

Reproducing Vulnerability Through Climate Change Adaptation? Policy Processes, Local Power Relations and Food Insecurity in North-Western Nepal

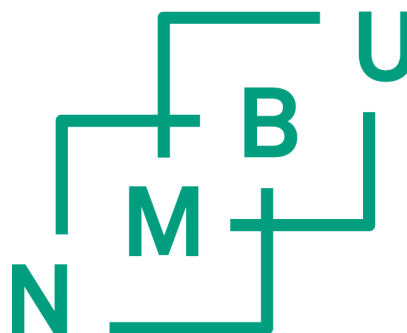
Reproduksjon av sårbarhet gjennom klimatilpasning?
Policy-prosesser, lokale maktreasjoner og matusikkerhet i det nordvestlige
Nepal.

Philosophiae Doctor (PhD) Thesis

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2. Nagoda, S. (submitted). 'Rethinking food aid in a chronic food-insecure region –effects of food aid on local power relations and vulnerability patterns in northwestern Nepal'. Submitted 02-01-2015 to Development Policy Review.
3. Nagoda, S. (2015). 'New discourses but same old development approaches? Climate change adaptation policies, chronic food insecurity and development interventions in northwestern Nepal'. Global Environmental Changes, Available online 19 September 2015.
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4. Nagoda, S. and Nightingale, A. (forthcoming). 'Producing Vulnerability in Climate Change Adaptation Planning: how vulnerable households are marginalised within participatory food security programmes' (working title) (Manuscript).

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Summary in English

This dissertation examines the role of politics in driving vulnerability in rural households in western Nepal. More specifically, based on empirical data collected through extensive fieldwork in four villages in the district of Humla and in Kathmandu, it investigates how power relations influence differential vulnerability patterns at the local level and how Climate Change Adaptation (CCA) policies are influenced by and influence on key drivers of vulnerability.

The study pays particular attention to how power relations expressed through socio-political processes of marginalization and inequality determine people's vulnerability and adaptive capacity by legitimizing access to resources, decision-making and policy processes. It contributes to the nascent research agenda of politics of adaptation by using Nepal's CCA policy as a case to demonstrate how dominant narratives travel across scales to shape policies that promote technocratic and apolitical adaptation approaches that fail to address the root causes of vulnerability. The study builds upon political approaches to adaptation, and it uses household food insecurity as an entry point to analyze the implications of CCA policies and programs on local vulnerability dynamics. The analysis is based on a contextual vulnerability approach and the study situates CCA within a broader development debate concerning how social, political, economic and environmental processes interact to shape vulnerability contexts.

The main findings are presented in four papers that are presented in the Part II of the thesis.

These findings include:

- Power relations as expressed through processes of marginalization, oppression, social status and subjectivity are particularly important in driving differential vulnerability patterns within the villages.
- Current CCA approaches attempt to build adaptive capacity are limited to address vulnerability outcomes with apolitical and technocratic measures rather than the social and power relations that contribute to the vulnerability context of the most vulnerable households.
- Climate change is only one among several stressors contributing to vulnerability, and since CCA itself forms part of the local vulnerability context it interacts with local social

structures and power relations and risks reinforcing, rather than addressing, pre-existing vulnerability patterns.

- Nepal's CCA policies (the NAPA and LAPA) are limited by, and do not go beyond, existing development approaches when addressing climate vulnerability.
- The knowledge of the most vulnerable households is marginalized in the CCA policy process while the narratives of local elites converge with district and national level interests to shape policy outcomes that in turn acts to reinforce structural inequity and marginalization process at local level.

The thesis makes a strong case of how current CCA approaches may contribute to the perpetuation of intra village inequality, and thus to reinforcing rather than challenging existing vulnerability patterns in the face of climate change. It argues that for CCA to build long-term adaptive capacity, it needs to go beyond current development paradigms and be re-conceptualised as a socio-political process that aims to transform the conditions currently contributing to vulnerability. These findings point to a need for CCA policies to create new policy spaces where the knowledge of the most vulnerable is given authority to contest social and power structures currently constraining their development. To achieve this, the thesis identifies a need to further enhance our understanding of how power relations influence which knowledge counts in policy formulation and how policies can be designed to better address the contextual vulnerability of the most vulnerable households.

Sammendrag på Norsk

Denne avhandlingen undersøker hvordan politikk påvirker sårbarhet på landsbygda i det vestlige Nepal. Mer presist baserer studien seg på empiriske data fra feltarbeid i fire landsbyer i Humla og i Kathmandu, og den tar den for seg hvordan maktrelasjoner påvirker lokale sårbarhetsmønstre og hvordan klimatilpasningspolicies blir påvirket av og påvirker de underliggende årsakene til sårbarhet.

Studien har særlig fokus på hvordan maktrelasjoner uttrykt gjennom sosiopolitiske marginaliseringsprosesser og ulikhet er bestemmende for folks sårbarhet og tilpasningskapasitet ved å legitimere tilgang til ressurser, beslutnings- og policyprosesser. Den er et bidrag til det ferske forskningsområdet tilpasningspolitikk, og den bruker Nepals klimatilpasningspolicy som et case for å vise hvordan dominerende fortellinger reiser på tvers av nivåer for å forme policyer som fremmer apolitiske tilnærminger til klimatilpasning, men som ikke adresserer de underliggende årsakene til sårbarhet. Studien bygger på politiske tilnærminger til klimatilpasning, og den benytter husholdningers matsikkerhet som en tilnærming for å vurdere konsekvensene av klimatilpasningspolicies og -prosjekter på lokal sårbarhetsdynamikk. Analysen baserer seg på en kontekstuell tilnærming til sårbarhet, og den plasserer klimatilpasning i en bredere utviklingsdebatt om hvordan ulike sosiale, politiske, økonomiske og miljømessige prosesser til sammen bidrar til å utforme folks sårbarhetskontekster.

Hovedresultatene presenteres i fire uavhengige artikler som allerede er publisert eller som skal publiseres, og omfatter følgende:

- Maktrelasjoner som uttrykkes gjennom marginaliseringsprosesser, undertrykking, sosial status og subjektivitet er særlig viktige i å skape ulike sårbarhetsmønstre mellom husholdningene innen hver landsby.
- Nåværende klimatilpasningspolicies forsøker å bygge tilpasningskapasitet ved å adressere konsekvensene av sårbarhet med apolitiske og teknokratiske tiltak i stedet for å se på maktrelasjonene som skaper sårbarhetskonteksten til de mest sårbare husholdningene.

- Klimaendringer er kun en av flere påvirkningsfaktorer som bidrar til sårbarhet, og siden klimatilpasningstiltak i seg selv utgjør en del av den husholdningenes sårbarhetskontekst og derigjennom påvirker sosiale maktforhold, er det en fare for at slike tiltak forsterker heller enn reduserer allerede eksisterende sårbarhetsmønstre.
- Nepals klimatilpasningspolicyer (NAPA og LAPA) er begrenset av, og går ikke lenger enn, allerede eksisterende utviklingspolicyer for å adressere sårbarhet til klimaendringer.
- Kunnskapen og interessene til de mest sårbare husholdningene marginaliseres i klimatilpasningsprosessene, mens interessene til de lokale elitene i stor grad sammenfaller med sterke politiske interesser på distrikts og nasjonalt nivå og fører til policyer som bidrar til å forsterke ulikheter og marginalisering av de mest sårbare husholdningene på lokalt nivå.

Avhandlingen viser hvordan nåværende klimatilpasningstiltak kan bidra til å institusjonalisere og fordype ulikheter internt i landsbyene og dermed også til å forsterke, i stedet for å redusere, eksisterende sårbarhet til klimaendringer. Forfatteren framholder at dersom klimatilpasningstiltak skal bidra til å bygge langsiktig tilpasningskapasitet, så må klimatilpasning i større grad utfordre eksisterende utviklingsparadigmer og forstås som en sosiopolitisk prosess som skal omdanne de bakenforliggende faktorene som fører til lokal sårbarhet. Resultatene understreker behovet for at klimatilpasningspolicyer gir legitimitet til kunnskapen og interessene til de mest sårbare husholdningene, slik at disse kan utfordre de sosiale maktstrukturene som i dag begrenser deres utviklingsmuligheter. For å oppnå dette peker avhandlingen på behovet for å styrke vår forståelse for hvordan maktrelasjoner påvirker hvilken kunnskap som teller i policyutforming, og hvordan nye policyer kan bli bedre til å redusere den kontekstuelle sårbarheten til de mest marginaliserte husholdningene.

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List of abbreviations

ADS: Agriculture Development Strategy

CCA: Climate Change Adaptation

DDC: District Development Committee

DFID: Department for International Development

DFSN: District food security network

GoN: Government of Nepal

IPCC: Intergovernmental Panel on Climate Change

LAPA: Local Adaptation Plan of Action

MoAD: Nepal Ministry of Agricultural Development

MoE: Nepal Ministry of Environment

MoSTE: Nepal Ministry of Sciences, Technology and Environment

NAPA: National Adaptation Programme of Action

NGOs: Non-Governmental Organisation

NFC: Nepal Food Corporation

SLF: Sustainable Livelihood Framework

UNDP: United Nation Development programme

VDC: Village Development Committee

WFP: United Nations World Food Programme

Part I

Introduction chapter

1 OUTLINE OF THE STUDY

1.1 Stating the problem

This thesis examines the role of power relations in determining local vulnerability patterns, and how climate change adaptation (CCA) policy processes influence on and are influenced by, these relations. Using Nepal's CCA policy and its implications for household vulnerability in four villages in northwestern Nepal as a case, the study contributes to the emerging field of "the politics of adaptation" by investigating the influence of politics and power across scales on vulnerability and adaptive capacity. The research is driven by an interest in improving our approaches to building long-term adaptive capacity to multiple stressors, including climate change in poor farming households, by addressing the root causes of vulnerability.

Reducing vulnerability and building adaptive capacity are interconnected concepts at the heart of securing human development. However, reducing vulnerability has proved a difficult task, and development and humanitarian actors have for decades struggled to address its root causes (Eriksen et al., 2015a). Critics of development aid argue that development and humanitarian interventions tend to focus too much on technocratic and apolitical economic growth approaches, at the expense of identifying and addressing the conditions that create vulnerability in the first place (Eriksen et al., 2015a). The growing recognition that climate change is inevitable and likely to have unprecedented impacts on already vulnerable systems has brought CCA to the fore of the global policy agenda. At the same time, the increased attention and resources devoted to CCA have triggered expectations that it might represent a new opportunity to improve our approaches to reducing vulnerability and building long-term adaptive capacity (Pelling, 2011; Tanner and Allouche, 2012).

However, CCA policies and interventions are increasingly being criticised for focusing too narrowly on reducing the negative effects of the actual or projected impacts of climate change (O'Brien et al., 2007; Eriksen et al., 2015b). More specifically, researchers point to the tendency that CCA policies are dominated by a scientific framing of adaptation, where vulnerability is regarded as a linear outcome of climate change within a specific sector, and where the broader sociopolitical context that conditions vulnerability is ignored (O'Brien et

al., 2007; Ribot, 2010; Taylor, 2014; Eriksen et al., 2015a). Scholars argue that this framing of adaptation not only fails to address the root causes of vulnerability, but also runs the risk of reproducing the type of development currently contributing to vulnerability (Manuel-Navarrete, 2010; Eriksen et al., 2011; Pelling, 2011; Waghmore, 2012; Marino and Ribot, 2012).

A growing body of literature has brought attention to the need for more holistic approaches to vulnerability and adaptation. These sources maintain that vulnerability is dynamic and caused by multiple stressors, as a result of the interaction of social, economic, political and environmental processes of marginalisation (Marino and Ribot, 2012; Eriksen et al., 2005; O'Brien et al., 2007; Pelling, 2011; Taylor, 2014). Indeed, it has been shown that people are seldom vulnerable to climate change alone, and that different stressors may affect people's adaptive capacity differently (Ziervogel et al., 2006; Reid and Vogel, 2006; Pelling, 2011; McCubbin et al., 2015). For example, the changes caused by an economic reform process, a new education policy or developments in infrastructure may lead to enhanced adaptive capacity for some and increased vulnerability to climate change for others (Adger, 1999; Manuel-Navarrete, 2010).

Importantly, power relations have been identified as key drivers of differential vulnerability patterns at the local level, since they influence people's access to resources and decision-making processes, thus enhancing or hindering their capacity to adapt to stress in the long term (Adger and Kelly, 1999; McLaughlin and Dietz, 2008; Eriksen et al., 2011). This implies that in order to understand how CCA can address the root causes of vulnerability, there is a need to investigate how adaptation policies interact with the sociopolitical processes that define who has access to power and who is excluded. Such recognition lies at the very heart of the nascent academic agenda of the politics of adaptation and highlights the need for research to shed light on how CCA policy decisions are made and how the exercise of power define which knowledge counts within CCA processes, and whose interests they represent (Taylor, 2014; Eriksen et al., 2015b).

This thesis addresses this need by showing how social dynamics lead to differential levels of vulnerability between people and over time, and how these dynamics relate to societal processes of change, including national and international CCA and development policies. More specifically, it examines the influence of Nepal's CCA policy processes on differential

vulnerability patterns, paying particular attention to how intra-village power relations influence the mechanisms that determine how knowledge and narratives travel across scales to shape CCA policies. It then considers how the resulting CCA policies, in turn, affect the intra-village power relations that drive local vulnerability patterns.

Nepal's main CCA policies, the National Adaptation Programme of Action (NAPA) and the National Framework on Local Adaptation Plans for Action (LAPA), provide a relevant case for analysing how CCA policy processes interact with the power relations that shape differential vulnerability patterns at the household level. The NAPA and the LAPA were adopted in 2010, by means of what the government describes as bottom-up and participatory policy processes, with a central focus on social inclusion and local-level ownership (Ministry of Environment [MoE], 2010a; Government of Nepal, [GoN], 2011). However, although the policies have been criticised for favouring technocratic and apolitical approaches at the expense of responding to the drivers of vulnerability (Nightingale, 2015; Ojha et al., 2015; Nagoda, 2015), an important gap exists in the investigation of the political processes and dynamics that led to the framing of CCA policies in Nepal, and its implications for local vulnerability and adaptive capacity.

While Nepal is described as one of the most vulnerable countries to climate change due to its specific geographic and environmental situation (Jianchu et al., 2007; Chhetri and Pandey, 2009; MoE, 2010a; UNDP, 2013), it is also one of the poorest countries in the world (UNDP, 2011). Importantly, a large part of the population has been marginalised and excluded from development processes as a result of centuries of autocratic rule that lasted until 1990. After the 1990's, Nepal has experienced a long period of political instability including a 10-year civil war that ended in 2006. There have been no local elections since 1997 and the country lacks legitimate political and administrative structures at the local level (Gellner, 2014). Political marginalisation and social exclusion have been identified as the main barriers in the fight against poverty, and people's access to resources, livelihood options and decision-making processes are to a large extent defined by caste, class, ethnic group and gender identity (Bista, 1994; DFID and the World Bank, 2006; Khadka, 2009). Such contemporary and historic processes of marginalisation are strongly present in the region of Karnali (Bishop, 1990; Levine, 1987; Nightingale, 2005, 2006) and play important roles in shaping the vulnerability context of the four villages that constitute the study area for this thesis.

The district of Humla in the region of Karnali in northwestern Nepal is particularly appropriate as a research site for examining how policy processes, external interventions and local social dynamics interact. The remote and mountainous district is among the poorest and most food insecure districts in the country (DFSN, 2010; UNFCO, 2013), and many of its villages have been targeted by food security programmes over recent decades (Adhikari, 2008; Bishokarma, 2010). Humla is also considered to be highly vulnerable to climate change; and observations that heavier rainfall during the summer and less snow and rain during the winter are creating difficulties for farming and economic activities, have prompted aid agencies to scale up their efforts to enhance people's food security and adaptive capacity (Oxfam, 2009; MoE, 2010; WFP, 2012).

This study uses household food security as an empirical lens through which to observe manifestations of household-level vulnerability patterns. Research has shown that food security can be understood as both a cause of, and an outcome of, vulnerability (Bohle et al., 1994; Downing et al., 2003; Yaro, 2004). While all four villages in the study area are characterised as chronically food insecure (District Food Security Network [DFSN], 2010), and most villagers refer to their state of food insecurity when describing their vulnerability situation (own data), the degree of food insecurity varies greatly among households within each village. In addition, because food security is also a main concern of Nepal's CCA and national development policies (National Planning Commission, [NPC], 2010; MoE, 2010; Ministry of Agricultural Development of Nepal, [MoAD], 2014), using food security as an entry point for analysing vulnerability allows us to investigate the extent to which policy processes take the knowledge and interests of the most vulnerable households into account. It also allows us to examine the mechanisms through which certain knowledge is given priority in policy formulation and the effects of policies on differential vulnerability patterns at the local level. Finally, it makes it also possible to compare the extent to which different approaches are taken to address vulnerability in CCA and development policies.

This thesis makes a strong case for how CCA policy processes and interventions may contribute to the perpetuation of unequal power relations that produce local vulnerability patterns, even though their objective is to achieve the opposite. The study forms part of the nascent research agenda on the politics of adaptation, which argue that "adaptation is a socio-political process that mediates how individuals and collectives deal with multiple and

concurrent environmental and social changes” (Eriksen et al., 2015b: 1). It builds on political approaches to development that regard vulnerability and adaptive capacity as the results of negotiations and resistance embedded in power and social relations by various actors at the local, district, national and international level (Ribot, 2010; Pelling, 2011; Taylor, 2014; Eriksen et al., 2015b). It also leans on the work of social theorists such as Foucault and Giddens, who have argued that power is fundamental in shaping social structures (Giddens, 1984) and legitimising which knowledge is produced (Foucault, 1980, 1984), and how it shapes policy processes and their outcomes (Fergusson, 1994; Shore and Wright, 1997; Wedel et al., 2005).

By asking how CCA policies influence, and are influenced by local vulnerability patterns, this thesis places vulnerability at the centre of analysis and focuses on the conditions that create vulnerability, rather than on the outcomes of climate change. It is thus based on a contextual understanding of vulnerability (O’Brien et al., 2007) that situates CCA within a broader debate about how social, political and economic processes of development interact to shape vulnerability contexts. By investigating inherent limitations in current conceptualisations of CCA in the face of complex local vulnerability contexts, and how adaptation approaches are framed by prevailing development paradigms, this thesis contributes to bridge research on the politics of adaptation with development studies. As such, it is hoped that the study will form part of a broader theoretical discussion about how development processes create conditions for marginalisation and vulnerability and whether CCA offers an opportunity to transform rather than perpetuate these conditions. The next section presents the research objective and the main research questions that have guided the investigation.

