability to its next disaster and connects this to a never ending process of increasing marginalization found among vulnerable groups. The ratchet effect increases over time and with every repeat disaster. This ensures that people not only remain vulnerable but that their vulnerability to disaster increases.

At the same time, the experience of disaster, as explained above helps to develop local knowledge of disasters which in turn helps build people's capacity to cope. This provides and acts as a protective shield. This strengthens over time, increasing resilience. Despite this, however, the population remains at risk, indeed at increasing risk. Thus while vulnerability increases, resilience also increases. These findings point-up the fact that although vulnerability and resilience are closely linked, they remain two separate entities. Vulnerability is closely linked to the causes of disaster - disasters occur only if people are vulnerable to a specific event. Resilience, on the other hand, is closely linked to the potential damage from a future disaster. Increased community resilience reduces the damage caused by a disaster, but cannot stop the occurrence of a disaster because it does not reduce vulnerability.

9.2 Looking Forward: Implications for Policy and Practice

The findings of this study have several implications for national and global policy and practice for disaster risk reduction and recovery.

9.2.1 Greater emphasis in addressing the underlying drivers (causes) of disasters in recovery interventions: an approach to ‘Build Back Better’ in recovery and disaster risk reduction

The findings presented clearly indicate that recovery is not a unique, isolated event or process. Both disaster and recovery are deeply embedded in the social system in which they occur. The findings show that weaknesses in the normative system and structure can determine people’s pre-disaster conditions and that these conditions promote risk. In most of the case studies, the immediate cause of landslides includes the effect of the Monsoon rains on the degradation of slopes, however, the ultimate cause, or *underlying drivers*, are poverty and need. These are themselves largely a consequence of social systems and structures that favour discriminatory practices and unequal power relations. Such circumstances are compounded by the State’s long-standing marginalization of the study region. These same drivers pose the biggest barrier to recovery and are the key reasons for the increasing level of risk.

The direct relationship between recovery and the underlying drivers of risk is clear. Until and unless these drivers are properly addressed the level of risk cannot be altered or reduced. To date, policies and practices for recovery largely have failed to address this point. The international frameworks for disaster risk reduction remain the principal guides to risk reduction in many countries (including Nepal). These frameworks repeatedly stress *Build Back Better* as their key principle. This hinges on the notion that “a key to successful recovery efforts is whether they leave survivors less vulnerable to hazards” (Clinton, 2006, pp. 22). *Building Back Better* aims to reduce the risk of future hazards faced by communities. Based on the evidence presented, this should necessarily involve addressing the underlying drivers of risk. However, the activities outlined in these frameworks (and current practice), address recovery first and foremost as a process of returning to „normality“ rather than as a process which addresses the underlying causes of disaster (UNISDR, 2015a, pp. 173). The use of these

frameworks remains largely limited to building resilience: achieving the resilience of buildings, infrastructure and services, increasing people's ability to face disasters by increasing their understanding and providing protection against hazards. These activities involve a set of instrumental and administrative mechanisms to protect against a tangible external threat. These include, construction of flood defences, reinforcing or upgrading infrastructure, retrofitting schools and hospitals, public awareness-raising, disaster preparedness, contingency policies, forecasting, early warning systems, disaster risk and emergency communication mechanisms, and technical and logistical capacity to ensure a better response to emergencies and so on (UNISDR, 2005, 2015b). But they pay little attention to the underlying drivers. In effect, efforts continue to be made to build resilience and to strengthen capacities for disaster management (Gall, Cutter, & Nguyen, 2014), but neglect the underlying drivers.

As this thesis concludes, resilience building helps reduce disaster damage, but does not address pre-existing vulnerabilities. As extensively discussed in the literature (see, for example, O'Keefe et al., 1976; Susman et al, 1983; Blaikie et al., 1994) and as demonstrated in this thesis, these vulnerabilities create and foster disaster risk, and are the consequence of poverty and marginalization, discrimination, food scarcity and the like. This throws into question the usefulness of recent global and national movements (and actions) that have elevated resilience into policy, backed by millions of dollars from donors to build resilience against disasters and climate change, all designed to reduce risk. These actions and frameworks, which address resilience largely as the capacity to cope with adversity, rest on the understanding that increased resilience automatically reduces vulnerability and reduces risk. However, reducing risk is unrealistic without a radical shift either in understanding resilience or in the nature of the actions directed at disaster risk reduction. If resilience building is indeed aimed to address (and reduce) disaster risk, then one option is fundamental modification of the concept of resilience as used in disaster studies. Such a conceptual change would need to follow the ideas presented by researchers such as Manyena et al. (2011) and Sudmeier-Rieux (2014) who view resilience as the ability to „bounce forward“ and view moving forward as involving addressing and reducing the vulnerability that led to the initial disaster. This concept of resilience differs from

its use in other contexts, where it is viewed simply as the ability of a community to withstand shock and adversity and return to its original state (see, for example, Timmerman, 1981; Turner et al., 2003). Alternatively, if the concept of resilience is to continue to be applied and used in current practice and existing frameworks (i.e. where increased resilience is viewed as automatically reducing vulnerability and disaster risk) then risk reduction should shift to the adoption of a broader approach that not only encompasses resilience building, but emphasizes and combines approaches and actions that directly target, address, and reduce the underlying drivers of vulnerability.

The Hyogo Framework of Action (2005-2015) created space to address the drivers of risk and this objective is identified as a priority in the Framework. However, this prioritisation remains somewhat formulaic and lacks operational detail. It remains largely limited to achieve resilience through the rebuilding of infrastructure and services, increasing people's capacity to effectively prepare and respond during emergencies, and strengthening land-use planning and other technical measures. The more recent, the *Sendai Framework for Disaster Risk Reduction* (2015-2030) has completely removed "managing the underlying risks" as part of its main objective integrating this within approaches that take disasters as unusual extremes that must be managed.

The mismatch between the conceptual and operational components of the existing frameworks for risk reduction and disaster management may be due largely to the approach used. According to the UNISDR (2015a) this tends to follow the disaster management cycle³⁷ which, as the name implies, revolves around disasters as „events“. As such, risk reduction within these frameworks continues to be practised principally as disaster management and as a set of instrumental and administrative mechanisms to protect against tangible external threats. This approach is of limited use for small-scale recurrent disasters which do not involve

³⁷ Disaster Management Cycle: The cycle illustrates the on-going process by which governments, businesses, and civil society plan for and reduce the impact of disasters, react during and immediately following a disaster, and take steps to recover after a disaster has occurred. It mainly comprises four phases: Mitigation, Preparedness, Response and Recovery. Mitigation aims to minimize the effects of disaster (examples include building codes, zoning, vulnerability analyses, and public education); Preparedness involves how to respond (for example, preparedness plans, emergency exercises/training, and warning systems). Response aims to minimize the hazards created by a disaster (for example, search and rescue, and emergency relief). Recovery aims to return the community to normal (examples include temporary housing, grants, and medical care) (Coetzee & Niekerk, 2012; Warfield, 2012).

any unusual external threat. The appeal of the disaster management cycle may lie in the simplicity inherent in such an approach, compared to the complexities involved in any attempt to address the underlying drivers of disasters which are commonly entrenched across a wide range of social, economic, environmental and political issues.