1.2 Objective of the study

The main objective guiding this investigation is to examine the role of power relations in determining local vulnerability patterns and how CCA policy processes influence, and are influenced by, these relations.

To address this objective, the study responds to the four research questions below. These questions correspond to four papers, which are summarised in section 5 of the introduction chapter and presented in part II at the end of the thesis.

1. How do power and social relations influence local coping and adaptation strategies and differential vulnerability patterns between and within villages?
2. How are local power relations affected by food security interventions and what are the implications for people's adaptive capacity and long-term vulnerability to chronic food insecurity?
3. To what extent do CCA policies and the type of interventions they propose conceptualise and address social and power relations as drivers of a household's vulnerability, as compared with food security policies and programmes?
4. How do narratives travel through social and power relations and across scales to influence policy process, and what are the mechanisms by which the knowledge and the interests of the most vulnerable are marginalised in the CCA policy spaces?

Studying people, power and policy processes implies looking for theoretical and methodological choices that shed light on complex environmental, social and political processes. To do this, I have drawn on various disciplines, such as anthropology, political science and development studies to define the theoretical and methodological approaches that are presented in the following sections of this introduction chapter.

1.3 Thesis structure

This thesis comprises four scientific papers, and this introduction chapter that provides an integrated presentation of the theoretical and methodological approaches and the main findings of the thesis. The four papers, which are presented fully after the introduction chapter, and in part II of this dissertation are as follows:

1. Nagoda, S. and Eriksen, S. (2015). 'The role of local power relations in the vulnerability of households to climate change in Humla, Nepal'. In Inderberg, T.H., Eriksen, S.H., O'Brien, K.O. and Sygna L. (eds), *Climate change adaptation and development: Changing paradigms and practices*. London: Routledge, pp. 200-218.

2. Nagoda, S. (submitted). 'Rethinking food aid in a chronic food-insecure region –effects of food aid on local power relations and vulnerability patterns in northwestern Nepal'. Submitted 02-01-2015 to Development Policy Review.
3. Nagoda, S. (2015). 'New discourses but same old development approaches? Climate change adaptation policies, chronic food insecurity and development interventions in northwestern Nepal'. *Global Environmental Changes*, Available online 19 September 2015. <http://dx.doi.org/10.1016/j.gloenvcha.2015.08.014>
4. Nagoda, S. and Nightingale, A. (forthcoming). 'Producing Vulnerability in Climate Change Adaptation Planning: how vulnerable households are marginalised within participatory food security programmes' (working title) (Manuscript).

The introduction chapter is divided into the following sections: the outline of the study, the theoretical approach, a presentation of the research context in Nepal and the study site of Humla, the methodological approach, a short summary of each paper, and a concluding section that highlights the main contributions and implications of the findings for theory and policy.

2 THEORETICAL FRAMEWORK

Several key studies have shown that people's vulnerability to climate change is influenced by different interests and ideologies at national and international levels, as well as by complex social structures and power relations at the local level (Nustad, 2001; Leichenko and O'Brien, 2002; Nyborg et al., 2008; Eriksen and Lind, 2009; Manuel-Navarrete, 2010, 2012; Pelling, 2011; Tanner and Allouche, 2011; Taylor, 2014; Eriksen et al., 2015b).

Highlighting the fundamentally political character of the concepts of adaptation and vulnerability, these studies comprise an emerging field of research that focuses on the role of sociopolitical processes in shaping and defining vulnerability and adaptation policies, sometimes termed "the politics of adaptation".

This thesis aims to contribute to the understanding of the politics of adaptation by investigating how local power relations shape vulnerability, and how these relations link to national-level policy processes in Nepal. My approach is that our understanding of the concepts of vulnerability and adaptation, and how they relate to power dynamics, are interrelated and shaped by prevailing development paradigms. The thesis therefore builds on knowledge accumulated across academic disciplines that allows us to situate current CCA debates within a broader context of development theories. In the following paragraphs, I set out the theoretical framework I use to analyse the relationship between the concepts of vulnerability, adaptation and development, and how they are influenced by – and have an influence on – sociopolitical processes in four chronically food-insecure villages in northwestern Nepal.

In the first section of this chapter, I present the main theories that frame our current understanding of vulnerability to climate change. I pay particular attention to the way in which power and political processes gain gradually more attention as drivers of vulnerability, and how this is also increasingly reflected in policies. I then locate CCA within the development debate, showing how the prevailing development paradigms and discourses influence our understanding of the role of CCA in reducing vulnerability. In the third section, I highlight the main theoretical concepts and approaches that I employ when analysing the role of power relations in influencing policy processes and local-level vulnerability patterns. In the last section, I highlight the relationship between vulnerability

and food insecurity in poor farming villages, and describe how I use food security as an entry point for discussing and analysing vulnerability in this study.

2.1 From conceptualising vulnerability to addressing it

The way in which we conceptualise vulnerability and its causes influence on the way in which we choose to address vulnerability (O'Brien et al., 2004b; Smit and Wandel, 2006; Füssel and Klein, 2006). At the same time, the concept of vulnerability and how it can be understood and measured is subject to important debate (McLaughlin and Dietz, 2008; Kelly and Adger, 2000; Füssel and Klein, 2006). McLaughlin and Dietz (2008) distinguish between five different perspectives from which vulnerability can be understood and analysed. I use these five perspectives as a starting point for presenting the theoretical framework upon which I base my analysis of vulnerability in this thesis.

The first perspective is the **biophysical perspective**, which sees vulnerability as a direct or indirect consequence of the degradation of biophysical conditions that support human life, as described by Liverman (1990). Ever since CCA was introduced into the development debate in the 1990s, this perspective has represented the predominant view of vulnerability to climate change (Clark et al., 2000). It tends to see vulnerability as a linear outcome of climatic changes, and typically ignores the social and political causes of vulnerability. Although the biophysical perspective has been increasingly criticised for offering a simplistic and positivistic view of vulnerability that disguises its complexity and ignores its root causes, it is still very much present in current climate discourses and policies (Adger, 1996; Pelling, 2011; Taylor, 2014).

The second perspective on vulnerability is the **human ecological perspective**, which emphasises “environmental variation as a causal factor that could explain social change and vulnerability” (McLaughlin and Dietz, 2008: 101). This perspective is important in showing the diversity of livelihood strategies at the household and/or village level as responses to environmental changes (see, for example Ellis, 1998). However, this viewpoint, like the biophysical perspective, is often criticised for focusing too much on a technocratic approach to the problems associated with vulnerability (McLaughlin and Dietz, 2008). While recognising that climate change may have sociopolitical impacts, it falls short of

acknowledging that sociopolitical factors relations may also be drivers of vulnerability (Adger, 1996; Pelling, 2011).

The third perspective is a **political economy perspective** that can be traced back to Marx's work and describes vulnerability as a "class phenomenon" (Pelling, 2003, cited in McLaughlin and Dietz, 2008: 102). According to this perspective, unequal class relations lead to differential vulnerability patterns between groups of people. Sen's analysis of food entitlement (1981) was an important contribution to this line of thought, as it showed how differential access to resources affects the food security of the poorest, even when food is available. *Political economy* has provided valuable insights into the causes of vulnerability by linking the distribution of power with productive activities and trade, and their relations with institutions and governments. Watts and Bohle (1993), in their search for the causes of vulnerability, created a framework in which the interaction of three processes – political economy, human ecology and entitlement - defines the *space of vulnerability* (Watts and Bohle, 1993: 53). However, as with Sen's analysis of entitlement, this approach is criticised for not giving sufficient consideration to the agency of the people in influencing their vulnerability situation (Pelling, 2003). Notably, Tanner and Allouche (2012) have stressed the need for a new political economy for climate change and development in order to understand adaptation as "processes by which ideas, power and resources are conceptualised, negotiated and implemented by different groups at different scales" (Tanner and Allouche, 2012: 2).

The fourth perspective on vulnerability is what McLaughlin and Dietz (2008) term a **constructivist perspective**. It is often used in anthropology and highlights how social categories are created, negotiated and contested by different actors, who are influenced by historical context and influence the vulnerability patterns of people and groups (see, for example, Buttel, 1996; Tansey and O'Riordan, 1999). This perspective is useful for highlighting the importance of the agency and culture of people in shaping vulnerability, but is criticised for underplaying the role of environmental and biophysical forces in its vulnerability analysis (McLaughlin and Dietz, 2008). Nevertheless, the constructivist perspective represents a conceptual counterbalance to the dominant apolitical and technocratic interpretations of vulnerability, and is helpful when analysing the importance of sociopolitical relations and subjectivity in shaping vulnerability, as well as the related policy processes.

The fifth and most recent vulnerability perspective, according to McLaughlin and Dietz (2008), is the **political ecology perspective**. Building on the work of scholars including Chambers (1989); Blaikie (in Blaikie et al., 1994); Brookfield (in Blaikie and Brookfield, 1987); Peet and Watts (2004); Robbins (2004); Leatherman (2005); O'Brien et al. (2007) and Ribot (2010), this perspective strives to integrate the conceptualisations and approaches of the political and social sciences into its analysis of vulnerability, while acknowledging the role of environmental forces. Political ecology thus provides insight and theoretical guidance on analysing the interaction of sociopolitical and environmental factors influencing vulnerability (see, for example, Adger and Kelly, 1999; Ribot, 1995 and 2010; Peet and Watts, 2004; O'Brien et al., 2007). Power and social relations are increasingly being recognised as key factors that enhance and maintain the vulnerability of people or groups to external stressors, including climate change.

The analysis of vulnerability in this thesis rests primarily on a political ecology perspective, in that it views vulnerability as dynamic and driven by multiple socio-environmental processes, including economic and political change, marginalisation and inequity (Eriksen et al., 2005; Adger, 2006; O'Brien et al., 2007; Ribot, 2010; Olsson et al., 2014). By doing so, it also draws on literature from the other four perspectives, for example when studying local livelihood strategies and the way in which social differences are constructed in intersectionality. The study recognises that power relations play an important role in determining people's entitlement to resources and thus their adaptive capacity. It also recognises that climate change influences people's vulnerability by affecting their livelihood options, and acknowledges the importance of social structures and categories in defining people's vulnerability and their ability (or lack thereof) to contribute to changing the root causes of their vulnerability.

Importantly, the great variation in perspectives on vulnerability is reflected in an equally great variation in the approaches to addressing it. This thesis is based on the view that the reasons for a person's or a group's vulnerability depend on each situation and must be analysed within the particular context in which people live. It builds on what O'Brien et al. (2007) have termed a *contextual vulnerability approach*. A contextual vulnerability approach is "based on a processual and multi-dimensional view of climate society interactions" (O'Brien et al., 2007: 75), and often draw on a combination of all of the above-

mentioned vulnerability perspectives. This implies viewing vulnerability as a starting point when analysing and addressing the impacts of climate change, and recognise that climate change may be only one of several stressors that contribute to vulnerability through complex processes that influence people's adaptive capacity. A contextual vulnerability approach also highlights the importance of looking at the historical and structural causes of vulnerability that may define the entitlements of groups or individuals by legitimising (or de-legitimising) their access to resources and decision-making processes (Yaro, 2004; Leatherman, 2005; Taylor, 2014). A contextual vulnerability approach may, for example, focus on reducing inequality and social marginalisation within a community as a means of enhancing the adaptive capacity of the most vulnerable.

According to O'Brien et al., (2007), a contextual vulnerability approach contrasts with an *outcome vulnerability approach*, which sees vulnerability as an end point and a consequence of stresses caused by climate change. Outcome vulnerability can be defined as "a linear result of the projected impacts of climate change on a particular exposure unit (which can be either biophysical or social)" (O'Brien et al., 2007: 75). Outcome vulnerability approaches are often based on a biophysical or human ecology perspective on vulnerability, as described above. They are usually associated with a scientific framing of climate change projections, which tend to lead to apolitical and technical measures for addressing the consequences of climate change. Typical outcome-oriented approaches may, for example, focus on improving irrigation systems or distributing drought-resistant seeds in rural communities, without considering the fact that the most vulnerable households may be landless and thus unlikely to benefit directly from such interventions.

By building on a contextual vulnerability approach, I am not implying that all technocratic and apolitical vulnerability approaches are wrong. However, this study is based on the view that all situations are different and that the causes of vulnerability need to be assessed on the basis of the particular environmental and sociopolitical context in each case. Indeed, various studies have demonstrated the importance of local social and political factors in particular contexts in triggering vulnerability and thereby different capacity people have to adapt to stressors including climate change (Pelling, 2011; Ribot, 2010; Agrawal et al., 2012; Taylor, 2014).

Despite the growing attention given to contextual vulnerability approaches, several researchers argue that outcome-related perspectives still play a dominant role in CCA research, policies and practice, at the expense of looking at the social and political drivers of vulnerability (Ribot, 2011; Pelling, 2011; Eriksen et al., 2015a). This has led researchers to question the potential of CCA to address vulnerability more effectively than traditional development approaches, and to ask how political and economic interests influence policy processes and the type of solutions promoted by the resulting policies (Cannon and Müller-Mahn, 2010; Manuel-Navarrete, 2010; Pelling, 2011). Because adaptation always takes place within a broader context of development and politics, it is crucial to understand how adaptation is framed by the prevailing development paradigms and how this influences the ways in which adaptation may address contextual vulnerability. The next section presents the development theories that form part of the theoretical framework and shows how our understanding of climate change adaptation is influenced by the dominant development debates of our time.

2.2 Locating climate change adaptation in the development debate

Climate Change Adaptation (CCA), as we currently know it, has been nurtured and influenced by many of the same ideas, discourses and ideologies that have influenced and framed the broader development debate over the last few decades (Pelling and Manuel-Navarrete, 2011; Tanner and Horn-Phathanothai, 2014; Eriksen et al., 2015a). Therefore, in order to understand the potential of CCA to reduce vulnerability, as well as its limitations in this regard, it is essential to assess how current CCA theories and practices are framed by the main tendencies within the development debate.

Interpretations of the concept of development vary greatly. For example, it may include economic growth, technological advancement, cultural change and improvement in social conditions. These interpretations are driven by a multitude of conflicting ideologies and interests that over time have been subject to intense negotiations by different actors (Mosse, 2005; Riddell, 2007; Li, 2007; Potter, 2014). However, few theories have been more influential in shaping the way we understand development in general, and how we approach vulnerability in particular, than the modernisation and dependency theories, together with the responses they have triggered in academia and in policies over the last half-century

(Cowen and Shenton, 1996; Peet and Hartwick, 2009; Nederveen Pieterse, 2010; Potter, 2014).

While the modernisation theory paved the way for neo-liberal approaches by emphasising a reduced role for the state and a strong belief in economic growth as a means of securing development and diminishing poverty (Gardner and Lewis, 1996; Bull, 2006), the dependency theory tends to see inequality between rich and poor countries as the main reason for poverty (Frank, 1972; Walerstein, 1979) and focus on political approaches to promoting development and reducing the vulnerability of the poorest countries. Although governments of developing countries often argue, along the lines of the dependency theory, that their vulnerability to climate change is the result of an unjust world order, the modernisation theory's focus on economic growth and technocratic approaches has arguably had a much stronger influence on how we conceptualise adaptation (Eriksen et al., 2015a). Indeed, ever since climate change was first placed on the global agenda by the United Nations Framework Convention on Climate Change (UNFCCC) in the late 1980s, adaptation has been viewed through a neo-liberal positivistic lens, resulting in technocratic approaches that focus on climatic stressors only (Burton, 1996; Ayers and Dodman, 2010).

Although influential in how development is conceptualised and debated even today (Peet and Hartwick, 2009; Cannon and Müller-Mahn, 2010; Best, 2012; Potter, 2014), the modernisation and the dependency theories have both been widely criticised for an overly simplistic focus on macro-processes, at the expense of looking at local contexts in which people live (Long, 1992; Binns, 2014). Similarly, the early approaches to adaptation to climate change, as described in the first reports of the Intergovernmental Panel on Climate Change (IPCC) in 1990 and 1995, were criticised for focusing on managing climate change as a physical threat to the economy of countries, while disregarding the complexity of the factors that influence people's adaptive capacity (Pelling, 2011; Taylor, 2014).

Partly as a response to the criticism that development approaches ignored local contexts, the 1980s and 1990s saw an increased focus on "sustainable growth" approaches, where environmental issues and local participation were put on the agenda as ways of addressing vulnerability and combatting poverty (World Commission on Environment and Development WCED, 1987). Good governance was emphasised in development debates (Riddell, 2007), as was Max Weber's work on the virtues of modern bureaucracies (Evans

and Rauch, 1999). The notion of social capital was popularised and promoted by Coleman (1990) and Putnam (1993), among others, who emphasised the importance of social relationships between people in providing or inhibiting access to resources and/or political, social or economic advantages. The notion was soon followed by the use of concepts such as local empowerment, social inclusion, gender focus and participatory development (Bebbington and Foo, 2014; Mohan, 2014). These concepts share an emphasis on the necessity for local and “bottom-up” approaches, to ensure that local needs are incorporated into development projects. The local perspective, often represented by civil society organisations and non-governmental organisations (NGOs), is thereby given the legitimacy of participation in knowledge production and policy development. Reflecting these trends in prevailing development discourses, recent CCA debates and policies often include experiences and concepts from the fields of food security, risk management and sustainable development. They emphasise the importance of social inclusion, participation and locally based or community-based adaptation programs (Ayers and Forsyth, 2009; Ireland and McKinnon, 2013; Schipper et al., 2014).

As a result of the growing recognition that the effects of climate change are inevitable, along with a better understanding of the inherent complexity of vulnerability, steps have been taken towards broadening our conceptualisation of adaptation (Ayers and Dodman, 2010; Pelling, 2011; Agrawal et al., 2012). In its fifth assessment report, the IPCC defines adaptation as “the process of adjustment to actual or expected climate change and its effects” (IPCC, 2014a: 5), thereby highlighting the importance of looking at adaptation as a process. However, although the climate change literature, as reviewed in the IPCC report, has broadened its analyses, prevailing understanding can still be criticised for not going beyond an outcome vulnerability view or having a broad enough understanding of the sociopolitical processes at various scales that influence differential vulnerability patterns at the local level. This is exemplified in the IPCC definition of transformational adaptation as “adaptation that changes the fundamental attributes of a system in response to climate and its effects” (IPCC, 2014b. p. 1), which still focuses on vulnerability and adaptation primarily in relation to climate change, rather than looking at climate change as one among various stressors that people face in their daily lives.

Increasingly, the same type of criticism that has been raised against development approaches for failing to respond to the needs of the poorest is now also directed towards

CCA (Tanner and Allouche, 2011; Pelling, 2011; Marino and Ribot, 2012; Taylor, 2014; Eriksen et al., 2015a). More specifically, critics emphasise the fact that CCA does not challenge the dominant neo-liberal development approaches that focus on technocratic strategies and economic growth in response to vulnerability (Cannon and Müller-Mahn, 2010; Manuel-Navarrete, 2010; Pelling, 2011). Some scholars even highlight the risk that, by ignoring the sociopolitical processes that contribute to the marginalisation of individuals and groups, CCA may in fact be contributing to reproducing the type of development currently creating vulnerability (Manuel-Navarrete, 2010; Eriksen et al., 2011; Waghmore, 2012; Marino and Ribot, 2012). For example, by uncritically replicating the focus on local participation that is so often characteristic of development discourses (Mohan and Stokke, 2000; Brock et al., 2003; Du Toit, 2004; Unsworth, 2009; Hickey, 2012; Hout, 2012; Green, 2010; Hughes and Hutchison, 2012; Mohan, 2014), CCA risks reproducing the mistake of regarding “the local” as homogenous and ignoring the sociopolitical relations that drive local vulnerability patterns. This has triggered new debates about the extent, if any, to which CCA approaches differ from development approaches and whether CCA can contribute to better responses to the drivers of vulnerability (Pelling, 2011).

The criticism levelled at CCA raises important questions regarding adaptation, its scope and its potential for addressing vulnerability and building adaptive capacity. Recalling criticism by post-developmentalists such as Escobar (1992, 1994) and Esteva (1992), several authors have argued that adaptation needs to move beyond “development as usual” and should be regarded as a social and political process that aims to change or transform the conditions that create vulnerability at a local level in the first place (Ribot, 2011; Pelling, 2011; O’Brien, 2012; Eriksen et al., 2013; Eriksen et al., 2015a). These arguments challenge us to think across scales and sectors when we conceptualise adaptation, implying that adaptation may entail everything from political process at the international and national level, to the everyday activities people carry out as part of a broader strategy for adapting when faced with climatic and sociopolitical changes (Taylor, 2014; Eriksen et al., 2015b). Furthermore, regarding adaptation as a social and political process also forces development actors and policy makers to ensure that externally planned interventions meet with local interests in complex sociopolitical contexts, and highlights the fact that interventions may have unintended consequences for the vulnerability context they are trying to address (Fergusson, 1994; Li, 1999 and 2007; Mosse, 2005; Barnett and Weiss, 2008; Barnett, 2008).

This thesis is based on the view that sociopolitical and environmental contextual conditions determine people's capacity to respond to changes, and that people's responses, in turn, may change these conditions by influencing the larger-scale processes of change that drive both vulnerability and policy responses. This view is consistent with Eriksen et al. (2015b), who define adaptation as a sociopolitical process that involves "relations, contestations, negotiations and cooperation at multiple scales, from the individual to that of international negotiations" (p. 4). Moreover, it underlines the importance of placing vulnerability and politics at the centre of the CCA debate, and of basing adaptation on a thorough and contextual vulnerability analysis (Ribot, 2011). In the words Ribot's (2011: 2), rather than asking "how to adapt" we should be asking "why people are vulnerable".

While numerous studies have identified sociopolitical processes expressed through relations of power as key drivers of vulnerability (Adger and Kelly, 1999; McLaughlin and Dietz, 2008; Eriksen et al., 2011), several scholars highlight the need for further empirical information that shows how power relations influence differential vulnerability patterns at the local level, which may in turn influence policy processes at the national level (Taylor, 2014; Eriksen et al., 2015b). This implies a need for a deeper understanding of the politics of adaptation, including how policy decisions are made and how the exercise of power define which knowledge counts, and for whom (Taylor, 2014; Eriksen et al., 2015b). In the following section, I present the main theoretical approaches that have guided my analysis of the role of power relations in driving local vulnerability patterns and influencing adaptation policies in Nepal.

2.3 The role of power, policies and politics within a contextual vulnerability understanding

Various scholars have demonstrated that power relations are important drivers of differential vulnerability patterns at the local level (Ribot, 1995; Pelling, 2011; Taylor, 2014; Eriksen et al., 2015b) and in shaping policies that promote adaptation and address vulnerability (Brock et al., 2001; Khadka, 2009; Pelling and Manuel-Navarrete, 2011). However, although central in shaping the everyday life of people, power is not easily defined (Gaventa, 2006) and its conceptualisation has been subject to various debates (Weber, 1978; Marx [see, for example, in Miller, 1984]; Giddens, 1985; Foucault, 1980, 1984, 1995; Lukes, 2005; Scott, 1985, 1998). In this study, I am particularly interested in power as a means of controlling or

legitimising access to resources and knowledge at the local, district and national levels, and in how local power dynamics influence, and are influenced by, the outcome of policy processes within development approaches.

Drawing on Gaventa's definition, I understand power to be both "held by actors, some of whom are powerful while others are relatively powerless" and "embodied in a web of relationships and discourse which affect everyone but which no single actor holds" (Gaventa, 2006: 23). Both expressions of power are relevant when studying how sociopolitical relations influence local vulnerability and policy making. Related to this study, the first expression of power presented above by Gaventa (2006) points to the need to investigate the implications of power in relation to the cultural and political oppression of differential vulnerability patterns. The second expression suggests that we look at how particular actors, groups, organisations and movements use and manipulate knowledge through narratives and discourses to command and/or disempower other groups of people.

Power is often understood to be a force of domination *over* another group or person which by coercion is used to seize and/or take over resources or rights at the expense of another group or person, as described in the works of Marx and Weber (Gaventa, 2003). However, power is not always expressed as domination and repression, and may take the form of the hegemonic control of one group of people over another group, through the expression of knowledge and subjectivity and divulged by dominant narratives and discourses that determine what knowledge counts and for whom (Foucault, 1980, 1995; Giddens, 1984; Fergusson, 1994). By exploring these more subtle expressions of power, Giddens and Foucault have made major contributions to our understanding of how power influences our society.

The famous work by Giddens (1984) on "the theory of structuration" is an attempt to show how social agency and social structure interact. According to Giddens, social structures can be traditions, moral codes or institutions that have established a certain way of doing things. The agency of the people is "the capacity or ability to make decisions and do things" (Adams and Sydie, 2001 p. 49). The structuration theory holds that structures condition the agency of the individuals, and social structures are maintained, reinforced or adapted through the acts exercised by these individuals. The theory provides a useful basis for analysing how social structures and actors' agencies shape local vulnerability and adaptation

policies in Nepal. It highlights the fact that actors may sustain or modify power structures by acting within or outside the constraints of the structure and is relevant when analysing how marginalised groups either replicate or attempt to change local power structures through their everyday actions and their participation in policy processes (Gaventa, 2003).

However, it may be challenging, and not particularly useful, to distinguish between structure and agency, as actors, rules, and behaviours are often tightly interconnected, with power circulating through a web of relationships. In addition, such a division may overstate the capacity of people's agency to transform these structures through actions. Instead, this thesis places emphasis on exploring the mechanisms by which processes of development and adaptation result in the perpetuation of the marginalisation of the most vulnerable.

In this regard, I lean on Foucault's work, which takes a somewhat different approach from that of Giddens, and looks at power by effacing the division between agency and structure. Foucault's enormous influence on developing theories of power is notably evident in his work on "disciplinary power" (Foucault, 1995), in which he shows how power pressures people into subjugated positions in which knowledge is produced. For Foucault, power is everywhere, and in everyone (Rouse, 2005). This means that it is present in every action people take and supported by other persons who, by their actions or behaviours, support or resist it (Rouse, 2005 p. 112). So, according to Foucault, power is not held by actors, but exists only when put into action. Importantly, Foucault emphasises the point that power should not always be seen as something negative. It can also be positive, as it may serve as a medium for producing new reality and knowledge, through which people influence a new social construction of reality. The positive connotations of power (as expressed in the phrases "the power to" and "the power within") have also been highlighted by scholars such as Giddens (1984), feminist theorists (Gibson, 2001; Allen, 2002; Butler, 1997) and post-Marxists (see, for example, Laclau and Mouffe, 2001). The interpretation of power as a positive force is important when looking at the possibility for resistance (Scott, 1985, 1998), and is therefore of particular interest when exploring the ability of the most vulnerable to participate in policy spaces and influence policy and decision-making processes (Masaki, 2007).

While Foucault has been criticised for "neglecting human agency" (Merod, 1987; Masaki, 2007), his work remains central in development studies (Shore and Wright 1997; Gaventa,

2003; Nightingale, 2011), and in the emerging research field of the politics of adaptation (Pelling, 2011; Taylor, 2014; Eriksen et al., 2015b), as it illustrates the complexity in social and power relations at the local level, as well as on the policy level. Foucault's conception of power and discourses is also instrumental in post-development approaches that look at the production of discourses used by developed countries as a way of domination to subjugate people in developing countries (Escobar, 1994; Esteva, 1992).

In the context of Nepal, where social status is strongly linked to caste, class gender and ethnicity, it is useful to approach the concept of power by analysing how it travels within relationships and between actors and influences, and legitimises people to act or constrains them from acting (Foucault, 1980, 1995; Burtler, 1997; Eriksen et al., 2015b). The approach has proved important not only when studying social and power relations at a local level, but also for studying policy processes as it helps to understand policies not as “rational problem solving” (Mosse, 2013: 2) tools that shape development, but rather as complex processes that include “institutions and power; interpretation and meaning; ideology, rhetoric and discourse and the politics of culture, ethnicity and identity as well as interactions between the global and the local.” (Wedel et al., 2005: 30–31). This implies that policy processes should be seen as part of the “messiness” of social and power relations that influence the outcome of policy interventions at local level (Fergusson, 1994; Shore and Wright, 1997; Barnett and Weiss, 2008; Brock et al., 2001; McGee and Brock, 2001; Khadka, 2009; De Haan, 2009).

In addition, when investigating how power is exercised within policy processes, I find it useful to recall the work of Lukes (1974), Gaventa (2006), and by VeneKlasen and Miller (2002) on visible, hidden and invisible power. Gaventa (2006) defines *visible power* as the observable decision-making, or contested interests, visible in public spaces or formal decision-making bodies (through rules, procedures and authorities). *Hidden power* refers to decisions made about who is present at the decision-making table (and who is not present) and what is discussed (and what is not discussed). For example, a donors' meeting that is not open to NGOs, or a high-caste meeting in a village that is not open to low castes. *Invisible power* refers to the shaping of meaning and what is viewed as acceptable in a society. The latter reminds us of Foucault's “subjected knowledge”, which underpins the cultural and social rules that govern what is socially acceptable in a society.

In this thesis, policies are understood to be products of politics that are shaped by power relations on various levels (Brock et al., 2003; Wedel et al., 2005; Eriksen et al., 2015b). I lean on Eriksen et al.'s (2015b) definition of politics as “processes through which individuals and collectives cooperate and collude to order and govern everyday affairs” (p. 5). In that sense, politics involve negotiation and conflict, coercion and hegemony, and domination and resistance between groups of people or individuals; where the outcome is triggered by power and social relations that influence which interests are given priority over others, and which policies are adopted.

Building on the political ecology and contextual vulnerability approaches, and local-level studies of adaptation and vulnerability, Eriksen et al. (2015b) suggest that knowledges, authority and subjectivity should be seen as central in order to analyse the sociopolitical processes of adaptation. In their work, the word ‘knowledges’ is used in the plural, as it represents different kinds of knowledge – not only scientific knowledge, but also the large body of knowledge present at different levels. Authority represents expressions of power that are legitimised by social structures in the form of formal or informal institutions, organisations or positions (Leach et al., 2010; Eriksen et al., 2015b). In this study, authority may include government and donor agencies, NGOs, local-level user groups, local leaders and local elites. Subjectivity is defined as the way in which “subjects emerge relationally from the exercise of power via dominant discourses and practices and the internalization, resistance and ultimately re-expression of those discourses and practices” (Eriksen et al., 2015b: 6). This definition explains subjectivity as being the product of complex sociopolitical processes that are exercised through power relations. In that sense, subjectivity may reinforce a situation of dominance and oppression but it may also have a positive outcome, where individuals and/or groups of people find the ability to act for change.

In this thesis, the concepts of knowledge and subjectivity are particularly useful as entry points for identifying and disentangling the mechanisms by which certain types of knowledge are given priority in policy spaces at the village level. It also helps the analysis when considering whether the policy process provides opportunities for the most vulnerable to contest the dominating power structures that define subjectivity and access to resources.

To broaden the analytical approach suggested by Eriksen et al. (2015b), I find the concept of intersectionality useful as it highlights the importance of individuals' social positions as a result of belonging to different dominant or subordinate groups, by virtue of their race, class or gender (Berger and Guidroz, 2009; Yuval-Davis, 2011). Looking at intersectionality together with subjectivity, as suggested by Staunæss (2003) and Nightingale (2011), is useful for revealing the complexity of power relations and how a situation may be understood differently, depending on the perspective from which one approaches it (Foucault, 1980 and 1984; Butler, 1997; Allen, 2002; Nightingale, 2011). In the case of Nepal, analysing subjectivity in relation to intersectionality allows us to look at how formal and informal systems of power are deployed, maintained and reinforced through axes of caste, class, ethnic group and gender, and how these systems are influenced by the perceptions of individuals and groups about their ability to influence decision-making and policy processes (Nightingale, 2011).

Looking at how narratives travel at a local level and within policy processes, through an analysis of which knowledge counts in policy formulation, by whom these have been formulated and how and through which mechanisms dominant narratives have been prioritised, provides interesting insights into how differential vulnerability patterns may be perpetuated at a local level. However, investigating these in practice, and disentangling the highly complex and dynamic processes inherent in vulnerability, demands an empirical lens through which to observe the manifestations of power relations and household-level vulnerability patterns. In order to analyse how power relations relate to household-level vulnerability patterns, I propose to assess vulnerability through the lens of household food security. The theoretical and practical rationale for using food security as an indicator of vulnerability in a study of the politics of adaptation in Nepal is presented in the following section.

2.4 Food security as an indicator for investigating vulnerability patterns

Attempts to measure household vulnerability include the use of poverty indices, consumption rates, assessments of livelihoods options, surveys on well-being and different kinds of risk assessments (Turner et al., 2003; O'Brien et al., 2004a; Adger, 2006; Füssel and Klein, 2006; Oppenheimer et al., 2014). However, most analyses have highlighted how difficult it is to grasp fully the multidimensional characteristics of vulnerability and its

causes. In this thesis, the theoretical choice to use food security as an entry point for analysing household vulnerability builds on numerous studies that have demonstrated that food insecurity and vulnerability in poor farming communities are closely linked (Bohle and al., 1994; Yaro, 2004; Downing, et al., 2003). Food insecurity is often regarded as an outcome of vulnerability, but a food-insecure situation may increase the long-term vulnerability of a person or group, for example through the sale of productive assets such as land or agricultural tools (Chambers, 1989; Downing, 1992; Bohle et al., 1994; Ribot, 1995; Scoones, 1998; Yaro, 2004; Hart, 2009; IPCC, 2014a). These studies highlight the fact that food security reflects the dynamic and multidimensional nature of vulnerability.

Placing food security at the nexus between policy making and day-to-day concerns, in particular in Nepal and Humla, allows us to investigate which knowledge produced at the local level is formulated within policy processes. Indeed, the early findings of this study indicate that most households in the study area choose to describe their own vulnerability situation in terms of a lack of nutritious food. Humla has also a long history of food insecurity (Bishop, 1990), and ensuring a sufficient supply of food is the priority of many households, particularly those facing uncertainty and change. At the same time, Nepal's adaptation and development policies regard food insecurity as a main outcome of climate change, in particular in rural areas, and enhancing food security is one of the main goals of the country's CCA efforts (MoE, 2010a) and agricultural development approaches (WFP, 2010; NPC, 2010; MoAD, 2014). Based on these above observations, I argue that household food insecurity is a useful entry point for analysing and comparing different perceptions of vulnerability at different levels, and for assessing the effects of policy interventions on local vulnerability patterns. Furthermore, since reducing food insecurity is a joint priority for adaptation and development policies in Nepal, comparing approaches to addressing food insecurity may also provide an opportunity to explore how adaptation relates to – and differs from – prevailing development paradigms.

Food security can be defined as “a situation that exists when all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life” (Food and Agriculture Organization [FAO], 2002: Chapter 2: 1). According to this definition, a food insecurity situation would occur when one or more of these conditions are not met. Devereux and Maxwell (2001: 1) state that “food insecurity is no longer seen simply as a failure of

agriculture to produce sufficient food at national level, but instead as a failure of livelihoods to guarantee access to sufficient food to people at household level”. Scholars including De Waal (1989) and Watts (1983) have also shown the connection between politics and power distribution within periods of food insecurity and famine. These works emphasise the point that the availability of food is not in itself enough to ensure food security. They also highlight the fact that the reasons for food insecurity may often be multidimensional, indicating that there is a complex dynamic between food insecurity, livelihood strategies and vulnerability. Indeed, the reasons behind the failure of livelihoods (that could eventually lead to food insecurity) include socio-cultural, political, economic and environmental changes which are often interconnected to form, enhance or sustain vulnerability patterns (O’Brien et al., 2007).

However, the vulnerability contexts of households are influenced by multiple factors and processes, and people have needs and aspirations that are much broader than simply ensuring that they have enough food. Indeed, food insecurity is only one of several manifestations of vulnerability, and by observing vulnerability through a food security lens one may risk concealing other aspects of the vulnerability context. In particular, a focus on food insecurity may direct our attention towards the outcomes of climate-related events, such as droughts or lack of seeds, and away from the often intangible root causes of household vulnerability, as power relations, working behind the scenes. Hence, vulnerability is not synonymous with food insecurity (Dilley and Boudreau, 2001; Ellis, 2003; Hart, 2009) although the concepts overlap. Vulnerability is a “forward- looking” concept related to unpredictable events (Ellis, 2003: i) while food security has a more temporal and intensity dimension (Hart, 2009). For example, some households in the study area may describe themselves as vulnerable to climate change when changing rain patterns increase the risk of landslides that could block their trading routes, even though they are not food-insecure.