The activities currently associated with managing disasters are not without merit. They have value because they can reduce people's exposure to disaster and increase their preparedness and so may significantly lessen any future damage a disaster might cause. But as they contribute little to disaster risk reduction, people remain vulnerable. The adverse consequences of not addressing the underlying causes of disasters are evident in the study communities. When not addressed, risk and vulnerability increase. The population affected by recurrent disasters has a range of coping mechanisms, the purpose of which are similar to those identified in the frameworks. Increased knowledge of disasters allows preparedness activities such as evacuation to a safer place prior to a landslide, installation of mitigation measures that might lessen the impact of a landslide, and the dismantling of vulnerable/damaged houses to secure building materials and so reduce reconstruction costs. These activities increase people's ability to face disasters and reduce potential damage. No such actions, however, contribute to recovery as they make no contribution to addressing the underlying drivers. These actions work to sustain life rather than ensure recovery. People cope, demonstrating a high level of resilience, but they remain at on-going risk. Recurrent disaster losses and a failure of recover leave people increasingly vulnerable.

Current approaches including external interventions aimed at disaster risk reduction and recovery divert attention from the underlying drivers responsible for creating and fostering risk. Policies and practices for disaster risk reduction need a much greater focus on identifying, addressing and reducing the underlying drivers of risk and disaster. This focus needs to be better integrated and implemented within the concept of *build back better*.

9.2.2 Towards a Socio-Culturally Sensitive Approach to Recovery

Contrary to the bulk of research (see, for example, Haas et al., 1977 and Geipel, 1991) which emphasizes physical reconstruction and the material aspects of disaster recovery, few (for example, Quarantelli, 1978 and Nigg, 1995) recognize the major role played by social systems and social structures in the aftermath of large disasters. The bulk of research remains focused on the influence of social power structures on reconstruction decisions and on the differential socio-economic benefits they bring to the different groups involved. The thesis has highlighted the central role of social systems and structures in efforts to cope and recover from small-scale disasters and therefore reinforces the perspective of researchers such as Quarantelli and Nigg on the fundamental role of the social system and social structures on the recovery process.

This current thesis provides a comprehensive view that identifies recovery as largely a social concern rather than as a technical issue, but also identifies the *what?* and *how?* factors, and processes, such as social values and practices, social hierarchies and power-relationships, that pre-date any disaster and explores how these factors can potentially facilitate or hinder recovery. These same factors are recognized as having key roles in vulnerability and as closely linked to disaster occurrence, outcome and impact (Hewitt & Burton, 1971; O'Keefe et al., 1976; Susman et al., 1983; and, Blaikie et al., 1994). These same scholars have long argued that disasters are socially constructed events, influenced by demographic and socio-economic characteristics, social and cultural norms, prejudices and values. Factors such as class, race, ethnicity and gender, have a significant impact on the outcome and consequences of disaster. All aspects of disaster, including occurrence, impact and recovery, are deeply rooted in the social structure and fabric of society. Identifying and understanding the local context is essential in the design of effective recovery interventions.

The thesis findings indicate that traditional practices that result in discrimination (such, as illustrated, those involving menstruating women, and mourning people) expose discriminated groups to greater risk during disaster, especially during the emergency period. Similarly, the deeply rooted unequal power relations, inherent in gender and caste, limit the recovery opportunities for weaker groups (including

women and Dalits). Even in the pre-disaster situation, these groups are particularly vulnerable because of prejudices which limit their access to basic resources, such as land, employment opportunities, the capacity to build social networks that, in turn, may limit their access to education and paid employment. This condemns the individuals concerned to weaker positions in terms of income, education, power, health and socio-economic wellbeing. This stymies their recovery. Discrimination is often confirmed or supported in the legal process. For example, the poor and weak, including women and sharecroppers, often do not have legal documentation to prove their relationship to land they may have lost or that this has been adversely affected by a disaster, because their access to that property is through others who have power and control over them. As a result, they are excluded from claiming official relief. Relief and recovery policies and practices commonly rely solely on established legal criteria but in practice this frequently excludes weaker groups, often those in the greatest need.

Most of the issues raised above are recognized in global and national recovery policies. Indeed, there have been significant efforts in this respect. Such policies frequently aim to ensure protection, an equitable response to vulnerable groups, including women and the marginalized, and may even give them some priority. This is one of the guiding principles of the international frameworks for disaster risk reduction. *The Disaster Risk Reduction Strategy of the Nepal* identifies gender and social inclusion (including the Dalits and the poor) as a priority objective (Ministry of Home Affairs, 2009; IFRC, 2011). In practice, however, there is no evidence that this has been translated into practice, at least not in the context of small-scale disasters.

The disasters examined in the case studies did not result in the generation of individually designed government recovery programs. This is understandable given the large number of such disasters that occur across Nepal each year. Therefore these disasters fail to receive any resources channelled through projects such as Cash-For-Work³⁸ and Cash-For-Training³⁹ which are specifically designed

³⁸ Cash-for-work is a term used by humanitarian agencies to describe short-term jobs meant for unskilled labour and designed to meet basic needs. Cash-for-training is a similar program designed to improve the plight of those impacted by disasters and empowers them through skills training and assistance towards gainful employment and entrepreneurial activities.

to benefit vulnerable populations. Equally, none of the examples examined could attract any disaster management (or disaster risk reduction) project funding, largely supported by international aid and development agencies, all of whom have a strong component that prioritises vulnerable groups. The projects funded under such schemes are concentrated on a few specific „priority areas“ but these rarely include remote, isolated areas (as typified in the study area). Interviews with key personnel in leading international aid and development organizations working in Nepal, explained that the areas (and communities) they target in response to disasters depend on many different factors. Importantly, one of the main factors identified is the scale of a disaster. Following a large-scale disaster the national government invites relief and recovery support from the international community. Prioritized areas are commonly those that have previously (and recently) been affected by large-scale disasters and which continue to be at-risk (such as the area impacted by the Koshi flood⁴⁰ of 2008). Indeed, such areas are often identified by the national government as priority areas for disaster management and risk reduction, and this in turn becomes the reason why they are selected by national and international agencies. Importantly, these priority areas are also determined by an organization’s own institutional goals and are often areas where that organization has established itself by its earlier development work.

With the exception of the Koshi flood, none of the case studies involved a large-scale disasters, nor did they have any recent history of a large catastrophe. Aid agencies do on occasion assist poor isolated communities, but the study communities were not among the few communities concerned. In effect, the study communities could neither secure assistance through any Government recovery project, nor through any projects under the auspices of an international agency. The study communities were only eligible for standard, official relief. This relief does not specifically identify the need to support identified vulnerable groups (including vulnerable to social exclusion), although it does not prevent their identification as a target focus. There is a need for a special „inclusion“ provision

³⁹ Cash-for-training is a similar program to improve the plight and conditions of those impacted by disasters and designed to empower them through skills training and assistance towards employment and entrepreneurial activities.

⁴⁰ Koshi flood was a major flood in 2008. Approximately 6,000 hectares of agricultural land and 70,000 people of Sunsari District (Eastern Nepal) were affected. The State of Bihar in India was also severely hit.

in the established, conventional rescue and relief process to ensure equitable access by all to that relief. Moreover, such relief remains largely inadequate to meet recovery needs. As noted earlier, there is no specific recovery or disaster risk reduction program managed by aid and development agencies, however a study in another remote area of Nepal indicates that these agencies may have a potentially important role to play in long-term recovery (Belperron & Shrestha, 2014).

As noted earlier normative systems and practices are re-invigorated after a disaster as a means to access resources. This ensures the on-going domination and impoverishment of weaker groups by the rich, while allowing the rich to increase their wealth and power. The findings presented equally demonstrate that the social hierarchy plays an important role in the distribution of resources including official relief. It is essential that the local context is recognised in designing short and long-term recovery interventions. In Nepal, recovery policies that integrate a proper understanding of the local context are necessary to protect discriminated groups and ensure the equitable distribution of relief. In the long term, such interventions could also potentially help break down internal social discrimination and practices that generate vulnerability. This could help address the underlying drivers of disaster. Recovery policies and practices could potentially also use the positive factors in an existing social system, such as mutual help and kinship ties, as part of recovery programs. Even traditional practices of land leasehold, land sharing, and the informal loan system could be positively modified (most probably with financial and technical support from Government authorities) to help secure recovery.

Local contexts differ. Power relations in Nepal are based largely on caste, ethnicity, gender and income (see, for example, Seddon, 1987; Mishra, 2007; Tilouine, 2009; and UNDP, 2011). In different contexts, individual criteria may vary, but the importance of social structure and power relationships are repeated features (in different forms), whether based on race, tribe, or religion (Blaikie et al., 1994). What stands out is the need to recognise the importance of the local context of a disaster and of at-risk communities and to identify the social factors (and processes) which could and should be incorporated into recovery policies, plans and practice.

Addressing unequal power structures is daunting. Ideally, policies and plans should be used to reduce the dominance and monopoly of powerful groups, and strengthen the role of the disadvantaged. This also requires the creation of new mechanisms to fill any void. For example, land reforms in Nepal in recent decades, have achieved some success in addressing the monopoly of landlord groups (see, K.C., 1986; Acharya, 2008; and Pyakuryal & Upreti, 2011). As a result, previously prominent community members have lost their power to allocate land resources using conventional legal criteria. But, at the same time, the reforms have brought few benefits to poor needy families, at least in the context of disaster recovery. Indeed, they have been adversely affected. Whereas in the past, in times of crisis, the neediest families were often gifted land by landowners, the situation has now completely changed. Reforms instituted a legal framework that removed the power of local elites to arbitrarily allocate land, but did not replace it with anything else that could help the neediest to access land in a disaster situation.

9.2.3 Towards greater attention to the long-term needs of the population affected by small-scale disasters and with special attention to cases involving recurrent disasters

The results presented demonstrate how external intervention in the context of small-scale disasters (both one-off and recurrent) is severely limited compared to that in large-scale disasters. This is primarily because small-scale disasters do not generate especially designed recovery programs. In effect, recovery interventions in the context of small-scale disasters rely mainly on the pre-existing policies and plans of the country concerned. In Nepal, such plans and policies largely concentrate on short-term emergency relief, and pay little attention to long-term recovery. In this, Nepal is similar to many other countries (IFRC, 2001; UNISDR, 2005, 2015b). As a result, as the findings show, recovery is largely determined by the pre-existing socio-economic conditions of the affected households and communities.

Standard policies and plans are designed to provide recovery support to those affected by small-scale disasters. Given the large numbers of small-scale disasters that occur, it is inappropriate (and impractical) to have individual recovery schemes for each event. However, as discussed, existing policies in most countries are limited to short-term emergency relief, leaving long-term recovery not only a

major challenge for those affected, but largely unattainable for the poor and marginalised. Small-scale disasters are frequent in many countries and their impact is increasing (Marulanda et al., 2010, 2011; UNISDR, 2011). It is urgent to properly address this situation by strengthening and extending established recovery policies and plans to include a focus on long-term recovery needs. The current international framework on disaster risk reduction 2015-2030 (SFDRR) briefly mentions small-scale disasters and explicitly states that the framework applies to disasters at all scales (UNISDR, 2015b).

Based on previous studies of recovery (such as, IFRC, 2001; Wisner et al., 2003; Cannon & Müller-Mahn, 2010; and Lewis & Kelman, 2010) and the findings generated by this current thesis, recovery should include two fundamental components: efforts to sustain lives by restoring lost livelihoods (access to safe shelter, food, employment, and the like), and efforts to address the underlying causes of disaster so that the population become less vulnerable to future hazards. In the context of large-scale disasters, external interventions often attempt to meet the former, but rarely the latter. This often leads to the reconstruction of disaster risk. As a result, the affected population remains at least as vulnerable to disasters as before (see, IFRC, 2001).

In Nepal, and in many other countries⁴¹ a *cluster approach* (see, Chapter Seven, footnote 34) has been formally implemented for humanitarian work. In these circumstances, efforts to restore lost livelihoods could be facilitated by greater emphasis on the fuller functionality of the clusters, so that they not only meet emergency needs but (as designed) go further and include early recovery components (see, Chapter Seven, footnote 33), i.e. by facilitating access to longer term needs, including shelter, food and income.

Policies designed to address the issues associated with one-off small-scale disasters need to address the recovery needs of those affected by recurrent disasters. This is clearly evident in the case studies. The standard relief and recovery mechanisms in Nepal remain based on the assumption that disasters are one-off events. They are not appropriate for the chronic nature of the consequences inherent in recurrent disasters. For example, relief money based on

⁴¹ As of 2012, clusters are formally implemented in 27 countries, and this number is increasing (Humphries, 2012).

the immediate impact of a disaster provides little relief from the cumulative impact of recurrent disasters. Moreover, even the distribution of relief is subject to particular difficulty as it is hard to distinguish the immediate impact of a disaster when it is one in a sequence and follows short on the heels of previous events. Disaster recovery policies and plans need to recognise such difficulties (and differences) and learn to deal with them in an appropriate manner.

9.2.4 Bridging the gap between outside and inside perspectives: towards people's participation in disaster risk reduction and recovery

External perceptions have shaped Disaster Risk Reduction (DRR) initiatives and in their design there has only occasionally been any consideration of the experience of those most directly affected by small scale disasters. This is evident in the operational definitions of disasters such as those of the Centre for Research on the Epidemiology of Disasters, and the UNISDR (Chapter Eight, section 8.1). Such definitions tend to emphasize the magnitude of damage and concentrate on external aid and support, rather than on the impact of such events on the affected population (Shrestha & Gaillard, 2013). Studies show that the scale of damage is not an effective measure of the impact of a disaster on the population concerned. Measures of impact remain very much shaped by external perceptions and overlook the views of those directly impacted. Perspectives on disaster recovery frequently show a similar bias.

Previous chapters have reinforced the fact that current understanding of disaster recovery centres to an undue extent on issues of external intervention to support the affected population. This appears to have limited the capacity of governments and others to develop effective recovery policies or to better frame recovery interventions. Despite significant external efforts to support disaster and risk reduction, it is perhaps understandable that there has been limited success in either addressing or reducing disaster risk, or avoiding (or even slowing) the process of risk generation (UNISDR, 2015a).

Local communities are demonstrably knowledgeable about disasters and disaster recovery as they form a major part of their day-to-day experience. Local knowledge is recognized in practice and policy. This is confirmed by the rise of

community-based disaster risk reduction (CBDRR)⁴² programs aimed to strengthen preparedness and build resilience. These programs involve a process in which at-risk communities are actively engaged in the identification, analysis, treatment, monitoring and evaluation of disaster risks to reduce their vulnerability and enhance their capacities (Abarquez & Murshed, 2004). However, the utilization of people's knowledge has been largely limited to goals that are important in the perception of outsiders and it is these perceptions that shape the concepts and ideas integrated into CBDRR programs. This current thesis has demonstrated that insiders' concerns are different, and at times in marked contrast to those of outsiders. The primary factors which shape outsiders' perspectives on disaster are at odds with the severity of the impact of a disaster on the affected population, and deflect focus from the impact of a disaster on those households and communities directly concerned. This is equally true in understanding of the recovery process. As demonstrated, from an insider's perspective the recovery process reflects the day-to-day struggle both with respect to their pre-disaster situation and their post emergency conditions. The outsider, on the other hand, often tends to relate recovery solely to the emergency situation. The result is a disproportionate focus on external interventions to meet short-term needs, rather than longer-term recovery. Reliance solely on outsiders' perceptions to shape the disaster response and recovery interventions is dangerously misleading.