While being aware of these limitations, the overlap between vulnerability and food insecurity is particularly strong in situations with lasting and chronic food insecurity (Hart, 2009). Studying food insecurity in these situations may shed light on the multidimensional and complex nature of the various stressors contributing to vulnerability (Hart, 2009). Furthermore, it is easier to have a conversation with a farmer about her food security situation than about her vulnerability context, which is less concrete. So, using food insecurity as an entry point for understanding vulnerability permits the researcher to collect

data based on a relatively concrete concept that most people in Humla understand and can relate to. In order to build a more comprehensive picture of a household's vulnerability contexts and the factors influencing its food security in the long term, the household's perceptions of its food security situation are triangulated with data including income, livelihood options, power and social relations through access (or lack thereof) to land, water, credits or help in difficult situations, political contexts, and so on. (See section on methodological approach, section 4 of the introduction chapter for more details.)

So, while being mindful of the some limitations of using food security as an entry point for investigating contextual vulnerability, I argue that in some cases, including that of Nepal, it may provide a particularly useful approach to analysing the politics of adaptation. Exploring the reasons behind the fact that some rural households in rural areas with chronic food insecurity have access to enough food while others do not, sheds light on the drivers of differential vulnerability patterns and enables us to relate power relations with variations in livelihood options and people's adaptive capacities. Furthermore, observing the impacts of CCA policy processes on the power relations that determine household food security, and analysing the role of these power relations in shaping the CCA policy processes, allows us to trace how specific knowledge and interests (as increased access to irrigation versus political measure to increase access to land or water for the poorest) are captured (or ignored) in narratives that travel across scales and how these influence differential vulnerability through processes of domination, subjectivity and intersectionality.

3 RESEARCH CONTEXT

3.1 Nepal, development and adaptation policies

3.1.1 General

Nepal provides a particularly interesting case for investigating the nexus between development and adaptation and the influence of dominating power relationships within policy processes. Nepal is among the world's poorest countries with an estimated rate of chronic malnourishment in children below five years of 48 percent (WFP, 2009a). Moreover, Nepal is characterized by an unstable political situation, even after the 10 year civil war ended in 2006, with shifting national governments and political alliances. Because there have been no local elections since 1997, the country lacks legitimate structures and bodies at the local level. Political marginalisation and social exclusion that are deeply rooted in society after centuries of social division shaped by castes, gender, and ethnicity are identified as critical obstacles in the fight against poverty (Levine, 1987; Bista, 1994; Cameron, 1995; DFID and the World Bank, 2006; Khadka, 2009), and are likely to be important reasons why Nepal is considered to be among the countries that are most vulnerable to climate change (Jones and Boyd, 2011; Nightingale, 2015; Ojha et al., 2015).

Since its opening to international humanitarian organizations in the late 1950s, Nepal has received large amounts of humanitarian aid. The government of Nepal, through the Nepal Food Corporation (NFC) and international organizations such as the United Nations World Food Programme (WFP), has responded to the chronic food insecurity situation by implementing food aid programmes in many regions of the country. As growing attention is given to the impacts of climate change on food security (Gurung and Bhandari, 2008; Dulal et al., 2010; NPC, 2010), reducing food insecurity is also becoming a key objective of CCA policies and programmes in Nepal (MoE, 2010a). Thus, examining the impacts of food security interventions on people's vulnerability to climate change –together with decision-making processes in climate change adaptation and development policies in Nepal - offers an interesting entry point to investigate to what extent adaptation policies offer new conceptualizations and opportunities to address vulnerability of the poor, compared to traditional food security programs.

3.1.2 Food security interventions in Nepal

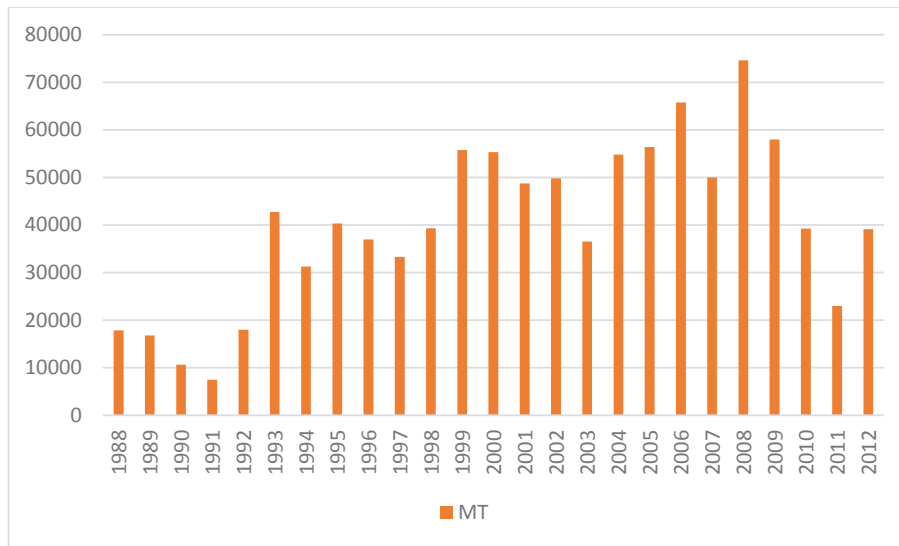
The World Food Programme (WFP) and the Nepal Food Corporation (NFC) have played important roles in designing and carrying out food security programmes in Nepal (Adhikari and Bhole, 1999; Adhikari, 2008), and particularly in remote regions such as the far north-western region of Karnali which includes the district of Humla (Adhikari, 2008; Bishokarma, 2010). As a background for understanding how food aid interventions have developed into programs that aim to address chronic food insecurity and build adaptive capacity I present a brief introduction to food aid in Nepal with a special focus on WFP and NFC in the following paragraphs.

Although food distribution began in the 1950s with the opening of Nepal to international aid, a regular food aid delivery system only started in the late 1970s. It reached a maximum in the 1983 drought that brought food aid delivery to more than 80 000 metric tons (Khadka, 1989; Bishokarma, 2010). After a short but sharp decline in food aid after 1983, data available from Food Aid Information System, FAIS, (2015) shows a gradual increase in food aid from about 10 000 metric tons in 1990 to 74 645 metric tons in 2008, followed by a decrease to 39 134 metric tons in 2012 (see Figure 1). In total, about one million metric tons of food was delivered to Nepal from 1988 to 2012 (FAIS, 2015), with the largest donors being Japan, the United States, United Nations and the European Union (Bishokarma, 2010).

The WFP has been working in Nepal since 1964. Its Country Plan for 2013–2017 (WFP, 2012) distinguishes between four main components. These are: productive assets and livelihood support, school feeding, improving mother-and-child nutrition, and capacity development. The first component aims to represent “a shift from a short term development approach of previous PRROs [protracted relief and recovery operations] to a long term development-oriented approach” (WFP, 2012: 12). The PRRO which began in 2007 and took over the rural infrastructure community work, is a major WFP programme involving food for work/food for assets activities (FFW/A) where people at local level participate in activities in exchange for food. Activities that have been organised within the FFW/A in the

district of Humla include the construction of paths, irrigation systems and the making of apple and *attis*¹ farms at the village level.

Figure 1. Total food aid distribution in metric tons (MT) in Nepal from 1988 to 2012



Source: FIAS (2015)

An important mechanism for analysing the food security situation at the local level is the Nepal Food Security Monitoring and Analysis System, the NeKSAP², which was developed by WFP and transferred to the Ministry of Agricultural Development, MoAD in 2010. The NeKSAP aims to decentralize food security assessments to the district level. In Humla, the NeKSAP holds a meeting every three months at the district headquarters in Simkot where non-governmental organizations (NGOs), local government representatives and UN agencies share their local level food security analyses. WFP works through local NGOs to plan and implement activities at village level, including through the formation of village level user committees (UC), with the aim of ensuring that the activities respond to local level interests.

¹Attis is a herb with an economic value in Humla of about 500 Nepalis Rupees per kilogram (see also Roy, 2010).

²NeKSAP in Nepali: *Nepal Khadya Surakshya Anugaman Pranali*

The NFC, an agency under the Ministry of Commerce and Supplies, was created in the 1950s. NFC's main response to food insecurity is to provide rice at a subsidized price to remote districts, mostly sold from outlets at the district headquarters. The NFC policy states that everybody is eligible to get rice – as long as they can afford to buy it and transport it back to their villages.

Such conventional food aid projects are in line with the country's national plans related to food security and development that include the Agriculture Development Strategy (ADS) (WFP, 2012). At the time of the fieldwork the ADS was being developed as the main policy dealing with agriculture and food security. The formulation of the ADS was led by the Nepal Ministry of Agricultural Development and facilitated by the Asian Development Bank, with the support of various donors and international actors³ that include WFP (MoAD, 2014). It replaces the Agriculture Perspective Plan (APP) that had guided the agricultural sector for the last 20 years. The APP was criticized for an excessive focus on green revolution approaches and lacked support and ownership from the leading stakeholders in the agricultural sector, including farmers, private sector and cooperatives (MoAD, 2014). The goal of the ADS is to improve livelihoods, food and nutrition security of Nepal over the next 20 years (MoAD, 2014).

Humanitarian aid has, without doubt, improved the lives of many people in Nepali (Bista, 1991). Indeed, when Nepal carefully opened up to international aid in the 1950s after centuries of hegemonic control over the population and its resources by the government-led oligarchy based in Kathmandu (the Shah and Rana families), only five per cent of the population was literate (Parajuli and Tapash, 2014). Malnutrition and poverty was rampant, and in 1971 life expectancy at birth was 37 years (Panday, 2000: 66). Forty years later, life expectancy is 67 to 70 years (World Health Organisation, [WHO], 2015), and the adult literacy rate has grown to 57.4 per cent (UNICEF, 2015). However, when figures are divided according to caste and gender, it becomes apparent that development has benefited men and

³Asian Development Bank (ADB), International Fund for Agricultural Development (IFAD), European Union (EU), Food and Agriculture Organization (FAO), Swiss Agency for Development and Cooperation (SDC), Japan International Cooperation Agency (JICA), Denmark Agency for International Development (DANIDA), World Food Programme (WFP), United States Agency for International Development (USAID), Department for International Development (DfID), the World Bank, the Australia Agency for International Development (AusAID), and the United Nations Entity for Gender Equality and the Empowerment of Women (UN Women).

high castes living in urban areas more than poor, low castes, and women in remote areas. For example, the Nepal Human Development Report noted that in 1996, life expectancy for low caste Dalits was only 50.8 years, while the high caste Brahman were expected to live for 61.4 years (UNDP, 2002). The literacy rate for women was only 45 per cent in 2009, compared to 72 per cent for men (Central Bureau of Statistics [CBS], 2011). Important disparities also persist between regions with a 57 per cent literacy rate in rural regions compared to 77 per cent in urban areas (CBS, 2011). In addition, the far- and mid-western hills and mountainous regions have the highest prevalence of hunger and malnutrition (WFP, 2009a).

Humanitarian and development programmes have also triggered a burgeoning civil society since the 1990s when a new constitution opened for non-governmental actors to take part in efforts to reduce the extreme poverty in Nepal (Singh and Ingdal, 2007). In 2004, about 30 000 NGOs were registered in Nepal (Kobek and Thapa, 2004; Singh and Ingdal, 2007). NGOs are now widely used by aid agencies to implement development projects and programmes at the local level.

Despite the important improvements in the wellbeing of many Nepalese as mentioned above, development assistance – and more specifically food aid – has been much criticized by government representatives, donors and NGOs for creating a dependency situation which may impact negatively on local capacity to cope with stress (Adhikari, 2008; Bishokarma, 2010). Such criticism is not new and has also been highlighted in other countries (Barrett and Maxwell, 2005, Harvey and Lind, 2005, Little, 2008; Dagnashew, 2012). At the same time, the risk of corruption and high degrees of ineffectiveness has raised concerns regarding the capacity of the government to respond to the needs and aspirations of its citizens. This comes amid a backdrop of growing concern about additional challenges triggered by climate variability and change that have led to a call to scale up humanitarian projects (see Oxfam, 2009; MoE, 2010a; WFP, 2009b, 2012, 2013). The following section discusses climate change challenges for Nepal as presented in the literature, and introduces the country's main climate change adaptation policies, the National Adaptation Programme of Action (NAPA) and the Local Adaptation Plan of Action (LAPA).

3.1.3 Climate change in Nepal and a historical background for NAPA/LAPA

Regional climate scenarios for the Himalayas for the next 100 years suggest that the warming will accelerate with increased seasonal changes in precipitation along with intense precipitation events (Cruz et al., 2007). In Nepal, the NAPA notes that observations indicate consistent warming and rise in the maximum temperatures at an annual rate of 0.04–0.06 Celsius (c). Studies also indicate that the warming is more pronounced in higher altitudes compared to the lower Terai and Siwalik regions (MoE 2010a, citing Practical Action, 2009 and Shrestha et al., 1999). Annual precipitation data shows a general decline in precipitation in far- and mid-western Nepal, with a few pockets of declining rainfall in the western, central and eastern regions and a trend of increasing precipitation in the rest of the country. In addition, the melting of the Himalayan glaciers has been documented with higher risk of glacier lake outburst floods (GLOF) (MoE, 2010a).

Important and recent events in Nepal that have been attributed to climate change are the heavy monsoon rains in 2008 that affected more than 200 000 persons in Nepal and over three million people in India (NCVST, 2009). In the same year, a winter drought affected the food security of many people (NCVST, 2009), triggering an increase in food aid in several districts, including in Humla (WFP, 2010). Although the acute onset of these events received important media coverage at the time, more slow-onset events attributed to climate change which have affected the food security situation in many places in Nepal have been reported regularly by aid organizations over the last years (WFP, 2010; Oxfam, 2014).

The NAPA was approved by the Nepal government in 2010 (MoE, 2010a) and is a product of the efforts of the United Nations Framework Convention on Climate Change to support national adaptation programmes that are eligible for funding managed by the Global Environment Facility. The NAPA was developed under the lead of the Ministry of Science, Technology and Environment, (MoSTE), called at the time of the NAPA formulation, the Ministry of Environment, (MoE), with the support of various donors and international organizations including the DFID, the UNDP, the Global Environment Facility, and the Danish International Development Agency.

An important aim of the NAPA is to develop a “country-driven inclusive and consultative process” (MoE, 2010a: iv), and it has become mandatory that at least 80 per cent of the

available budget shall be allocated to the implementation of adaptation actions at the local level (GoN, 2011a). To better respond to local conditions, and to ensure “bottom-up, inclusive, responsive and flexible” processes at Village Development Committee (VDC)⁴, the government in 2011 developed the LAPA framework (GoN, 2011a: 3). At the national level, Nepal’s CCA process is led by the Ministry of Science, Technology and Environment, the MoSTE⁵, and supported by the UNDP through the Nepal Climate Change Support Programme (NCCSP). Strong emphasis is placed on District Development Committees (DDCs)⁶ to ensure that top-down and bottom-up processes address the vulnerability of the most vulnerable (GoN, 2011a). Local partnerships at the village level are forged through the formation of “users groups” which are given important roles in the planning and implementing of programmes. These groups may be existing or new groups that shall be representative and inclusive to ensure that projects take local needs into account (GoN, 2011a).

With reference to the IPPC, the NAPA defines vulnerability as “a function of the character, magnitude, and rate of climate variation to which a system is exposed, its sensitivity, and its adaptive capacity” (MoE 2010b: 2). *Exposure* is defined as “the nature and degree to which a system is exposed to significant climatic variations” (MoE, 2010b: 2), and *Sensitivity* as “the degree to which a system is affected either adversely or beneficially, by climate-related stimuli” (MoE, 2010b: 2). *Adaptive Capacity* is understood to be “the ability of a system to adjust to climate change (including variability and extremes) to moderate the potential damage from it, to take advantage of its opportunity, or to cope with its consequences” (MoE, 2010b: 2).

Based on the above, the government of Nepal has produced a climate change vulnerability mapping tool (MoE, 2010b) that supports the NAPA process and where various regions of Nepal are classified according to a vulnerability index ranging from very high, high, moderate, low to very low. This index is based on a combination of various indices based on

⁴ The VDC is the smallest administrative unit after the ward. One VDC includes different villages that are divided between and within nine wards.

⁵ After the fieldwork the Ministry of Environment changed name to Ministry of Science, Technology and Environment, the MoSTE. For the ease of the reader, the following paragraph refers to the Ministry of Environment..

⁶ On DDC includes different VDCs.

existing secondary national databases available at district level (MoE, 2010b) The index distinguishes between human and ecological sensitivity, and exposure is assessed based on six indicators: temperature and rainfall, landslides and flood (referring to the hill and mountain ecological zone), flood (referring to the Terai ecological zone), drought, glacier lake outburst floods, and ecology. The three indicators used to assess adaptation capacity at district level are socio-economic, infrastructure, and technological capacity.

This classification method underwrites the importance given to biophysical factors in the vulnerability mapping of Nepal, with a focus on the consequences, or outcomes, of climate change, rather than looking at climate change as part of a context affecting the vulnerability of a system. Interestingly, based on this mapping exercise, Kathmandu comes out as one of the regions with the highest vulnerability, while Humla – which is considered one of the poorest regions in Nepal – is only moderately vulnerable. This is explained in the Vulnerability Mapping document (MoE, 2010b) by Kathmandu’s human sensitivity (population density) rating being high in comparison to Humla.

NAPA’s interpretation of vulnerability to climate change is frequently referred to in other climate and development policies, including the Climate Change Policy in 2011 (GoN, 2011b), the mentioned Agricultural Development Strategy (ADS) and the Pilot Program for Climate Resilience (PPCR) that was facilitated by the Asian Development Bank under the lead of the Ministry of Environment⁷. These international and national policy processes have triggered new funding opportunities for development and aid organizations. This has led to a reorientation of aid and development organization’s discourses that include climate change as a major factor impacting on people’s food security. This can also be seen, for example, in efforts to include climate change vulnerability indicators within the NeKSAP.

As the NAPA/LAPA underscores the importance of local participation and local initiatives, this raises the question whether an outcome-oriented description of climate vulnerability in the NAPA opens analytical spaces for the LAPA to respond to the vulnerability context at local level. In this study I examine this question by analysing the vulnerability context in

⁷ The PPCR has been developed in parallel with the NAPA, but after various protests by civil societies, the PPCR appears to have been disentangled into various activities under the Ministry of Environment, albeit under a different under-secretary to the NCCSP that facilitates the NAPA.

Humla and how it is addressed by food security projects and climate change policies. In the following paragraph, I give a short presentation of the region of Humla focusing on certain key physical, historical and social characteristics as well as meteorological data that shed light on the district's vulnerability context.