Whose perspective matters? The affected populations (and at-risk communities) who directly experience disasters are the key actors in disaster risk reduction. Their perspectives are based on their own knowledge which is an enormous resource gained through experience and innovation, tested and refined by multiple personal trials (Chambers, 1983, 1995, 2006). The affected people's perspectives, therefore, are undoubtedly valuable and should occupy centre stage. Their knowledge should be used to better understand concepts and processes related to disasters to effectively address and reduce risk, and support appropriate aid for recovery. Provision of effective relief and support to an affected population may reasonably be argued as impossible without greater participation of the people directly concerned both in knowledge building and practice.

⁴² Also known as Community-based Disaster Risk Management Projects (CBDRM)

One of the key findings of this thesis is the need to include local people in the production of knowledge on disaster and disaster recovery. This could help bridge the gap between outsider and insider perspectives and support more effective interventions for disaster risk reduction and recovery. This would allow those who directly experience disaster to be involved in knowledge production and in participatory approaches by making „people“ central to policies and actions that directly affect them and over which they have to date, had only limited control or influence (Chambers, 1983, 1995; Cooke & Kothari, 2001). This could primarily be achieved through the use of participatory tools in research (in both academia and practice). The visual and interactive aspects of participatory activities permit the involvement of a wide range of people, including those with limited understanding of economic or scientific concepts as well as those with low levels of formal education, who are not numerate, and may be illiterate (Le De, Gaillard, & Friesen, 2014). Participatory methods may also be used to help quantify qualitative aspects including perceptions and values (Le De, Gaillard, & Friesen, 2015). This could help equip local populations with the tools and information that allow them to debate with local experts and decision-makers on their needs and priorities during recovery (Chambers, 2003). This would also help stakeholders better understand disasters and help them better identify the needs of those impacted. This would equally foster dialogue between local communities and others as to how best to design recovery policies and practices. The involvement of local people in the production of knowledge could potentially lead to more informed decision-making and more sustainable solutions (Collins & Evans, 2008). This involvement could be done using ethnographic approaches for data collection in disaster research. Ethnography allows people’s voices to be heard (see, for example, Hammersley & Atkinson, 1995; Emerson, 2001; and Maso, 2001) by allowing space for them to share their views, raise issues and concerns, and so help shape knowledge of disasters. However, ethnography requires a lot of time in the field and is therefore often deemed unrealistic in practical terms.

9.3 Where to from here? Limitations of the Thesis

Time and resources were the main limitations in this study.

The thesis utilises an ethnographic approach to data collection. Such an approach has significant advantages for qualitative data collection (see, Chapter Three).

Basic characteristics of ethnographic research include participant observation, a focus on natural settings and the investigator's avoidance of any manipulation of phenomena under investigation (Hammersley & Atkinson, 1995; Emerson et al., 2001). The ideal conditions to deliver these three key-outcomes require that people's behaviour is studied in an everyday context, rather than under experimental conditions created by the researcher. This means that ideally the researcher should not impose or pre-determine the research subject matter, and that this should emerge from the people themselves and through the process adopted. This all takes time. Ethnographic research can extend for several months, even years. The researcher must attempt to participate, observe and understand in a new (often strange) social setting, while simultaneously, investigating the subject in question without imposing any direct research questions. Time constraints for this PhD research inevitably limited the full adoption of an ethnographic approach, although the principles of such an approach were fully observed. However, more time in the field might have strengthened the findings still further.

The researcher was able to spend a total of seven months in the field, this included the time used for scoping. All this was determined in large part by the rules around scholarship funding. Of the total time available, approximately a month in the field was used to interview appropriate officials and this required several expeditions within and outside the case study region. Only four months were available to live in the study communities themselves. This was further divided over the two study areas. Most communities in the study areas are widely dispersed and accessible only by foot over difficult terrain. A lot of time was spent commuting between these communities (though this did help better shape the researcher's understanding of the local context, the landscape and the almost overwhelming problems of communication in the region).

A major thread in this thesis is the perceptions of local residents regarding small-scale disasters, their experience of recovery in the aftermath of such disasters, and how these perceptions and experiences connect to their everyday lives. In tracing this thread, an ethnographic approach proved immensely helpful. It didn't restrict the researcher to any prior assumptions, but by co-relating the research focus with the multiple aspects and complexities of the social system in the study area,

helped develop new understanding. This linkage between disaster, recovery and the social system has commonly been neglected in research, but in this current study it was addressed as a major research theme and emerged as an important explanatory tool. In the course of the fieldwork, the researcher realized that the more she lived in the local communities the more insight she gained. This further helped enrich her understanding. Features and processes such as the unequal power dynamics could have been observed more fully if there had been more time. Time constraints necessitated a greater dependence on verbal data– „what is said“ by people, than observation - “how it is reflected” in day-to-day interactions and behaviour between different social groups. But undoubtedly, without an ethnographic approach, much would have been lost.

To address time limitations, the research included additional, multiple research methods to ensure the most rigorous and effective analysis. At the same time, significant attempts were made to ensure that these additional approaches complied with the essence of an ethnographic approach. Unstructured in-depth interviews were guided by loose themes, voice recorders were avoided as much as possible, and natural settings were used for interviews whenever possible. The use of these additional tools required the researcher to work longer hours. Being a Nepali proved advantageous in the face of time constraints. Prior to the field work I already had a general understanding of the socio-cultural, economic, political and administrative context of the country and of the study region. I understand and speak the Nepali language which is understood and spoken by most of the locals. Consequently, building a rapport with individuals and communities took less time and effort than if I had been a complete stranger.

Time and resources limited the number of study communities explored and limited the choice of study areas. As previously mentioned, the ideal would have been to select communities from at least two of the three recognised different ecological belts in Nepal. Arguably, the remote hills and mountain belts would have offered the best insight. However, travelling to the mountains is expensive - almost four times more expensive than travel to the hills (themselves expensive to reach). With the budget available it was impossible to include mountain communities. The recovery issues and concerns in these communities are probably similar to those in the hills, as the resource poor and remote parts of

these two geographical regions share many similarities in terms of food security, physical access and level of development. But, equally there are differences in the nature of the hazards, economic activities and culture between the hills and the mountains. Inclusion of mountain communities would certainly have added more breadth to the research. However, it is reasonable to argue that the findings presented, based on households and communities in the hills, have wide applicability across all remote communities that share similar socio-economic conditions, remoteness, and risk.

The research was limited to remote communities where physical access is difficult. This carries with it the fact that these communities have only limited (difficult) access to what many might view as basic services and infrastructure. At the same time, remoteness implies that most issues and events in these areas rarely attract the attention of the national media, and consequently engender less attention from central government authorities. As a result, these communities have little access to power. This is an important factor in disaster impact and recovery.

Other constraints intruded on the field work. Most families in the study area strictly practice Chhaupadi that discriminates against menstruating women (see, Chapter 4, section 4.2.1). As a woman, I wanted to avoid such victimization. This left me with few homestay choices as only a few local families take a liberal approach to deeply entrenched „rules“. Accommodation problems were exacerbated by widespread food scarcity in the area. A majority of households are so poor that they struggle to get two basic meals a day. There were no hotels available that offered meals. Markets were far away. I therefore, chose not to live in the poorest households. Having a guest would have been an additional burden on them. I did try to juggle an equitable relationship with all community members. I frequently visited other households and spent time with them and the multi-method research approach adopted necessarily involved intensive interaction with individuals and groups and allowed (indeed encouraged) the establishment of relatively neutral relationships with all households in the communities.

9.4 Moving Forward: Future Research Trajectories

As noted previously, this thesis is the first empirical research on small-scale disasters and on recovery following such disasters. The results are encouraging,

providing both academic insight, and practical support to local as well as external actors in disaster risk reduction and recovery. Also, as previously noted, these results are largely limited to the context of remote communities. In this, they neglect the large and growing urban populations in Nepal and in similar developing areas elsewhere. Only a few previous studies have found significant differences in the relationship between social context and the recovery process (see, for example, Miller & Simile, 1992; Simile, 1995) (whether the community in question was in a rural or urban area). The disproportionate impact of disasters on slums and squatters (predominantly found on the urban fringe) is a rising international concern. According to analysis by the UNISDR, slums in middle- and low-income countries experience the risk of disaster more acutely than those in poor rural areas (UNISDR, 2009). Similarly, other commentators identify slums as particularly vulnerable to disaster (UN-HABITAT, 2003; Firdaus, 2012; Gencer, 2013; UNISDR, 2015a). In slums, small-scale disasters are most probably a frequent phenomenon. However, the recovery process in slums has not been explored. It is unknown to what extent the knowledge garnered by this research or previous research provides an explanation of the recovery experience of affected slum populations. Although slums have similar levels of poverty, vulnerability and marginalization as poverty stricken remote (rural) populations, their characteristics, particularly in terms of access to resources is very different. Slums may well have comparatively better access to economic opportunities, concerned authorities, media and modern technology and state managed services (such as, fire services). On the other hand, social relationships based on kinship could be (and most probably are) less strong than in rural communities, although other strong community networks and mechanisms may exist. Studies of slums and squatters recognize a unique set of challenges including crime and health (see, UN-HABITAT, 2003; Gencer, 2013). These could well pose additional problems during and after a disaster. In effect, although yet unknown, the factors that operate in the recovery process in slums and squatter camps could be different from those in remote rural communities, and the perspective of slum dwellers on small-scale disasters could be different as well.

To gain a broader understanding of the different issues surrounding small-scale disasters and the recovery process, future work should be extended to an urban

context with a particular focus on slums and squatters. The same methodological approach as used here could undoubtedly be replicated to good effect. This would help build a more complete picture of the disaster and the recovery process.

The findings presented in this thesis also suggest that poor people impacted by recurrent small landslides in the hills of Nepal are often obliged to squat illegally on river banks and in the forests where there is better access to roads, economic opportunities and the like. The findings also suggest that in this process these people are either exposed to new threats (such as flooding due to living on river banks), or contribute to the creation of new disaster risks (through, for example, deforestation.). The current thesis did not explore how these people adapt to their new environment or what happens when they are repeatedly impacted by new threats, and how similarly or differently they respond compared to when they were in their previous location and conditions. The implications of such changes demand exploration.

The thesis clearly shows that vulnerability and resilience are two different entities. An increase in resilience does not necessarily contribute to disaster risk reduction (or reduce vulnerability). There is, however, no doubt that any increase in resilience reduces the impact of a disaster on a population. However, it does not make them any less vulnerable to future hazards. Rather, the findings from the case studies demonstrate that in the context of recurrent disasters both vulnerability and resilience increase simultaneously. This finding is interesting and important, but appears limited to small-scale disasters where there is little or no effective external intervention. In small scale disasters, resilience is developed using solely a community's own knowledge and experience. However, not all small scale events fail to generate effective external intervention. The policies of many countries (including Nepal) include the potential active involvement of central authorities to build resilience and reduce disaster risk. Examining the recovery process in such specific cases where external assistance is provided, could offer more insight. However, it seems unlikely that such assistance would alter the co-relation found between vulnerability and resilience, because the types of interventions used to build resilience are usually limited to short-term, technocratic responses (such as, early warning systems, education and preparedness training to enhance the local capacity to mitigate and cope with

disasters) and equally emphasise capacity building among the affected population to reduce disaster impacts, they largely fail to address the failure of social processes and the systemic failures which so often underlie vulnerability.

A closer look at communities which have received external support for resilience building and other disaster risk reduction works is necessary and important. Researchers such as Mitchell and Harris (2012) assert that resilience at its heart places emphasis on individual, institutional and system wide capacities and that this exposes an inability to address those underlying causes and weaknesses (such as a lack of power) that have an impact on overall functioning. Future work should, therefore, focus on examining the contribution of any programs directed towards the reduction of disaster risk. This would allow a better conceptualization of resilience within a disaster risk reduction framework, and help better shape risk reduction policies and actions.

9.5 Conclusion

As demonstrated above, this thesis makes an original contribution to knowledge both in its focus on small-scale recurrent disasters and the recovery process, and in its determination to allow the people impacted, those most directly concerned, to have their voices heard. The ethnographic approach adopted was fundamental to this objective. At the same time a focus on small, remote, Nepalese communities offered an ideal setting to explore the process of disaster recovery. The findings presented are demonstrably limited to the place and time in which they were generated. Yet there is no reason why these findings might not be replicated elsewhere since the fundamental processes identified are almost universal at least in similar economic and social contexts. The attempt made to set these findings within the global, academic literature is important. Equally important, is the remaining need to build and test the findings presented in different social contexts. Several potential priority areas have been suggested. Above all, however, there is an urgent need for government authorities and international aid organisations to reassess their policies and plans in the light of the findings presented if they are to strengthen their capacity to respond to disasters, better address their impact and ultimately, reduce long-term disaster risks.

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Appendix 1

Themes for semi-structured interviews

*There are a total of seven sets of themes designed for different stakeholders. Some of the typical ones are given below:

A Governmental authorities

Interview themes for national and regional level government managers

1. Criteria, nature and character of a disaster as endorsed and understood at policy level, or as used in government initiated disaster management related schemes and projects
2. Government's response to disaster
3. Perception of disaster recovery
4. Existing national and regional level policies, strategies and mechanisms on disaster recovery
5. Key challenges to disaster recovery
6. Perception, remarks and understanding of small-scale disasters

B Non-governmental authorities

Interview themes for national level NGO managers

1. Criteria, nature and character of a disaster
2. Conditions of disaster response
3. Factors of prioritization for disasters
4. Perception of disaster recovery
5. Existing schemes and projects associated with disaster recovery
6. Key challenges to disaster recovery
7. Role of affected communities or the degree of their involvement in recovery initiatives
8. Perception, remarks and understanding of small-scale disasters

Appendix 2

Themes for in-depth interviews

Interview themes for community members

1. Family background
2. Issues of livelihood
3. Disaster as understood by the community
4. Previous disaster experience
5. Recovery experience
6. Role of affected community in disaster recovery
7. Interpretation/ Reflection about the roles of VDC, CDO and other concerned agencies in disaster recovery
8. Current position of the community/household in terms of recovery
9. Community's perception of their resilience to future hazards
10. Challenges associated with recovery
11. Disaster recovery as understood by the communities
12. Understanding of small-scale disasters

Appendix 3

Participant Information sheet

*There are a total of ten sets of themes designed for different stakeholders. Some of the typical ones are given below:

A VDC Secretary

Title: Exploring recovery from small-scale disasters in Remote Nepal

My name is Sushma Shrestha. I am a student at The University of Auckland, enrolled in a Doctor of Philosophy (PhD) Degree in the School of Environment. I am conducting research to understand the recovery process in the aftermath of small-scale disasters. My case study sites are Ratanpur VDC and Nigali VDC in Kailali District, and Gokuleshwor VDC in Baitadi District of the Far Western Region.