3.2 Research site –Humla

Humla district, in the region of Karnali in far north-western Nepal, provides an appropriate study area to investigate the political dimensions and social dynamics of vulnerability as perceived at the local level, and how development and climate change policies are conceptualized in policy and put into practice at the local level. Humla is among the most impoverished districts of Nepal (Mission East, 2010; Sanders, 2010; Citrin, 2012). In 2010, the District Food Security Network (DFSN), a network facilitated by the WFP and the Ministry of Agricultural Development, notes that about 80 per cent of its 50 000 inhabitants suffered from food insecurity (DFSN, 2010), based on a set of different indicators (<http://neksap.org.np>). As a result of the alarming poverty situation, the district has received humanitarian aid for decades in an effort to enhance the food security situation (Adhikari, 2008). The district is also considered to be vulnerable to climate change (MoE, 2010a), with concerns that the food security situation is aggravated by fewer but heavier rainfalls during summer, and less rain and snow during the winter – leading to difficulties in predicting sowing time and higher risks of landslides limiting trade possibilities and people's movement (own data). These observations are in line with studies done at national level (Practical Action, 2009; Eriksson et al., 2009; Oxfam, 2009; Nepal Climate Vulnerability Study Team [NCVST], 2009; MoE, 2010a).

3.2.1 Physical and social description of Humla

Humla is a mountainous area bordering Tibet (see Figure 2), with altitudes varying from 1219 to 7337 metres above sea level (DDCO, 2006; Roy, 2010). Humla is partially in the rain-shadow as the high mountains (including the Saipal Humla at 7030 metres) separates most of the district from the southern monsoon rain (Roy, 2010). At the same time, as elevations vary considerably within the district, data reported by the DDCO (2006) shows high variations in temperatures and precipitation. The DDCO (2006) notes that the average rainfall ranges from 25.4 to 146.9 millimetres with maximum temperatures ranging from 10

to 25 degrees Celsius in June/July while the minimum temperature is between -10 to -18 degrees Celsius in December/January. There is a wet monsoon period from June to September while drought are frequent during the winter period from February to May (Roy, 2010).

Figure 2. District of Humla (Map of the Foundation Nepal, <http://www.foundation-nepal.org/content/map>)



Humla can be divided into two main ecological regions: Upper Humla in the north, bordering Tibet – and Lower Humla in the south, with a warmer climate and land better suited to agriculture. The main livelihood strategies are subsistence agriculture, livestock and trade with non-timber food products (NTFP), rice/salt exchanged with Tibet and *Furu*⁸ (Bishop, 1990; Fürer-Haimendorf, 1988; Roy, 2010; Nagoda and Eriksen, 2015 [Paper 1 of this thesis]). Of Humla's 5 655 square kilometres, only 97 square kilometres are cultivated and only 11 per cent of the cultivated land is irrigated (UNFCO, 2013), making the

⁸*Furu* is a wood cup used by Buddhist Tibetan-speaking people living in the north of Humla. The wood is collected during the winter time by the lama people of Upper Humla in the forests in southern parts of Nepal and sold to others in Tibet and Kathmandu.

agriculture highly dependent on rain. Land endowments are small with an average of about 0.5 hectares per household (Nagoda and Eriksen, 2015). My data also shows important differences between landholdings, especially in southern parts of Humla (for example, two hectares for better-off households compared to 0.1 hectare for very poor). This is presented in more detail in Paper 1 of this thesis (Nagoda and Eriksen, 2015).

The estimated population in Humla was 49 749 persons in 2010 (Mission East, 2010), dispersed into 27 VDCs. The people are of diverse ethnicity and may be divided roughly into two social groups: the Buddhist Tibetan-speaking people in the north and the Hindu Nepali-speaking people in the south. The latter are categorized according to the Hindu caste system. The most common castes present in Humla are the Brahman, the Thakuri and the Chhetri representing high castes, and the low caste Dalits who remain socially and politically marginalized. Although the district is described by policy-makers in Kathmandu as very poor, picturing a very homogenous group of Humlis (people living in Humla) struggling to survive, a closer look reveals various differences between women and men, very poor and better off, and high castes and Dalits. These differences have been highlighted in Paper 1 (Nagoda and Eriksen, 2015) where I discuss how different people perceive vulnerability differently depending on the context in which they live – including their status in the village, the number of family members, the caste system and their networking capacity with NGOs political parties or government officials at district level.

3.2.2 Food insecurity, WFP and NFC in Humla

Data related to malnutrition in Humla was not available at the time of the fieldwork. However articles, reports and applications from WFP show alarming rates of malnutrition in the district with prevalence of stunting of 60 per cent of children under five years old (UNFCO, 2013).

Because food aid is a controversial issue in Nepal, getting information about food aid in Nepal and particularly Humla has been extremely difficult. Most official data about food aid in Humla was not made available during the fieldwork for this study, and the data which was received usually arrived informally after months of continued search and inquiries. Information received from interviews indicated that the NFC had begun to transport rice in

the 1950s with the construction of the airport in Simkot. Although WFP has been present in Nepal since 1964, it only began its efforts in Humla in the 1990s. WFP distributed about 7 980 metric tons of food in Humla from 2004 to 2011. In comparison, the NFC distributed 10 890.3 metric tons from 1985 to 2006 (Adhikari 2008: 178). NFC sells rice at subsidized prices from the district headquarters but has also used helicopters (along with WFP) to distribute food – mostly rice –to remote areas (an overview of the quantities distributed by WFP and NFC in Humla is presented in the paper 2 of this thesis).

3.2.3 Climate change in Humla

Most aid organizations and policy-makers in Nepal point at climate change as an important reason for food insecurity. However, data related to climate change in Humla is scarce. During the time of the fieldwork, it appears that no one collected meteorological and hydrological data about temperature and rainfall in Humla, apart from at the landing strip of Simkot related to flying conditions. Information from the Nepal Department of Meteorology and Hydrology (DHM) in Kathmandu indicates the existence of two stations in Humla –one in Simkot and another in Darma. Although difficult to access, information given by a DMH officer interviewed shows that data has been collected since 1978 for precipitation and temperature for Simkot and since 1989 for precipitation in Darma. The DHM officer informed that no data had been collected after 2005/2006.

Although there is a lack of data about temporal and spatial climate variability in Humla, people report that changes in rain patterns have impacted on their livelihoods during the past five to ten years (Nagoda and Eriksen, 2015). Some crops such as millet (*kodo*) and rice (the latter being cultivated in lower and southern parts of Humla) are described as being affected by a lack of rain. People also report about more landslides owing to strong rainfall during the summer, which affects trading routes and summer crops. Less snow during the winter affects some winter crops as the melting of snow during the spring is an important source of water during the dry season. These local observations support studies at the regional and national levels (Eriksson et al., 2009; Oxfam, 2009; NCVST, 2009; MoE, 2010a).

According to the vulnerability assessment presented in the LAPA for Humla (HTSPE, 2012) and based on the definition of vulnerability presented in the vulnerability mapping of Nepal

(MoE, 2010b), the 27 VDCs of Humla have been classified into four vulnerability categories presented in the following table (Table 1).

Table 1: Climate Change Vulnerability Ranking of the 27 VDCs in Humla District
Vulnerability index VDC of the District

Very High (3.26->4.0)	Kharpunath, Dandafaya, Melchham, Sanya (Sama), Chhipra
High (2.51-3.25)	Limi, Syaanda , Khaagaalgaun , Shreemastha, Jair, Gothi, Darma, Madana, Maila, Rodikot
Medium (1.76-2.50)	Thehe, Hepka, Simikot, Raya, Sarkeedeu, Kalika , ShreeNagar, Mimi, Muchu
Low (1.0-1.75)	Bargaun, Baraigaun, Lali

Source: HTSPE, 2012

Note: The three VDCs in bold are those visited during the fieldwork.

In this ranking process, one can read that:

“the communities are **exposed** to drought or dry period, landslides, incidence of disease/pest outbreak in the last 30 years. The **sensitivity** index was then calculated from the assessment of human loss, household infrastructure loss, loss of land and epidemic outbreak after the exposure of aforesaid climatic hazards” (HTSPE, 2012: 44).

In the LAPA for Humla, the index of adaptive capacity is calculated from data based on three systems: the core, the secondary and the tertiary systems. The three systems are presented as follows: The **core system** is presented as “access to electricity and drinking water facility; irrigated land; level of food sufficiency of the VDC level households”, while the **secondary system** represents the “nearest distance to the market centre, telephone network in the VDC, number of households rely on agriculture as main occupation”. The

tertiary system is defined as “the literacy rate and number of cooperative organizations and distance to the nearest market” (HTSPE, 2012: 44). The LAPA for Humla summarizes the vulnerability context as follows:

“The major hazards observed to affect the vulnerability of the habitants are dryness/drought; heavy diseases and pests in agricultural crops, livestock and human; decrease in water sources and agricultural production” (HTSPE, 2012: 44).

As was the case for the NAPA, this classification reflects an outcome approach to vulnerability focusing on the physical impacts of climate change without assessing the role of socio political differences among households in shaping vulnerability. However, the vulnerability and adaption literature reviewed in the previous chapter, show that vulnerability is much more complex and produced by the interactions of various social, political, environmental and economic processes at local, national and international levels. Some of the social and political characteristics of Humla that have driven differential marginalization processes of its inhabitants are presented in the following paragraph.

3.2.4 Humla – the forgotten region

Humla is usually described in Nepali newspapers and during interviews at national level as a backward region which has been forgotten by political interests (or in the world of a development worker I met in Humla “*deshko pachadi desh*”, meaning “the country behind the country”). The physical remoteness of the district is striking and the headquarters can only be reached by plane, or after one week’s walk from the nearest road. Leaders of Kathmandu will often describe the Humli (people living in Humla) as lazy and dirty and few ever have visited this part of Nepal. There is little development work visible in the villages. A few water taps are available in some of the villages, but latrines are more or less non-existent, or they are broken. Schools often do not have enough teachers or furniture (or walls). The few health clinics that exist are extremely poorly equipped and rarely have doctors, but sometimes a nurse is on duty even if there are no medicines.

In addition to its geographic remoteness, Humla is characterized by its political remoteness with sporadic state presence outside the district headquarters. There is a lack of historical data about the district, but Bishop in his book *Karnali under Stress* (1990), notes that the

region of Karnali was relatively prosperous prior to 1770 under the control of the Khas kingdom (eighth to twelfth centuries). Between the twelfth and fourteenth centuries, Bishop writes that the Khasa Mallas dynasty introduced a feudal society and the Hindu caste systems to assure control over the population and its resources by high castes and its elite (Bishop, 1990). It was not until the 1770s under Gorkha unification that King Prithvi Narayan Shah achieved control of the territories of what is mostly known as Nepal today where various regions, including Karnali, fell under the control of Kathmandu. This was followed by about 200 years of oligarchy led by the Shah and the Rana families who, until 1951, used an extensive control system over the different regions of Nepal to extract resources and taxes from the population. With the support of the King, a few families were given privileges and the responsibility to collect taxes while a large part of the population was left without any rights or voice to claim social justice.

These conditions of political and geographical isolation have forged a district where local social, political and economic networks and social relations are essential elements of people's survival strategies. Such networks form part of a broader system that enhances or inhibits people's access to various assets and shapes important social inequities and marginalization processes based on castes, classes, ethnic groups and gender (Paper 1). It is within this complex situation that development work and climate change adaptation programmes are expected to address the extreme poverty and vulnerability to stressors including social, political and climatic changes.

4 METHODOLOGICAL PERSPECTIVES

4.1 Research approach- epistemological and ontological stand

The study supports the argument by Taylor (2014) that a dualistic ontological representation of nature versus society has depoliticized our understanding of adaptation processes. In that sense, I base my understanding of what appears to be the natural description of environmental processes on the fact that it is a product of the interaction of human and non-human forces (Sayre, 2012; Taylor, 2014) and I regard climate change vulnerability as a product of environmental, political, economic and social factors. This implies, for example, that descriptions of too much or too little rain are related to how people use the precipitation. In agricultural production for instance, one can only understand the implications of precipitation when it is accompanied by an understanding of how cultural practices have shaped the use of various cultivated species, cultivation and ploughing methods, terraces and/or forest management and how society structures are rearranged in relation to these processes.

Following from the above, the study builds on a critical realist philosophical position (Bhaskar and Lawson, 1989; Sayer, 2000) that “combines a belief in an external reality with the recognition that this can only be known through socially mediated concepts and representations” (MacKinnon, 2011: 28). This means that the geographical and social scales, as well as people’s own perceptions, knowledge and/or class representation, although seen as real entities for some, are socially constructed representations of objects and relations (MacKinnon, 2011) and can be contested in relation to the context in which they are produced.

Critical realism implies seeing people’s constructivist views of nature or phenomena, including the researcher’s interpretation and the construction of ideas and discourses, as real. By building on critical realism, I take distance from positivism as I consider relations of causal explanation as complex and unpredictable, as opposed to a positivist approach which views causal chains of explanation through predictable and observable patterns. Analysis of causal chains of explanation, according to critical realism, generates tendencies rather than measurable conditions, but allows the researcher to examine underlying mechanisms that have different implications at different levels (ex: local, national and

international institutional and political structures) in changeable societies influenced by various processes (Alvesson, 2009). Critical realism recognizes the social as relational and emergent, which also implies a recognition that an in-depth interview of individuals will not open for the full understanding of structures because individuals are also limited by the existence of acknowledged and non-acknowledged conditions (Archer, et al., 1998; Bhaskar and Lawson, 1998).

In that sense, and building on post-structuralism, I do not consider that agent and structure can be separated in an objective manner or that all mechanisms deriving from the internally related objects that define structures can be identified (Alvesson, 2009). Based on this, I understand subjects as not mere objects of the study, nor is the researcher outside of the study. The researcher will understand the information given by the subject through her own observations, life story, personal experience and own ideology. At the same time, the informant will present the information in relation to his/her apprehension of the reaction of the researcher.

In addition, it is important to take into account the asymmetrical relationship (see Kvale and Brinkmann, 2009) that existed between me as a student/researcher and the persons I interviewed, as well as the conceptualization of these relationships with villagers or interviewees at policy level (Maxwell, 2005). People saw me as an outsider and could, for example, mistake me for an aid worker. This perception of me could bias the interviews and the information provided. The fact that I am a woman and mother of three small children has given me some advantages when talking to other women and when introducing discussions in an informal way. It could also have been a disadvantage in a society where women do not have the same place as men, but I have never experienced any discomfort when travelling alone or when accompanied by a research assistant. The fact that I am not Nepali has also given me a different status that I could use to ask questions as the “naïve foreigner” (or the big sister “*Thulo didi*” in Nepali language – which is what people used to call me when I stayed in Humla).

Building on critical realism has also helped me to become more aware of my own subjectivity as part of this dynamic, including being attentive to the double subjectivity or *inter-subjectivity* between two persons (see Melhuus, 1995;Kvale and Brinkmann, 2009). For this study, inter-subjectivity means a self-interpretation among the people the researcher

studies and a self-interpretation of how the researcher perceives the information given by the people studied. This means being aware that my presence changes the context in which people act and/or answer questions, but also that my understanding of what may cause local vulnerability can be somewhat different from people's perceptions – although the many interviews I carried out and my three years in Nepal help to orient my own subjectivity within the complexity of the Nepali life.

Maxwell (2005) argues that personal values and identity are important elements of research and that personal ties to the study provide a valuable source of insight, theory, and data about the phenomena the researcher is studying. He suggests writing a memo while doing the fieldwork to make one self-aware of these subjective motives and goals that drive and influence the research. Following Maxwell's suggestions, I wrote memos during my fieldwork while staying in the villages and at home in Kathmandu. In these memos I noted my own understanding of values and narratives presented by interviewees, as well as observations that I found interesting as a means to reduce the risk of me being biased by my own subjective interpretations and to continuously strengthen the research quality of the study.

4.2 In search of a method

Studying social and policy processes cannot be a linear task as these processes are inherently part of complex dynamics where vulnerability is framed by diverse actors who, by their agency and networking power, promote or limit different kinds of knowledge related to their own ideologies, identities, expectations, perceptions and interests (Brock et al., 2001). Various social scholars have suggested different methodological approaches to study power relations, its influences on knowledge production, and subjectivities, who has the authority to produce knowledge and how power relations have been constructed through history (through repression, coercion and hegemony) (see for example Shore and Wright, 1997; Wedel et al. 2005; Mosse, 2005). By using food security as an entry point to analyse vulnerability, I found it useful to integrate three different approaches. First, the Sustainable Livelihood Framework, SLF, (see for example DFID, 1999) is helpful to map the different livelihood strategies people choose to improve their food security. Second, the actor-oriented approach (Long, 1992) gives interesting insights into how to approach the complexity of social and power relations at the local level and how different actors negotiate

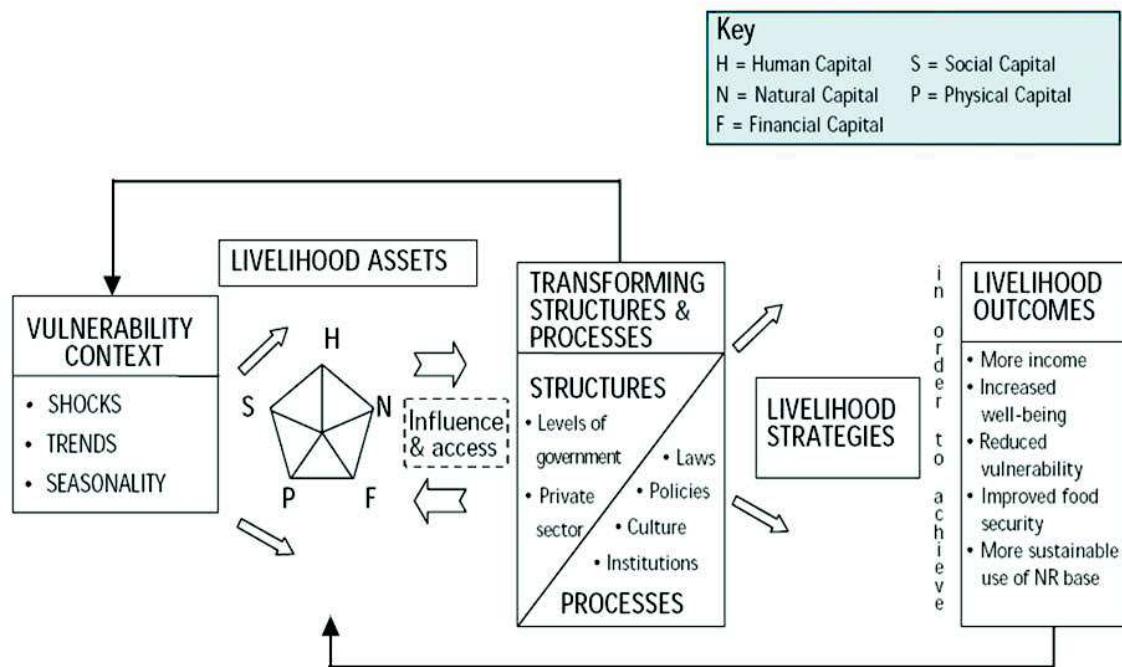
their everyday life. And third, the work on anthropology of policy (Fergusson, 1994; Shore and Wright, 1997; Wedel et al., 2005) provides useful tools for observing and analysing the complexity of social and power relation within policy processes.