The thesis will pioneer the exploration of small-scale disasters and the recovery process using Nepal as an example. The focus is on the recovery process as experienced by those directly affected in poor, marginalized, rural communities. The methodology involves an ethnographic approach using semi-structured interviews and participatory observation. The study also involves interviews with key officials of concerned agencies at a national, regional and local level to explore issues related to disaster response and to obtain their views on small disastrous events. These interviews are designed to provide contextual material to evaluate against the direct experience of disaster affected households. Information gathered from this study will be used to complete my PhD degree and for future possible publications.

I would appreciate the opportunity to interview you to obtain your insight and knowledge of disaster response and recovery in small-scale disasters. You have every right to refuse to be interviewed. I will need approximately two hours of your time for the interview. I would like to audiotape the interview to facilitate note-taking, but I will only do this with your permission and at your request the recorder may be turned off at any time. After the interview, I will transcribe the recording. If you wish to read and edit the transcript of your recording please provide me with an email address and I will send the transcript to you. Your anonymity is important and will be maintained. With your approval, however, your job title may be used. Though your name will not be mentioned in my research or any future publications, use of your job title may mean that you can be identified.

I would also like to interview some of your staff whose expertise, knowledge and experience could be valuable in the research. Your employee's anonymity is also important and will be maintained. With their approval, however, their job title may be used. Though their name will not be mentioned in my research or

any future publications, use of their job title may mean that they can be identified.

I would like to start my research by hosting a semi-formal introductory meeting with all concerned stakeholders (the secretary of the VDC, concerned staff of VDC, village leaders, school principals, field staff of NRCS, field staff of local health post and field level project staff of UNDP/Mission East/Mercy Corps) to share the purpose of my visit and the research topic, and to respond to any questions. If the stakeholders agree, I will then invite potential participants in the communities to take part in the research.

This is an ethnographic study, so I will be living here in the community for a period of around three weeks. During that period I will also need to interview members of your community. However, I will not be making the initial approach to potential participants. Instead, the participants of the introductory meeting (including you) will be requested to approach and invite potential participants in the community to take part. Only then I will approach the potential community participants. With community members unstructured conversations will be carried-out at a household level and the household head will be interviewed, unless he/she is absent for some reasons. Talking with individual village householders will extend over 6 weeks and total on average approximately 4 hours over this time period. The participation of community members is voluntary, and they will be asked for their oral or written consent, whichever is feasible. Your community member's anonymity is important and will be maintained in my research and possible future publications.

You, your staff and the community members can withdraw information at any time up to three months after the interview. You, your staff and the community members also have the right to withdraw from the interview at any time without giving reasons. All information obtained from the interview process will be kept in a secure place for six years after the research is completed. It will then be destroyed. Transcribed information on hard copies will be shredded. Soft copies of all recordings will be deleted from the hard drives, cds, and flash drives.

I must request an assurance from you that participation or non-participation from staff and community members will not affect their employment or social relationship. This assurance can be given by signing the attached consent form. Should you be interested in the results of this research, a summary will be made available to you.

Thank you very much for your time and help in making this study possible. If you have any queries or wish to know more please phone me on +9779849360333. You can also write to me at the address given above, or email me at sshr503@aucklanduni.ac.nz, or sushma_115@hotmail.com, or contact my supervisors at the address below:

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Secretary, Nepal Red Cross Society- Kailali District Chapter
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For any queries regarding ethical concerns please contact:
The Chair, The University of Auckland Human Participants Ethics Committee,
The University of Auckland, Research Office, Office of the Vice Chancellor,
Private Bag92019, Auckland. Tel. +649 3737599 ext. 87830

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN
PARTICIPANTS ETHICS COMMITTEE ON 16 AUGUST 2013 FOR (3)
YEARS ON 16 AUGUST 2016, REFERENCE NUMBER 9661

B Government Manager

Title: Exploring recovery from small-scale disasters in Remote Nepal

My name is Sushma Shrestha. I am a student at The University of Auckland, enrolled in a Doctor of Philosophy (PhD) Degree in the School of Environment. I am conducting research to understand the recovery process in the aftermath of small-scale disasters. My case study sites are Ratanpur VDC and Nigali VDC in Kailali District, and Gokuleshwor VDC in Baitadi District of the Far Western Region.

The thesis will pioneer the exploration of small-scale disasters and the recovery process using Nepal as an example. The focus is on the recovery process as experienced by those directly affected in poor, marginalized, rural communities. The methodology involves learning to understand through living in affected communities and observing people's response to small-scale disasters and interviewing them about these. The study also involves interviews with key officials of concerned agencies at a national, regional and local level to explore issues related to disaster response and to obtain their views on small disastrous events. These interviews are designed to provide contextual material to evaluate against the direct experience of disaster affected households. Information gathered from this study will be used to complete my PhD degree and for future possible publications.

I would appreciate the opportunity to interview you to obtain your insight and knowledge of disaster response and recovery in small-scale disasters. You have every right to refuse to be interviewed. I will need approximately one hour of your time for the interview. I would like to audiotape the interview to facilitate note-taking, but this will only be done with your permission and at your request the recorder may be turned off at any time. After the interview, I will transcribe the recording and give you the opportunity to read and edit your transcript if you wish. Your anonymity is important and will be maintained. With your approval, however, your job title may be used. Though your name will not be mentioned in my research or any future publications, use of your job title may mean that you can be identified.

I would also like to interview some of your staff whose expertise, knowledge and experience could be valuable for the research. In order to do so, I must request your assurance that their participation or non-participation in this study will not affect their employment relationship with you. This assurance can be given by signing the attached consent form.

Your employee's anonymity is also important and will be maintained. With their approval, however, their job title may be used. Though their name will not be mentioned in my research or any future publications, use of their job title may mean that they can be identified.

You and your staff can withdraw information at any time up to three months after the interview. You and your staff also have the right to withdraw from the interview at any time without giving reasons. All information obtained from the

interview process will be kept in a secure place for six years after the research is completed. It will then be destroyed. Transcribed information on hard copies will be shredded. Soft copies of all recordings will be deleted from the hard drives, cds, and flash drives. Should you be interested in the results of this research, a summary will be made available to you.

Thank you very much for your time and help in making this study possible. If you have any queries or wish to know more please phone me on +9779849360333. You can also write to me at the address given above, or email me at sshr503@aucklanduni.ac.nz, or sushma_115@hotmail.com, or contact my supervisors at the address below:

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For any queries regarding ethical concerns please contact:

The Chair, The University of Auckland Human Participants Ethics Committee,
The University of Auckland, Research Office, Office of the Vice Chancellor,
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APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE ON 16 AUGUST 2013 FOR (3) YEARS ON 16 AUGUST 2016, REFERENCE NUMBER 9661

Appendix 4 Consent Forms

*There are a total of nine sets of themes designed for different stakeholders. Some of the typical ones are given below:

A Government Managers as Participant

THE CONSENT FORM WILL BE HELD FOR A PERIOD OF SIX YEARS

Title: Exploring recovery from small-scale disasters in Remote Nepal

Researcher: Sushma Shrestha

- I have read and understood the purpose of this research project.
- I have had an opportunity to ask questions and have them answered.
- I understand that I may withdraw myself and any information traceable to me from the interview or any time within three months from the date of the interview.
- I understand that if I do decide to withdraw from this study, I will not have to provide a reason, and if I choose, any information pertaining to myself will be destroyed.
- I understand that if I wish I will receive a summary of the research findings upon completion of this study and that the information given will be kept in a secure place for a period of six years after the research is completed, after which it will be destroyed.
- I agree to take part in this research.
- I agree/do not agree for the interview to be audio taped.
- I consent/do not consent to my name 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.
- I consent/do not consent to my job title being used in the research. I do/do not request a copy of the interview transcript.
- I would/would not like a summary of the thesis findings.

Signed: _____

Name: _____

(Please use capital letters)

Date: _____

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B NGO Manager

THE CONSENT FORM WILL BE HELD FOR A PERIOD OF SIX YEARS

Title: Exploring recovery from small-scale disasters in Remote Nepal

Researcher: Sushma Shrestha

- I have read and understood an explanation of this research project.
- I have had an opportunity to ask questions and have them answered.
- I understand that my staff will receive a summary of the research findings if desired.
- I understand that interviews are expected to take approximately 1 hour of my staff's time.
- Also, I understand that if I wish I will receive a summary of the research findings upon the completion of this study, and that the information given will be kept in a secure place for a period of six years after the research is completed, after which it will be destroyed.
- My staff's participation in this research will be voluntary.
- I permit my staff to take part in this study during work hours.
- Participation or non-participation in this research will not affect my relationship with my staff or their employment status.
- I would/would not like a summary of the thesis findings.

Signed: _____

Name: _____

(Please use capital letters)

Date: _____

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE ON 16 AUGUST 2013 FOR (3) YEARS ON 16 AUGUST 2016, REFERENCE NUMBER 9661

Appendix 5

The caste system in Nepal

Höfer (1979) presents a classification of the socio-cultural typology of the people of Nepal, a classification which, because of the population's multiple origins, he describes as necessarily „largely schematic“ (Figure 20).

Figure 20: The Peoples of Nepal - A Schematic View

High Mountains	Tibetanids (or Bhotia): ethnic groups of Tibetan linguistic and cultural affiliation: Sherpa (Syarpa), the people of Dolpo, Manang etc.		Linguistically: Sino-Tibetan (Tibeto-Burmese)	
Midland foothills	Linguistically: Indo-Aryan	III. A. Ethnic groups: 1. Tibetanoids: Gurung, Tamang, Thakali etc. 2. Kirati: Limbu, Rai, Sunwar 3. Maar, Hayu 4. Chepang, Kusunda, Raji (Raute) etc. B. Newar: intra-ethnic caste hierarchy in the Kathmandu Valley		Individual Languages
Mahabharat Hills Inner Terai		II. A. „Parbatiya“ Nepali speakers with own caste hierarchy: Brahmin, Thakuri, Chetri etc., Untouchables like Kami, Sarki, Damai etc. B. Hill Muslim (Curaute), Hill Newar- Nepali speakers		
Terai (Plains)		IV. „Awaliya“: linguistically (mostly assimilated) Nepali and North Indian dialects Tharu, Darai, Danuwar, Kumal, Majhi V. Terai population Linguistically: North Indian dialects Intra-regional caste hierarchy: Maithali Brahmin, Rajput etc. Muslim		

Source: Höfer (1979)

The Caste System⁴³

The caste system (Figure 20) has impacted and continues to impact on all aspects of people's lives. The system is the traditional basis of social stratification and organises different socio cultural groups, their castes and ethnicity into their own hierarchies. One's position in this hierarchy determines one's status, social role, employment options, and potential social interrelationships, therefore determines one's access to various resources—a key element in disaster recovery. The caste system has led to inequalities and

⁴³ References: Gurung (2005) and Höfer (1979)

discrimination. In Nepal, it was legally enshrined until 1963. The Muluki Ain⁴⁴ of 1854 provided a written version of a social code based on a system practiced for centuries (Gurung, 2005). It identifies the legal role and responsibilities of the different caste groups, and the extent and nature of the restrictions between members of different castes. To cross these limits was a crime.

The Muluki Ain of 1854 remained legally binding until 1963, when a revised code ended legal discrimination based on caste, creed, or gender, granted the right to divorce, permitted inter-caste marriage, and abolished the laws that had sanctioned untouchability (explained in the following paragraphs). All people were declared equal under the law. Although legally abolished, caste based discrimination does, however, remain widely observed and this is particularly pronounced in rural areas.

Castes and their respective hierarchies as existed when the Muluki Ain was promulgated in 1854, are identified in Table 1.

Table 9: The Caste Hierarchy

Hierarchy (A-highest; E- lowest)	Caste groups
A	Wearers of holy cord (Caste)
B	Non-ensalvable alcohol-drinkers (Ethnic)
C	Enslavable alcohol-drinkers (Ethnic)
D	Impure, but touchable castes (Ethnic, other caste and outsiders)
E	Impure and untouchable castes (caste)

Source: Gurung (2005)

The social code set-out in the Muluki Ain was based on the Varna⁴⁵ of the classical Vedic model⁴⁶: the *Brahmins* (priests, teachers and preachers); the *Kshatriyas* (kings, governors, warriors and soldiers); the *Vaishyas* (cattle herders, agriculturists, businessmen, artisans and merchants); and the *Shudras* (labourers and service workers).

Prior to the unification of the country in the 18th Century, the caste system was found among only the Parbatiya, the Newar, and Terai people. After unification, various indigenous tribes came under national rule. The Muluki Ain had to accommodate these groups within the one hierarchy and to integrate them with the three historically and regionally autonomous caste hierarchies already in place (Table 10).

⁴⁴ The *Muluki Ain* is the criminal code of the government of Nepal. It deals with criminal offences and penalty procedures.

⁴⁵ Varna is the term used for the four broad ranks into which traditional Hindu society is divided.

⁴⁶ Vedic model based on the Vedas, the sacred scriptures of Hinduism regarded as the key foundation of Hinduism and its associated traditions.

Table 10: The Integrated Caste and Ethnic Groups System established by the Muluki Ain

E= ethnic group

*=the position of the social group within a caste group is not precisely defined

Caste groups	Caste and (or) ethnic groups	Level of purity
Wearers of holy cord	Upadhyaya Brahmin	Caste category I: pure castes chokho jat or „water-acceptable castes (pani chalne jat)
	Rajput (Thakuri) (“worrier”)	
	Jaisi Brahmin	
	Chetri (Kshatri) (“worrier”)	
	Dew Bhaju (Newar Brahmin) E	
	Indian Brahmin	
	Ascetis sects (Sanyasi etc.)	
	“Lower” Jaisi	
Non-enslavable alcohol-drinkers	Magar *E	Caste category II: impure castes or water-unacceptable castes „pani nachalne jat“
	Gurung *E	
	Sunwar *E	
	Some other Newar castes *E	
Enslavable alcohol-drinkers	Bhote *E (Tibetanids and some Tibenoids)	
	Chepang *E	
	Kumal *(potters)	
	Hayu *E	
	Tharu *E	
	Gharti * (decendents of freed slave)	
Impure, but touchable castes	Kasai (Newar butchers) E	
	Kusle (Newar musicians) E	
	Hindu Dhobi (Newar washer men) E	
	Kulu (Newar tanners) E	
	Musulman (Muslims) *	
	Mlecch * (European) or Chrestain	
Impure and untouchable castes	Kami (blacksmiths); Sarki (tanners, shoemakers)	
	Kadara (stemming from uniiions between Kami and Sarki)	
	Damai (tailors and musicians)	
	Gaine (minstrels)	
	Badi (musicians)	
	Pore (Newar skinnners and fishermen) E	
	Cyame (Newar scavengers) E	

Source: Höfer (1979)

One basic feature of the system is the division of people into pure and impure groups (Tables 1 and 2). The status of each person is linked to the amount of purity they possess. Purity is gained though inheritance, but it may be changed either though the receipt of certain foods or other items from a person of an impure or less pure group, by eating of certain kinds of meat, drinking alcohol, or by physical contact (sex, marriage with a member of a less pure or impure person). It may also be changed by physical contact with a member of an untouchable group or though contact with bodily excretions such as occur at menstruation, or by touching a female during menstruation or within certain

days after they have given birth. Brahmins are identified as the most pure and are not permitted to consume alcohol or meat.