4.2.1 Sustainable Livelihood Framework

The SLF underscores that persons and/or communities use different livelihood strategies to enhance their food security and helps us to understand and analyze some of the factors behind differential vulnerability to food security (Chambers and Conway, 1991; Scoones, 1998; Ellis, 1998). The SLF shows how a range of different types of assets (social, physical, economic, human and natural capitals) are combined within broader policy and institutional contexts to achieve a sustainable livelihood (Scoones, 1998; DFID, 1999), see Figure 3. Scoones (1998) also highlights the importance of institutional processes “*embedded in a matrix of formal or informal institutions and organizations*” (p. 3) that support or affect livelihood strategies at the local level to enhance, among other, food security and wellbeing. Chambers and Conway (1991) suggest that the dynamics within the use of livelihood strategies are controlled by people’s personal capabilities, and their access to tangible (resources and stores) and intangible assets (claim and access).

This approach is useful in that it shows that different livelihood groups are affected differently by food insecurity (Young et al., 2001) – what Sen in 1981 referred to as the variation of exchange entitlements that enable or do not enable people to have access to food. However, and repeating the criticism on Sen’s entitlement framework, scholars such as Leach et al. (1997), Yaro (2004) and Yates (2012) have criticized the SLF for not taking into account the “dynamics of exercising power in the distribution of the means to access food” (Yaro, 2004: 26) where reasons for inequalities and marginalization are depicted. An emphasis on livelihood strategies as a means to tackle changes may thus risk focusing too much on a positivistic epistemology of vulnerability and fail to take into account meanings, social and political processes and the constructive formation of knowledge and power.

Figure 3. The Sustainable Livelihoods Framework. (Source: DFID 1999: Section 2.1)



This limitation of the SLF has also been encountered in the research process. While the SLF has proven useful in terms of identifying the types of resources that people draw upon in responding to changes (see in Paper 1), I also saw a need to look at vulnerability and food security beyond a livelihoods framework. This is supported by various scholars who have argued for frameworks that take into account the multi-dimensional complexity of the vulnerability as well as the unpredictability, speed and scale of climate change (Bohle et al., 1994; O'Brien, et al., 2007; Pelling, 2011; Scoones, 2004). Thus, in addition to building on SLF, the analysis of vulnerability in the thesis integrates other approaches as a way to relocate an analysis of food security and vulnerability within a context where social, political and environmental processes interact.

4.2.2 Long's actor-oriented approach

The actor-oriented approach proposed by Long (1992) offers interesting insights into how to address the relation between theory and methodology, including field work and data collection, while investigating how perceptions, knowledge and strategies of different actors are shaped by power at the local level. It underscores that people are not only passively

affected by macro-level processes, as is often assumed by the modernization and dependency theories with their focus on how international and national processes affect people at local level. In addition to the macro-level processes, Long argues that actors are also important determinants of their own social development which is driven by internal factors and relationships. In that sense, while the actor oriented approach gives a strong focus on the agency of the actors as suggested by the structuration theory of Giddens (Masaki, 2007), it also follows some theories of power argued by Foucault when he points to the “microsociology approach” (Gaventa, 2003: 5) that shows how power circulates between actors, even through those that occupy subordinate positions (Gaventa, 2003; De Regt, 2007).

In this study, I build on the actor-oriented approach to “emphasize the interplay and mutual determination of internal and external factors and relationships and which provides accounts of the life-worlds, strategies and rationalities of actors in different social arenas” (Long, 1992: 4). This means that I aim to analyse processes through the recognition of the interplay between individuals, human actions and institutions and how these in turn are influenced by the context in which people live where external and internal factors intervene. As such, using the actor-oriented approach allows me to reveal and analyse the complexity of how social and power relations influence everyday life and decision-making processes at the household level.

Long suggests three analytical concepts that are useful when analysing how power and social relations influence differential vulnerability patterns at the local level. These are: 1) the agency and social actors, 2) the notion of multiple realities and arenas of struggle where different life-worlds and discourses meet and 3) the idea of interface in terms of discontinuities of interests, values, knowledge and power (Long, 1992: 271). Indeed, the first two concepts highlight the importance of looking at “the ability of [the] social actor to act” (Nyborg, 2001: 43), while also recognizing a context which is constructed by different meanings and perceptions, including the researcher’s own values and interest. The third concept underlines the importance of studying the moments where different social systems and/or fields interact, in other words, to look at the encounters at the boundaries between different social groups or meanings that catalyse processes of negotiation influenced by the nature of power and social relations (Nyborg, 2001).

Although the actor-oriented approach provides an opportunity to analyse the multitude of narratives and perceptions about vulnerability presented by different actors, it can also be criticized for paying too much attention to the power of agency to influence external processes (Gaventa, 2003; Masaki, 2007). These criticisms highlight the need to incorporate a method that reveals the complexity of processes of policy formation at different levels.

4.2.3 Anthropological approaches of policy processes

In order to broaden my analysis of the role of power relations in shaping policy processes on different levels and the implications for local vulnerability, I build on approaches that have been developed within the field of anthropological approaches of policy processes (Fergusson, 1994; Shore and Wright, 1997; Wedel et al. 2005; Mosse, 2005) what Shore and Wright (1997) have also called “Anthropology of Policy”. Reinhold (1994: 477 cited in Shore and Wright, 1997 p. 14) states that policy analysis means: “tracing ways in which power creates webs and relations between actors, institutions and discourses across time and space” (p. 14). This implies not treating the policy processes as rationally formed by neutral actors but as contested political spaces where different ideologies and interest interact and are influenced by relations of power and systems of governance where the outcomes end up very different from what was intentionally planned (Fergusson, 1994; Shore and Wright, 1997; Wedel, et al., 2005, Mosse, 2005). In this sense, an anthropological approach to analysing policies builds on Foucault’s work on discourse analysis and power relations, which sees the influence of power relations in the production of meaning and knowledge through discourses.

Fergusson (1994) explains that clearly when he writes:

“The thoughts and actions of “development” bureaucrats are powerfully shaped by the world of acceptable statements and utterances within which they live; and what they do and do not do is a product not only of the interests of various nationals, classes or international agencies, but also, and at the same time, of working out of this complex structure of knowledge” (p: 18).

Within the anthropology of policy, Shore and Wright (1997) highlight the importance of analysing policy documents and how these are used to legitimise a kind of knowledge that justifies a type of interventions. Qualitative analysis of policies, including discourse

analysis, are widely used to reveal broader political interest and ideologies hidden behind problem and solution framing and to better understand who and what is included and who and what is left out (Apthorpe and Gasper, 1996; O'Brien et al., 2007; Nederveen Pieterse, 2010; Ireland, 2012).

As part of this study, I conduct a qualitative content analysis of Nepal's two main CCA policy documents and the country's food security policy document with a focus on different interpretations of vulnerability and adaptation. To further strengthen the analysis, I conducted a mapping of different actors (i.e. organisation and institutions) involved in the formation or implementation of these policy documents, their networks as suggested by Wedel et al. (2005) followed by qualitative interviews of key informants as further described in the methods sections. Political spaces as defined by Gaventa (2006: 6) as "opportunities, moments and channels where citizens can affect their lives and interests" also gave an instrumental level of analysis at local, district and national level as they define the boundaries of whose voices and knowledge count in policy deliberations (Brock et al., 2001; Cornwall and Gaventa, 2011). At local level, the political spaces were represented by user groups facilitated by WFP. At district level, I was present in various political meetings, while at national level, study of political spaces implied participating in different conferences, meetings for donors, NGOs or seminars. This contextual understanding of the production of policy discourses is important as it is within such complex negotiations and contestations of meanings and ideas that physical and social realities are constructed (Masaki, 2007).

At the same time, an anthropological approach of policy has been criticised for paying too much attention to the oppressive nature of development discourses and for focusing too little on the nature of agency to transform and/or influence these policy processes (Masaki, 2007). Combining the SLF, an actor oriented approach with anthropological analysis of policy processes allows me to follow the way in which dominant narratives travel within and across scales (through interviews and qualitative analysis of policy documents), to compare these narratives with peoples' perceptions of the root causes of their vulnerability, and to understand the extent to which people have agency to influence their vulnerability situation. Furthermore, and recognizing that policy processes are formed and influenced by power relations on multiple levels and that these power relations play a key role in defining knowledge, subjectivity, authority and intersectionality, this opens up for a more nuanced

study of how social and power relations influence vulnerability. It is with this complexity of the relationship between power, vulnerability and adaptation policies in mind, that I selected the following methods for data collection, analysis and interpretation

4.3 Data collection, analysis and interpretation

To depict the complexity of power and social relations into policy processes and to avoid a “simplistic, dichotomous conception that power is exercised by dominant players over oppressed actors” (Masaki, 2007: 5), I chose to start my fieldwork by looking at the complexity of the village level and then follow this complexity within dominant narratives at the district and national levels. This choice also reflects a theoretical stance by looking at power through what Foucault called “a micro-physics of power” where one has to look at power relations experienced by individuals and then travel within these dynamics to reveal a more general web of power and social relations (Masaki, 2007).

As will be further described in the following sections, the analysis is based on data from interviews with household members from selected communities and policymakers at the international, national and local levels, group discussions, participant observations in the field, discourse analysis and literature reviews using qualitative methods as a main form of analysis.

4.3.1 Research design and field methods

Field studies were conducted over a five-year period from 2009 to 2014. During the three first years, I lived with my family in Kathmandu from where I planned and made six trips to Humla where I stayed for about one month during each trip in the villages. I also visited Humla and Kathmandu in May 2013 for one month and Kathmandu in August 2014, for two weeks.

I chose a case study approach to be able to investigate the complexity of social phenomena at both local and national level within real life contexts (Yin, 2013). Four villages were selected in the district of Humla as the main study site where different observations and narratives at the local level were compared to shed light on the vulnerability context and the impact of aid programmes as experienced at local level. At the national level, policy

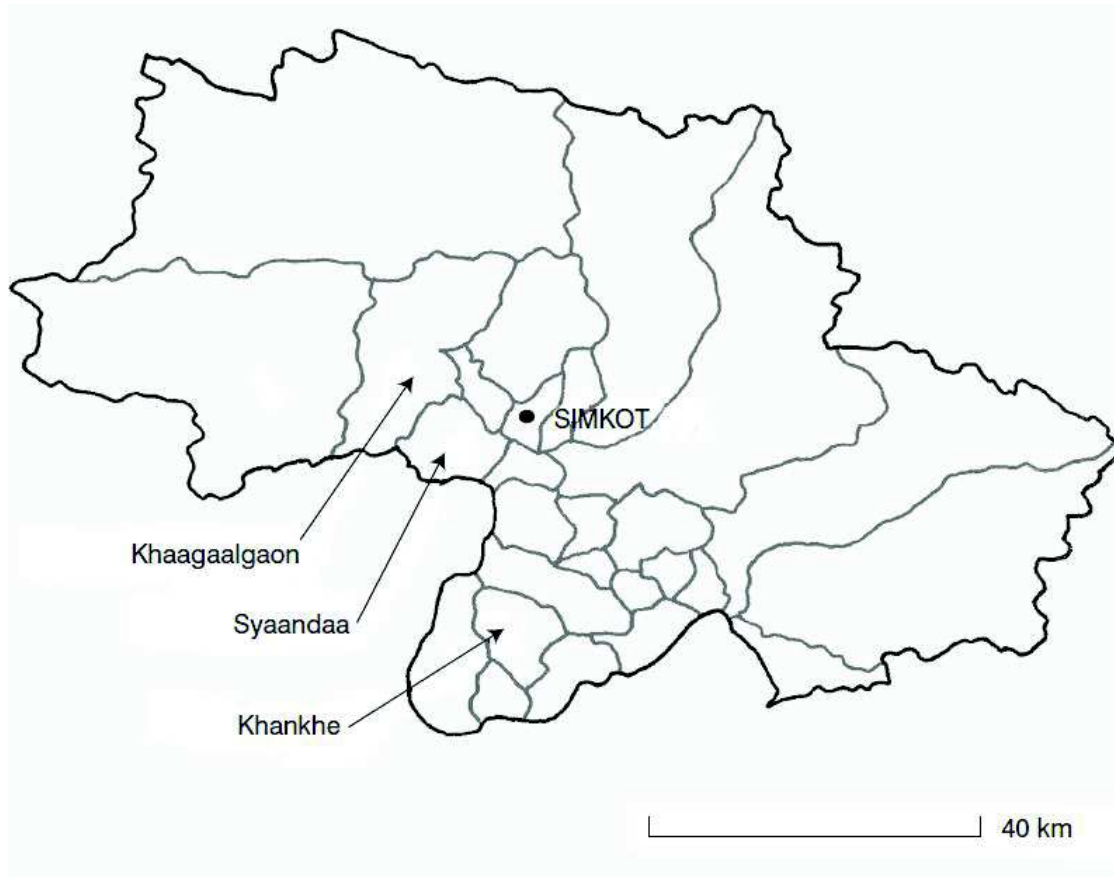
discourses and narratives of representatives of government, aid organizations, political parties and research institutes were analysed and compared with local level perceptions of vulnerability.

Because Humla is very inaccessible (in my experience, it took between two and ten days to reach Simkot, depending on the weather and the capacity of the flight system, and then another day to reach the villages studied in Upper Humla, and two to four days' walk to reach the villages in Lower Humla) and because of my family situation, I chose to make several visits to Humla, each of about one month's duration. Although I acquired a basic understanding of the Nepali language while living in Nepal, the Nepali dialect spoken in the district – also called Nepali *kaas* – is quite different from the Nepali spoken in Kathmandu. To sort out possible misunderstandings during interviews and to help me get a better understanding of the everyday life of Humlis, I chose to get help from two research assistants while staying in the villages in Humla. The first research assistant comes from one of the lama villages in the Khaagaalgaon Village Development Committee (VDC) and helped me in the three villages of Upper Humla. The second research assistant helped me in the village of Khankhe in Lower Humla, where he comes from. Both research assistants did tremendous work in facilitating a discovery process of the multiple faces of Humla. Between each trip to Humla, while staying in Kathmandu, I used my time to do policy interviews with donors and various aid and government agencies, participating in seminars, conferences or meetings as well as reading literature and writing and analysing field notes.

a. Site selection

The four selected villages are located in three different VDCs. These are Khaagaalgaon in the VDC of Khaagaalgaon, Syaandaa and Yangu in the VDC of Syaandaa, and Khankhe in the VDC of Kalika (see Figure 4). The three VDCs belong to two different ecological regions: Khaagaalgaon and Syaandaa VDCs are located in the north, in Upper Humla and Khankhe in the south, in Lower Humla. While subsistence agriculture and animal husbandry are the dominant livelihood strategies in the villages in combination with trade for certain households, they differ in terms of their physical environments, food security situations, livelihood strategies, ethnicity and social structure. The main features of the villages that are critical for understanding their vulnerability contexts are summarised in the table below (Table 2).

Figure 4. Map of Humla showing the location of the three village development committees (VDC) of the villages visited, from north to south: Khaagaalgaon, Syaandaa and Khalika (the latter VDC includes Khankhe village) (Reproduced from Nagoda and Eriksen, 2015)



Syaandaa, Khaagaalgaon and Yangu were selected primarily based on the differences in the food security and vulnerability situations between these villages even though they only are a few hours walk away from each other and share relative similar⁹ ecological characteristics. Comparing these three villages gave interesting indications on how social and environmental factors interact and affect the vulnerability context. Since there are almost no guesthouses in Humla outside Simkot, I identified households in Syaandaa and Khaagaalgaon where I could stay as a paying guest during my stay in the villages.

⁹ All villages studied are situated in relatively steep mountain slopes facing east with access to water and nearby forests. However, Khaagaalgaon faces slightly more to the north indicating some more shadows in Khaagaalgaon and possibly more capacity to retain humidity in the soil.

Table 2. Characteristics of the three villages studied in the Humla district

Villages	Khaagaalgaon	Syaandaa	Yangu	Khankhe
Altitude (metres above sea level)	2808*	2745*	2531*	1700
Religion	Buddhist	Hindu	Hindu	Hindu
Caste/ethnic group	Lama	Chhetri	Thakuri; Dalit; Chetri	Thakuri; Dalit
Approximate number of households	75*	152*	41*	94
Persons per household	6.08*	6.3*	5.6*	7.2
Child mortality per household	0.2	1.4		0.9
Food security**	Moderately food-insecure	Highly food-insecure	Highly food-insecure	Highly food-insecure
Main livelihood strategies	Agriculture, trade	Agriculture, trade, wage labour	Agriculture, trade, wage labour	Agriculture, trade, wage labour, migration and food aid
Main crops cultivated	Buckwheat, millet, barley, potatoes, seasonal vegetables	Buckwheat, millet, barley, wheat, potatoes, seasonal vegetables	Buckwheat, millet, barley, wheat, potatoes, seasonal vegetables	Rice, millet, barley, wheat, corn, seasonal vegetables
Main livestock	Yaks, yak/cow hybrids, horses, sheep, goats	Yaks, yak/cow hybrids, horses, sheep, goats	Yaks, yak/cow hybrids, horses, sheep, goats	Cows, buffalo, sheep, goats

Data based on fieldwork 2010–2011, except for those denoted with an asterisk (*) based on Roy (2010) and with two asterisks (**) that are based on District Food Security Network (DFSN, 2010).

The village of Khankhe in the VDC of Kalika can be reached after four days' walk south of Simkot (or two days using a shortcut, crossing a pass of about 4000 metres). Although food insecurity in the this VDC is described by development aid agencies and the DFSN as higher than in the VDCs of Upper Humla, the village has more lands and better climate for agriculture than villages in Upper Humla. Comparing Khanke with the three villages in Upper Humla made it possible for me to broaden my understanding of the complexity of the vulnerability context in Humla. The analysis of the four villages highlights the different perceptions people have about what influences their food security and wellbeing and how different livelihood strategies, political and economic processes and factors interact with each other to drive differential vulnerability patterns at local level. It also gave important insights into different forms of power relations, where wealth differences and contacts with traders were important in Upper Humla, while power relations based on caste and gender were more visible in Lower Humla, including contacts with political parties and development organisations. All these villages also receive food aid in differing quantities. Looking at the way in which aid was planned and implemented in each village provided

useful information for investigating the extent to which food security interventions and people's perceptions about food aid vary related to different situations.

As mentioned earlier, I made different trips to Humla. Revisiting Khaaghaalgaon twice, Syaandaa four times, Yangu three times and Khankhe twice, gave me the chance to meet the same people several times. This made it possible to discuss past dynamics and changes, and to get to know people a little better, making each visit easier and more insightful. I always stayed few days in Simkot on each trip, in order to meet with government officers, non-governmental organizations (NGOs) and political parties at the district headquarters.

The four villages were not investigated with equal focus, as shown by the number of interviews presented in Table 4. A higher number of informal interviews were conducted in Khankhe and Syaandaa compared to Yangu and Khaaghaalgaon. This was based on a choice to spend more time in Khankhe and Syaandaa considering the interesting social relations between the better-off and the poor, and between high castes and low castes, as well as the fact that these two villages had received more food aid than Khaaghaalgaon. In addition, because of the extreme poverty encountered in Yangu, I had some difficulty finding a household in this village that could give me shelter for the nights I was there and I decided to concentrate my work in Syaandaa and Khankhe where the socio-political situations were equally interesting and where I could stay in a household without being too much of a burden to my hosts.

b. Data collection

Although I started my field work with semi-structured interviews to get some understanding of the different livelihood strategies in the villages (building on the SLF approach), I quickly followed Long (1992)'s actor oriented approach and adopted an open-ended ethnographic approach to explore the complexities of meaning and social action of everyday life situations while doing fieldwork and data transcription.

Semi-structured interviews at household level

In these interviews, I aimed to get an overview of the household's livelihood strategies, food security, limiting factors and opportunities relating to access to different capitals or assets. Although I tried to include some specific questions that I would repeat in other interviews to

allow for some comparison between households, I also kept much time (and space in my notes) for the specific experiences and/or stories the interviewees wished to highlight. In this sense, each interviewee provides some unique information that deepened my understanding of his/her specific situation.

I began my data collection by asking people how they perceived their food security, framed in the field by asking if they considered their household as having access to enough food to live a healthy life. The answers would lead to a myriad of different directions and to new questions related to agricultural production, access to land and trade and social structures including causes of the limits or opportunities the family has to access food and how these may be related to drivers of vulnerability. These discussions would not necessarily lead to a proper measurable or objective identification of the food security situation per se. Indeed, informants might have had an incentive to exaggerate their food insecurity problems in front of me in the hope of getting more food aid. Also, food security depends on various indicators as presented by United Nations Food Agriculture Organisation (FAO, 2015) and can be classified along the four dimensions of availability, access, utilization and stability. However, I was more interested in the different narratives people would present to explain their food security situation at the time of the interview than in a concrete measure of food security. Conversations about the present situation were also used as background information to ask about changes in vulnerability and food security over the last 10 to 20 years – or more if speaking with elders – and integrating information about environmental (climate), political and social changes that have impeded or enhanced the food security situation of the household and the region over time.

Although the semi-structured interviews mostly followed a qualitative approach, some quantitative data was also included. For example, I asked the interviewees to rank the main limiting factors, livelihood strategies or sources of coping and adaptive strategies in case of stress, on a scale from 1 to 4. I also enquired about the area of land available to the household, the yields of different crops, months of consumption from own production and from off-farm sources or from food aid, and the main expenses/income in terms of Nepali currency per year. The information was collected in local values and measurements as this made more sense for the people interviewed (and for me) than using foreign currencies. Importantly, because the quantitative information was, in some cases, based on estimates rather than on actual measurements, these figures are used only to illustrate the relative

variation between households, groups and/or villages, and not in absolute terms. During the semi-structured interviews, information about the agricultural and trade calendar as well as about household members' occupational duties and educational levels, was also collected.

The interviewees for the semi-structured interviews were chosen as randomly as possible by selecting every fourth household from a list of household heads. Although some persons were absent or in a few cases did not want to be interviewed, I tried to keep close to equal representations from the different geographical areas (wards)¹⁰ within the villages and of each wealth category, caste and gender as represented in each village.

In this first part of the fieldwork, the SLF was useful in order to guide questions to show how food security is related to access to land and/or livestock, and how the access to these physical assets were related to different capitals and/or social assets. In addition, the SLF helped to show that, although agriculture is the most important livelihood in Humla, households also have to rely on other livelihood strategies such as trade and off-farm activities, in order to survive. However, because of the limitation of the SLF mentioned earlier and because I soon realized that people would tell much more if I did not approach them with a notepad but while helping them in their daily activities, in the second part of my fieldwork I relied much more on informal and open-ended conversations as presented below.

Open-ended interviews with key informants at village level

Informal interviews were done with key informants chosen when I was living in the villages, to elaborate issues identified during the semi-structured interviews or to clarify my own observations. I also used these informal interviews at times to verify viewpoints or accusations (often between Dalit and Thakuri families or women and men) raised during conversations with people. Key informants were drawn from local leaders, elites, the very poor, women, or neighbours. These people were usually approached in an informal manner, asking if they had time to clarify some views or discuss some specific issues while I would help cleaning the lands, taking care of the children or collecting firewood.

¹⁰ Every village (governed by a VDC) is divided into nine wards, this being the lowest administrative unit in Nepal.

These informal interviews were instrumental in obtaining a better understanding of sensitive questions related to power and social relations, as people were not keen to give detailed information about conflicts, oppression or control while approached in more formal settings. They were also important to get better insight into historical moments and as suggested by Taylor (2014) I recorded a few life time accounts with elder villagers. Although interviews could last an hour or more, most people were generous with their time. And while many women in particular were not willing to give formal interviews (with me approaching with a note-pad and a pen) – in part because they felt their husbands “know better” than they, or because they were busy with other work – most women were keen to share their experiences informally when I accompanied them in the field or helped them with their daily tasks.

Group discussions at village level

Group discussions were an important part of the data collection process as they generated debates between the different participants. The dynamic of the group depends on people’s own subjectivity and beliefs or interests for putting forward their meanings, or trying to convince others (or myself), or simply adapting to more passive roles. Group discussions also nurture social interaction and, at best, the generation of ideas and meanings that may be lost in individual interviews (Krueger, 1994). In total, I conducted seven groups discussions as explained below.

I followed Krueger’s (1994) argument regarding the importance of the homogeneity of the group, where participants may feel at ease in expressing themselves without being afraid of being turned down, or at worst, of oppression or reprisals because of unequal power and social relations. At the village level, I tried to speak with homogenous and small groups, believing that discussions would be most fruitful and interesting with three to five persons in each group. With the exception of the more formally convened introductory group discussions that I organized in all villages, groups were mostly formed spontaneously and discussions were informal. According to Frey and Fontana (1993), spontaneous groups are naturally formed group interviews as opposed to formal group interviews which follow a semi-structured approach. Although most of the groups were naturally formed, I tried to separate group discussion from individual interviews. In the case a neighbour or parent joined an individual interview, I felt it inappropriate to insist on continuing with the individual interview by turning away those neighbour or relatives. Instead, I usually used

these opportunities to hold a very informal group discussion, while asking if the original person being interviewed would have time a bit later to continue the interview. In that case, I have not counted these very informal group discussions as part of the seven group discussions mentioned below, but I recorded the discussion as informal information. In all group discussions, as in individual interviews, I prepared in advance two or three issues I wished to discuss, but let the discussion evolve by itself.

In each village, an introductory group discussion was organized with the help of a research assistant during which I presented myself and explained the reasons for my stay in the village. The discussion was open to everyone in the village. During this first meeting, I also tried to undertake an informal wealth-ranking classification of the villagers. This first exercise would often cause interesting discussions and allowed me to observe how villagers classified themselves and others as “very poor” or “better off”, and how people would negotiate their household classification. Interestingly, although most of the villages made a ranking related to a food security situation, each village chose different criteria to classify households’ wealth ranking. In Khaagaalgaon, having many livestock and monetary income generated from trade were important criteria, while the villages of Syaandaa and Khankhe placed more weight on having access to good land or relatives with networking capacity with development organizations and/or political parties.

In addition, seven group discussions – including with people of different castes (Chhetri, Dalits, Thakuri), women, very poor, better-off, traders and elders – were undertaken to follow up on particular issues raised in household interviews. Examples of these issues were particular social relations in order to access resources, changes within the agricultural calendar over time, and the work burden at household level. The help of my research assistants was essential during these group discussions to clarify questions and responses, and to assist when the dynamic of the group would make it difficult for me to follow up as people would interrupt each other, make jokes or become emotional when referring to issues related to injustice or oppression.

Participant observation

In addition to the formal and informal interviews and interactions during my stay in the villages, participant observation was an important source of information. During my stay in the villages, I used the opportunity to take part in village life as much as possible. This also

allowed me to observe how people organize their daily lives, and how people would help and interact with each other. The observed examples of how social and power relations affected interactions and access to resources were numerous. In one case, a Dalit approached a Thakuri household for food but was rudely rejected as he had not helped the Thakuri family to collect firewood. Another time, a Dalit was explaining to me about a dispute he had with Takuris, but he was interrupted by a Takuri so that he was unable to continue his story. There were also the stories demonstrating help and support between households during hard times. For example, a Dalit explained how a Thakuri family had helped him during the war when the Maoists tried to enrol him in the insurgency against his will. I also met a husband who chose to transgress the codes of the Hindu religion when helping his wife during childbirth, as she was about to die. Indeed, based on the Hindu religion, a man cannot touch his wife during, or for a few days after, the birth. He managed to save the life of his wife, but not that of his new-born son. On another occasion, I observed how women and children were carrying stones for a World Food Programmes (WFP) project, while the men were discussing with each other trying to agree where to put the stones.

I also observed interactions in political spaces at local, district and national level that were created as part of the adaptation policy processes by humanitarian organizations, political parties and/or local, district and national level government agencies. These observations were made in order to better understand how decision-making processes function at different levels. Political spaces at the local level were analysed by observing how NGO representatives would organize village user groups for the planning and implementation of activities, who participated in these user groups, and who did not. I was present at some meetings organized by NGOs and political parties at district level in Simkot. Although not actively involved, I was able to sit with the groups and observe the dynamics of the group's discussions and to see who was included and who was not – in other words, to see whose knowledge counts and whose does not. These meetings at district level were interesting as I could recognize some people from the villages – usually local elites – who were actively involved in political meetings and/or with NGOs present at district level. At national level, I participated in many meetings and conferences open to humanitarian organizations or donors. In these, I usually adopted a passive participatory stance, taking note of people's narratives. Importantly, the fact that I was based in Kathmandu for three years and had friends engaged in the Nepali and international aid apparatus, provided me with insights into

the policy processes at national and local level. I could also observe the everyday struggles of development workers, both local and international, attempting to reduce people's misery in a very complicated and rigid international and national development system.

Individual interviews at policy level in Kathmandu and Simkot

Policy level interviews were conducted with donors, government officers, political parties and humanitarian organization representatives at local and national level, in Kathmandu and in Simkot. Interviews at policy level were usually formally planned; I would request a meeting by sending an email or calling their office. The interviews followed an open-ended and qualitative approach where one question and response would lead to a new question and response. However, although I designed the interviews as an open platform for exchange of ideas and opinions, I also prepared a few questions in advance on topics I was particularly interested in discussing for each interview. I tried to cover some of the same core issues in the different interviewees to be able to compare different perceptions of the same issues. These core issues include general perceptions of vulnerability (and specifically in the district of Humla), food insecurity, climate change adaptation and the importance of social and power relations at local and national level. These interviews were also important to enlarge my network, where I was often able to obtain new names and contacts for a next meeting.

c. Sampling

The household level analysis draws on 68 semi-structured interviews, and 52 key informant interviews within the four villages as presented in Table 3. This was deemed an appropriate number of interviews in order to capture both social differentiation, contrasts between the villages, and to be able to go into sufficient depth in individual interviews regarding sensitive issues such as marginalization processes and power relations. The Table 4 presents the number of semi-structured interviews in the villages of Khaagaalgaon, Syaandaa and Khalika categorized into food secure and food-insecure households. As mentioned above, getting interviews with women was more challenging than with men. Some women accepted to start a semi-structure interview but the interview was interrupted either because her husband took over the interview or because she had to run after a child or finishing a work. However, in counting all the interviews with women, either that started as a semi-

structure interview or an informal conversation related to the study, about 37 women were interviewed for the PhD.

Table 3. Number and types of interviews conducted in Humla district

Village	Key informants	Focus group	Semi-structured interviews	Sample of interviews related to number of households
Khaagaalgaon	2	1	21	30.6%
Syaandaa	22	1	21	28.3%
Yangu	5			12.2%
Khankhe	23	5	26	52.1%
Total	52	7	68	33.1%

Table 4. Number of semi-structured interviews in the three villages of the district of Humla categorized into food-secure and food-insecure households. The numbers in parentheses are percentages.

Food security situation of the households interviewed	Villages			Castes in Khanhe		Total
	Khaagaalgaon (Lama)	Syaandaa (Chhetri)	Khankhe (Takuri and Dalit)	Thakuri	Dalits	
Food-secure households	21 (100)	9 (43)	4 (15)	4 (29)	(0)	34
Food-insecure households	(0)	12 (57)	22 (85)	10 (71)	12 (100)	34
Total	21 (100)	21 (100)	26 (100)	14 (100)	12 (100)	68

At the policy level, a total of 74 qualitative interviews were conducted with donors, government officials, political parties and humanitarian organization representatives mainly in Kathmandu (46 interviews) and in Simkot (28 interviews) as presented in table below (Table 5).

Table 5. Interviews at district and national policy level

Interviews	Kathmandu	Simkot	Total
Total interviews with donors	8	1	9
DFID	3		
USAID	1	1	
European Union	2		
Embassy of Norway	2		
Total interviews with the United Nations	8	3	11
WFP	4	2	
UNICEF	1	1	
UNDP	2		
FAO	1		
Total interviews with International financial institutions	4		4
Asian Development Bank, ADB	2		
World Bank, WB	2		
Total interviews with the Nepal Government officers	10	6	16
NPC	1		
Ministry of Environment	3		
Ministry of Agriculture	1		
Ministry of Foreign Affairs	1		
Ministry of Finance	1		
Ministry of Supply	1		
Ministry of Local Development	1		
NFC	1		
District Agriculture Development Office (DADO)		2	
Local Development Officer (LDO)		1	
Chief District Officer (CDO)		1	
VDC		2	
Total interviews with political parties		4	4
Maoists		1	
National Congress, NC		2	
Unified Marxist-Leninist Party, UML		1	
International and national NGOs	11	14	25
Total interviews with research institutions	3		
ICIMOD ¹¹	2		
INSET-N ¹²	1		
Nepali scholars	2		
Total	46	28	74

d. Secondary literature

Secondary data about Humla is sparse, and I met important challenges in obtaining trustworthy data and statistics from the district, including information about temperature, precipitation, development indexes, economy and levels of food aid, and other external interventions. However, the work from the Karnali region by Bishop (1990), Levine (1987),

¹¹ ICIMOD: International Center for Integrated Mountain Development

¹² INSET-N: Institute for Social and Environmental Transition, Nepal

Fürer-Haimendorf (1988) and Adhikari (2008) gave important information of the history of the region as well as cultural and development features. When doing the fieldwork, I met other PhD students and scholars that were working in Humla (Roy, 2010; Sanders, 2010; Citrin, 2012). Discussions with them and with the Karnali expert Jagannath Adhikari provided important information about the contextual understanding of the district. Other interesting studies from adjacent districts include Connell (1991), Nightingale (2005, 2006, 2011) and Bishokarma (2010).

In addition to these studies, I read a large number of project proposals and evaluations presented by NGOs or the United Nations as well as government directives, plans and donors' country plans. At governmental level, the NAPA and the LAPA as well as documents for the preparation of the Agricultural Development Strategy (ADS) have been central for this study. Documentation of WFP programmes in the area (although difficult to access) were particular useful to understand development of food security programmes and food aid in the areas. Other documents scrutinized were DDC plans, national and local NGO plans, and newspapers.

4.3.2 Data analysis and interpretation

The analysis and interpretation were done in two overlapping phases: first in the field while doing the interviews and subsequently back in the office, when looking at my notes and analysing the data for the papers.

The villages had no electricity; bringing my computer was not an option. Instead, I kept a system of "clear" notes in a book with the responses of the interviewees, together with personal notes where I wrote questions, remarks and the names of persons I wanted to see. I transcribed the interviews with my notes from the field when I returned to Kathmandu. I did not record the interviews with a recorder as I found out that it intimidated more than it helped the interviewees. In that respect, the quotes used in the papers are those I wrote directly from the interviews in English or Nepali in my note pad.

To analyse the qualitative information, I chose two main methods. The semi-structured interviews were analysed using the NVIVO system where I coded different types of information and created nodes and queries related to the information I was interested in

looking at. For example, I compared Dalits' perceptions to those of Thakuris relating to access to land, or compared differences in coping strategies or limiting factors related to castes, wealth-ranking, food security situation of the households or gender. The nodes referred to villages, caste (Dalits, Thakuri, Chhetri, Lama) and the food security situation (food-secure and food-insecure households), while "queries" enabled me to regroup the information related to main livelihood strategies, perceptions about the evolution of the food security situation, limiting factors, coping strategies, importance accorded to food aid and importance according to social and power relations and social networks. After having created the nodes and the queries, the information could be compared with any of the themes defined. Although the NVIVO coding was useful for comparing different households and to find patterns, I also re-read whole interviews several times to better understand the connection of different viewpoints related to the situation of each household. Because I had spent some time with the people in the villages, I was able to recall most of the persons interviewed, the places we had talked together and most of their family situations when reading the interviews in my office.

Details of informal interviews were kept as Word documents as I found that every informal interview had particularities that were not comparable. At the same time, these interviews were key to understanding some patterns highlighted during the coding and to better understand significant details related to power and social relations.

Quantitative information was analysed using Excel. Different analyses were done to estimate the income, source of income, purchasing power, expenses, production, consumption and access to land for every household and for each crop, as well as the importance given to food aid. I compared different groups (by castes, villages, food-security situation, wellbeing situation) using the medians of aspects such as land, month of consumption, income to ascertain whether there was a pattern in how the food security situation was related to tangible and intangible assets. Recognizing the subjectivity of the responses, I used median rather than average values when comparing different groups. I posted the information on different charts on the wall of my office, where I coloured the responses in relation to the importance people placed on different issues, in order to help with visualising possible patterns.