Purity may also be changed simply by contact with a less pure person. For example, category I (pure castes) may not accept water from those in category II (impure castes); hence the latter are labelled as “water-unacceptable”. If this rule is broken then the concerned member of the pure caste becomes temporarily impure with a corresponding drop in status resulting either in a loss of caste membership, or at a minimum, being subject to restrictions. For instance, a member of an alcohol drinking caste may regularly consume alcohol and pork. If, however, alcohol and pork are consumed by those belonging to the wearers of the holy cord (Table 10), then the member concerned permanently loses their caste status. Certain offences could result in members of the enslavable castes being punished by enslavement. Impure castes (D and E) are also enslavable, although not explicitly described in these terms.

Caste D (impure, but touchable castes „Choi chito halnu naparne“) and E (impure and untouchable castes „Choi chito halnu parne“) are both water-unacceptable castes. Water from them is not acceptable to members of pure caste groups. Category D and E are, however, different. If someone in pure caste comes into contact with a person in category E (impure and „untouchable“ caste) they are considered as temporarily polluted and should go through a process of purification⁴⁷. If this is neglected, they remain impure. The person polluted has to pay a fine to regain purity. Whereas, if a member of caste D contacts a member of a pure caste, however, the person from the higher caste is not required to go through a purification process. Members of caste group E (impure and untouchable group) are also termed „Untouchables“.

The Untouchables

In recent decades, disadvantaged and marginalized groups have emerged as a focus in Nepalese development and political discourse. This has heightened debate on lower castes and associated ethnic groups, particularly the Untouchables. In this thesis, terms such as „Janajati“ are used to refer to ethnicity and „Dalit“ for untouchable castes. The word Dalit originates from India. Both Janajati and Dalit, are not terms identified in the Muluki Ain in which the former are described as Matwali (alcohol-drinkers) and the latter as Untouchables.

Caste and ethnicity are components of a complex system, and there is in particular, confusion about the origins of the Dalit were because the term, as argued by Gurung (2005) originated from the Vedic model and does not apply outside the caste system. In Nepal, however, the water-unacceptable (caste II in Table 2) include two caste groups (D and E) and D in turn includes ethnic groups, not only castes. As a result, different organizations have identified a different number of social groups within the Dalits. For example, the Dalit Bikash Samiti (Dalit Development Committee) lists 23 social groups as Dalit. Of these, only 15 are identified as untouchables. Whereas, in the Dalit Sewa Sangha (Bikas Partika, 9, 19) 2001) 54 groups are identified including 7 ethnic

⁴⁷ Purification process: A person (from the pure caste groups) touched by a member of the untouchable caste sprinkles himself with water which has been brought into contact with gold, which is held to the „purest“ of all metals.

and 4 Newar touchable groups (as cited in Gurung, 2005). Different government agencies have identified a range of different groups and combinations of groups. In short, there remains no one accepted definition or identification of the Dalits, but the term is commonly used to refer to those social groups categorized in the Muluki Ain as Untouchables.

In traditional Nepalese society, discrimination against Dalits took different forms. They were usually prohibited from entering the house of a person of superior social status. If a member of an untouchable caste knowingly entered the ground floor of a house where someone of a pure caste was about to prepare a meal, the house had to be purified. When the Muluki Ain was still legally enforceable, the Untouchable would, be fined and liable to pay for whatever had been touched (Höfer, 1979). Hofer again says that saliva or water, or simply bodily contact could be viewed as vehicles of impurity. As explained earlier, if a person from a higher caste comes in contact with a member of an untouchable caste then the person from the higher caste has to go through a process of purification.

Dalits were not allowed to practice Hindu rituals, or observe its norms and values in the same manner as other castes. They were usually not allowed to enter into temples where other castes performed their rituals. They were also denied entry into public places regarded as holy. Food and milk, if touched by an untouchable person, were considered impure, so working in, or often merely entering teashops, food factories, dairy farms, and milk collection centers was denied. In consequence, the Dalits were limited to specific kinds of work that were considered low status, including skinning animals, tailoring, shoe making, and fishing. Farming was also not considered appropriate, and even today, many untouchable are landless.

Formerly, it was common for Dalits to ask higher caste people for material goods, described as *riti magne*, which translates as asking, begging, requesting, or soliciting from higher caste people according to „tradition“ (*riti*) (Cameron, 2007). Such requests were a common form of patterned interaction between people whose families and lineages had been connected for generations. The Dalit used to visit the higher caste (usually a wealthier landholder’s family home) to request basic items such as rice, wheat, corn, and spices, even cigarettes, tea, and sugar, or a cash loan. Such practices served to strengthen the economic, social, and political dominance of the higher caste. These discriminatory practices, beliefs and traditions, however, also ensured that the Dalits had little autonomy and were left socially dominated and powerless.

Despite the abolition of the Muluki Ain 1854, caste based practices can still be widely observed across Nepal. In rural and remote areas discriminatory practices against Dalits remain common-place. A study on the status of Untouchables, conducted in 1993, by Save the Children found that 84% of respondents reported experience of caste-based discrimination. This included not being allowed to take drinking water from taps used by members of higher castes, not being allowed inside hotels, restaurants, shops or high caste Nepali homes, not being allowed inside temples, not being allowed to sit or eat with high caste people at social events and being denied jobs, especially higher-level

managerial positions, even when qualified for them (Cos, 1994; Murshed & Gates, 2005). In modern Nepal there are numerous regulations, policies and acts aimed to ensure equal opportunities for the Dalits. There are also numerous national and international non-governmental organizations involved in efforts to socially empower the Dalits. Change however, is slow and discrimination persists.

The deeply rooted caste system and its continued impact have led to a class divides which remains apparent. Those discriminated against are commonly significantly worse off both socially and economically than those of higher caste. This has created and maintains huge inequalities in income, land ownership (United Nations Development Programme, 2004) and socio-economic opportunity (Central Bureau of Statistics, 2001; UNDP, 2004, 2011; Bennett, 2005). Bennett (2005) found the incidence of poverty among Dalits almost 50 percent more than for the population as a whole. While 88 percent of Brahmins, Chhetris and Newars have attended schools, 50 percent of Dalits have never been to school. Similarly, over the period 1985-2002, 70-90 percent of civil service positions were occupied by the Brahmins and the Chhetris (Benett, 2005). According to the Agriculture Census 2002 land ownership continues to exhibit caste and ethnic disparities. Most Dalits remain landless (UNDP, 2004).