4.3.3 Qualitative content analysis

The qualitative content analysis of policy documents is based on the diagnosis tool developed by O'Brien et al., (2007) on different interpretation of vulnerability at policy level and builds on three main policy document. The NAPA, and the LAPAs are used as a case to represent CCA policy documents and are compared with the main food security policy document in Nepal (the ADS). The qualitative content analysis focuses on how vulnerability is conceptualized in a *contextual* versus an *outcome* vulnerability axis as suggested by O'Brien et al. (2007) and is supplied by qualitative interviews with people working at policy level, including donors, government staff at national and district level, and international and national organizations as further described in Paper 3. The main narratives at policy level were further compared with the findings from Papers 1 and 2 and narratives at local level to better understand the implication of interventions as defined at national level with the highly contextual vulnerability context as perceived locally.

4.4 Methodological guide to the thesis

The following table (Table 6) aims to give an overview over the main analytical and methodological approaches used in the four papers.

Table 6. Overview over the main analytical and methodological approaches used in the four papers

Papers	Case study	Analytical and methodological approach	Data collection
Paper 1	The role of power and social structure on differential vulnerability contexts at local level.	Secondary literature on historical accounts about Humla, SLF, Actor-oriented approach.	Qualitative interviews including semi-structured interviews and some quantitative data.
Paper 2	Impacts of food security interventions on vulnerability context.	Secondary literature on historical accounts about Humla, SLF, Actor-oriented approach.	Qualitative interviews at local, district and national level including semi-structured interviews and some quantitative data.
Paper 3	Comparing adaptation with food security policy and interventions and with local level perception about vulnerability.	Anthropology of policy including qualitative content analysis and qualitative interviews at policy and local level.	Qualitative interviews at policy and local level including informal and formal interviews at both local and policy level.
Paper 4	Politics of adaptation.	Actor-oriented approach and anthropology of policy.	Informal interviews.

4.5 Validity, reliability and generalisation

According to critical realism, the empirical domain is an anthropocentric concept and represents only what people can experience (Archer et al., 1998; Johnston and Smith, 2010). Hence, because this study is developed within my interpretation of what I analysed, the validity and reliability of the study depends on the inquiry processes and how these reduce misinterpretation of the data collected (Guba and Lincoln, 1994).

As mentioned above, I acknowledge an open system leading to the complexity of the causes of vulnerability. I also acknowledge that my research was guided by my own perceptions and ideologies and that interviews have to be understood within the double subjectivity that implies the interaction of interviews and in general social relations with people. This often obliges me to double-check my presumptions and ask various questions. At the same time, using a research assistant in Upper Humla and then another one in Lower Humla, increases chances of data distortion as they would also understand the situation related to their own perceptions. As I could understand most of the discussion in Nepali, this helped to rephrase my questions when I saw that I was misunderstood.

To increase the validity and reliability of the findings and thereby diminish the risk of data distortion and flaws, I was eager to triangulate the data. I found it important to speak with many different persons, including women and men, low and high castes, extremely poor people and local leaders, farmers and traders, politicians and aid officers and sometimes to speak at different times with the same person. Staying for some time as I did with people in the villages and in Kathmandu and being aware that I may not have understood a situation well also increased the number of interviewees to get a better understanding of the different facets of the vulnerability context of Humla and how it is understood and interpreted by different actors. The period in which I lived in Nepal – mostly in Kathmandu – allowed me to meet an important number of informants, in formal and informal situations as well as being part of the everyday life of many Nepalis while living in the villages. I read many documents, historical inquiries, journalistic articles and political or official documents about Humla and Nepal in general. Since the semi-structured interviews were chosen randomly, with several questions duplicated to different interviewees, I avoided excessive bias during the first steps of my inquiries while getting a quick overview of livelihood strategies, main limiting factors and main opportunities. The possibility of returning several times to the

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same villages and revisiting the same people also helped me to maintain some distance from the data collection process and the analysis while building some trust and respect between the people and myself.

The ethical considerations are woven into my own moral integrity and my wish to obtain good quality research. My priority is, in any case, to respect all the people I meet. All interviews at both local and policy level were based on voluntary participation and confidentiality. At the same time, I have cited all written sources of information used in this study.

5 SUMMARY OF EACH PAPER

Paper 1. The role of local power relations in households' vulnerability to climate change in Humla, Nepal

The paper aims to provide an understanding of the dynamic of vulnerability in rural households through an analysis of people's perceptions related to vulnerability, in particular the influence of local social and power relations on livelihood strategies and how these impact on vulnerability patterns. The study uses food security as an entry point and an empirical lens through which vulnerability is discussed with villagers and analysed. The research was guided by two main questions: 1) How is the variation in vulnerability patterns among the households influenced by access to different types of assets and livelihood strategies? 2) How do local power and social relations influence coping and adaptation strategies and the dynamics of vulnerability patterns?

Quantitative and qualitative analysis is undertaken at household level, through the use of the Sustainable Livelihood Framework and actor-oriented approach. The study shows how chronic food insecurity is part of a larger context where the livelihood strategies people use to access food depend not only on the ecological situation of the area people live in, but also on the social and power dynamics that enhance or inhibit people's access to resources or decision-making processes. The analysis goes beyond a focus on assets and access to resources to investigate how social and power relations interact with local level strategies to manage multiple stressors, including changing climatic conditions, and how this dynamic shapes vulnerability patterns over time.

A main finding is that farmers tend to understand climate change as one among various stress factors that influence their vulnerability situation and that the impacts of climate change on local vulnerability vary greatly between households within and between communities, depending on household's wealth and social status. Social and power relations were considered by most poor and food-insecure interviewees, mostly those belonging to the low caste Dalits and women, to be key in determining their vulnerability situation, as these limited their access to assets such as land, water, seeds or trade. In addition, lack of access to decision-making processes, lack of education, and exclusion from development initiatives were important concerns raised by the most vulnerable and food-

insecure persons when speaking about the factors limiting their capacity to adapt to stress, including climate change. Most better-off households, on the other hand, would refer to technical limitations, such as a need for better irrigations systems, when suggesting how to reduce their vulnerability to climate change.

Furthermore, when faced with stressors such as climate change, local power relations were found to reinforce existing vulnerability patterns by deepening the intra-dependency and inequality between households with access to power and those excluded. Better-off households rely on building networks with developmental and/or political organizations as well as with traders to access assets, including food, during crises, while the poorest households tend to rely on the better off by borrowing food and money. This dependency is deepened during chronic crises where the poorest increase their debt towards fellow villagers and thereby their vulnerability before the next crisis, while the status of better-off households is reinforced.

In conclusion, the paper argues that humanitarian organizations need to place greater emphasis on understanding and challenging local power dynamics as drivers of differential vulnerability in order to effectively reduce the vulnerability of the poor when seeking to tackle food insecurity and vulnerability to climate change. Answering to the outcomes of food insecurity, by distributing food or seeds or with technically based interventions is a suboptimal response as long as the underlying drivers of vulnerability are not addressed.

Paper 2. Rethinking food security programmes in a chronic food-insecure region – effects of food security programmes on local power relations and vulnerability patterns in north-western Nepal

The paper investigates food security programmes facilitated by WFP on intra-community vulnerability patterns in the face of multiple socio-environmental changes, including climate change and variability. Food aid that include Food for work programmes and food distribution are used as a case to get a deeper understanding of the effects of food security interventions on people's vulnerability patterns. The study is guided by two research questions: 1) How does food security programmes including food distribution affect coping and adaptive strategies and livelihood options such as agriculture, trade, migration and daily labour and lead to dependency at village level? 2) How are local social and power relations

affected by these programmes and what are the impacts on people's vulnerability to chronic food insecurity and climate uncertainty?

The paper is guided by quantitative and qualitative analysis to better understand the effects of food aid on households' livelihood strategies and capacity to adapt to multiple changes. In the short term, food aid is found to increase poor households' access to food and to postpone the need for food insecure households to borrow food or money to cope with stress. However, the importance given to food aid varies greatly within and between villages and the social, political and economic relations of exclusion represented in the caste system are particularly powerful in explaining food insecurity in Khankhe where a high number of households belong to the lowest castes (Dalits). However, the study offers little evidence that food distribution led to aid dependency. Indeed, food distribution was found to be unreliable and unpredictable and none of the households interviewed counted on food aid to survive in cases of food shortage.

The paper questions the capacity of food aid to reduce vulnerability in the longer term. It finds that in some cases, these programmes reinforce the existing inequities and interdependency relations that shape local vulnerability patterns. Indeed, food distribution and the accompanying development programmes (FFW/FFA) provide more advantages to the better-off than to the poor, more to the high castes than the low castes and does not challenge the gap between men and women within the communities. Based on these findings, the study argues that food aid may indirectly impede the enhancement of food security in the region because it contributes to maintaining the status quo rather than challenging the local power structures that drive household vulnerability by using the same social networks that increase vulnerability in the first place.

The paper underscores that food distribution and the FFW components of the food security programmes do not occur in a vacuum but in a context of pre-existing structural and cultural intra-village dependency relations (including class/caste/gender), where the interventions are both influenced by and may influence these local power relations in ways that affect and consolidate households' vulnerability patterns over time, where the poorest often remain excluded from new livelihood opportunities. The study indicates that a refocus is needed within food security projects in general to address the power imbalances and social

dynamics that drive local vulnerability before interventions can support strategies to increase households' long-term capacity to adapt to climate change.

Paper 3. New discourses but same old development approaches – climate change adaptation policies, chronic food insecurity and development interventions in northwestern Nepal

The third paper contributes to the debate about whether CCA policies represent new conceptualizations and approaches to address local vulnerability that differ from traditional food security programmes. Using food insecurity as an entry point to investigate household vulnerability, the interpretation of vulnerability in Nepal's main CCA policy, through an analysis of the National Adaptation Programme of Action (NAPA) and Local Adaptation Plan of Actions (LAPA) is analysed and compared with the country's main food security policy, the Agricultural Development Strategy (ADS) and local level perceptions of vulnerability in the four villages of the study area. Two research questions guided the investigation: 1) To what extent do narratives related to climate change adaptation policies differ from those presented by food security policies? 2) To what extent do climate change adaptation policies and the type of interventions they propose reflect contextual vulnerability concerns and needs as perceived locally?

The study is based on qualitative analysis at household level and with key informants at local, district and national levels. It also uses a qualitative content analysis building on the diagnosis tool of O'Brien et al. (2007) to investigate different interpretations of vulnerability within policy documents and at local level. It finds that Nepal's adaptation policy consistently addresses *outcome vulnerability* at the expense of *contextual vulnerability* and that it offers little new in terms of challenging the structural root causes for vulnerability compared with "development as usual". Because the adaptation policy builds on an apolitical analysis of vulnerability, not only does it promote one-dimensional technocratic solutions that ignore the drivers of local vulnerability, but it also runs the risk of reinforcing existing vulnerability patterns and even reducing the adaptive capacity of the most vulnerable.

In addition, the study finds a mismatch between how vulnerability is understood at policy level and how it is perceived at local level. Indeed, the complex and highly dynamic state of

vulnerability perceived at local level – where social and power relations interacting with cultural identity, environmental, political and economic marginalization are keys in sustaining vulnerability patterns (see Paper 1 [Nagoda and Eriksen, 2015]) – is not captured in the Nepal CCA policy documents nor in the ADS. Likewise, the possibility that these interventions may have unintended consequences or, at worst, may increase vulnerability of the poorest by increasing inequities in the villagers as demonstrated in Paper 2, is not considered. The policy documents’ view of the local level as homogenous spaces is reflected in the focus on bottom-up planning processes and in the formation of user groups without problematizing the “local” as a place with important social inequities and power relations that inhibit access to decision-making processes for the poorest.

The paper concludes by highlighting the importance of seeing vulnerability as the product of the interaction of multiple stresses belonging to a context where social, historical, political and environmental factors interact. It argues that in order to effectively address the root causes of vulnerability, adaptation policies need to be based on a context vulnerability analysis and promote policy responses which contribute to the transformational changes of the conditions that create vulnerability in the first place. To achieve this CCA policies cannot continue to be limited by a development framework with a narrow focus on technocratic and apolitical approaches. Rather, CCA should be reoriented and seen as an opportunity to go beyond current development approaches when addressing the social and power relations that drive differential vulnerability on the household level.

Paper 4. Producing Vulnerability in Climate Change Adaptation Planning: how vulnerable households are marginalized within participatory food security programs

The paper investigates why efforts to ensure local participation and incorporate the needs of the most vulnerable in CCA policy formulation and project implementation have not resulted in new and better approaches to reducing household vulnerability. The power relations in the policy processes leading to the formulation of the NAPA and the LAPA in the district of Humla are analysed, focusing on how the interests of the most vulnerable are represented and included.

By investigating the narratives and the negotiation processes between different actors and the channels and political spaces used to plan and implement CCA projects, we intend to respond to the following research question: How do narratives travel through social and power relations and across scales to influence policy process and what are the mechanisms by which the knowledge and the interests of most vulnerable are marginalized in the CCA policy process?

The paper builds on an anthropological approach of policy (Fergusson, 1994; Shore and Wright, 1997; Wedel et al., 2005) and uses qualitative interviews at the local, district and national levels. It shows that the narrative of the better off households and local elites, typically asking for more technical assistance are echoed by district and national level actors at the expense of taking into account the interests of the most vulnerable. The capacity of the better off households to influence policy processes is strengthened through networks between local elites and political parties, government officers and NGOs that enable local elites to pull down resources for their own interests, strengthening at the same time their positions in the village. The paper also shows that several of the actors, interests and political and social processes involved in defining CCA policies play important roles in shaping the same vulnerability context which the policies are meant to address. It is argued that as long as the same power relations which drive local vulnerability dynamics are playing important roles in defining CCA policies, there is a risk of reinforcing rather than reducing the causes of vulnerability.

The paper argues that the capacity deficit of the local government due to political instability, to implement CCA programmes is strengthened by donors agencies that bypass government structures to work directly with NGOs, and create a political vacuum at the district and local. This political vacuum increases the space for local political, social and economic elites to shape policies and implement projects, and excluded the knowledge and interests of the most marginalized. The result is that the “bottom-up policy process” coincides with the “top-down policy process” on a least common denominator that focuses on apolitical and technocratic approaches to reduce vulnerability. From the bottom, the views and concerns of the most vulnerable households are effectively ignored, while from the top, government and donor policies of social inclusion and equality are just as effectively diluted.

6 CONCLUSION - MAIN RESULTS AND THEIR IMPLICATIONS

This thesis contributes to the nascent research agenda of the politics of adaptation by demonstrating how local power relations drive differential household vulnerability, and how these relations shape, and are shaped by, climate change adaptation (CCA) policy processes. Eriksen et al., (2015b) suggest that the politics of adaptation should be viewed through the analytical lens of authority, knowledge and subjectivity. They also stress the need for more empirical data to enhance our understanding of how CCA as sociopolitical processes may lead to the transformation of conditions that create climate vulnerability. Based on an analysis of data on how power relations at local, district and national levels shape CCA processes in Nepal, and considering how these processes interact with vulnerability patterns in four villages in the district of Humla, this thesis makes the case that current CCA approaches risk contributing to the perpetuation of intra-village inequality, and thus to reinforcing rather than challenging existing vulnerability patterns in the face of external stressors including climate change. At the same time, it contributes to bridge the gap between the politics of adaptation and development by shedding light on how our conceptualisations of adaptation are framed and limited by prevailing development approaches.

More specifically, the case of Nepal's CCA policy and its implications for vulnerability patterns and adaptive capacity in four rural villages reveals how dominant narratives travel across scales to shape policies promoting technocratic and apolitical adaptation approaches that fail to address the root causes of vulnerability. Importantly, this thesis demonstrates that CCA is developed in a complicated political space in which several of the actors, interests and political and social processes involved in defining CCA (and development) policies are playing important roles in shaping the vulnerability context that the very same policies are supposed to address. These social and political processes, whereby the most vulnerable households are excluded from participating in and benefitting from CCA policy processes, are explored and documented in the four papers that form part of this thesis (see previous sections for a summary of the papers and part II for the full papers).

The first paper (Nagoda and Eriksen, 2015) demonstrates how local social and power relations influence the livelihood strategies and vulnerability patterns of households within villages. Power relations that are defined by people's social status through the belonging to

one or more marginalised or socially excluded groups are particularly important in driving differential vulnerability by legitimising or inhibiting access to resources such as land, irrigation, trading networks, subsidised food and education, as well as the benefits of humanitarian interventions. The paper reveals that stressors including climate variability reinforce the gap between groups and therefore the dependency relations between those who manage to cope with their own resources and those who increase their social and economic debt towards neighbours or relatives in order to survive.

The second paper (Nagoda, submitted) shows that food security interventions for reducing vulnerability and increasing local food security have unintended impacts on local vulnerability patterns in the face of climate variability and change. Aid interacts with local social structures and power relations to reinforce pre-existing drivers of vulnerability. Consequently, interventions may impact negatively on the long-term adaptive capacity of the most vulnerable households. Mechanisms for local participation, such as those facilitated by the formation of user groups, have been found to reflect the pre-existing power relations in the villages, leading to the marginalisation of the most vulnerable (i.e. the poor, women and low castes) within these policy spaces. The results are apolitical and technocratic approaches that reflect the interests of better-off households, and ignore the concerns of the most vulnerable households regarding social inequity and marginalisation.

The third paper (Nagoda, 2015) shows that Nepal's CCA policies (NAPA and LAPA) do not go beyond existing development approaches when addressing vulnerability. Rather, they reproduce the major development narratives, including a strong belief that local participation will result in projects better adapted to local-level needs. However, they do not problematise "the local" as a place of high diversity, negotiation and resistance, where the voices of the most vulnerable are marginalised in the policy process (i.e. in the user groups). The CCA policies fail to analyse and address the causes of differential vulnerability; consequently, there is a real risk that CCA will reinforce the existing power relations that marginalise the most vulnerable and reduce, rather than increase, their adaptive capacity.

The fourth paper (Nagoda and Nightingale, forthcoming) reveals how CCA policy processes are influenced by, and have an influence on, whose knowledge counts and the prioritisation of certain kinds of interventions in the name of the poor. By investigating how dominant narratives travel within policy processes, the analysis shows that the narratives of the better-

off households and local elites, typically requesting more technocratic support, are echoed by district- and national-level interests (both economic and political). Since the most vulnerable households do not have access to political networks beyond their community, and do not believe in their own deliberative strategies to make changes, they have little hope of benefiting from adaptation projects. Importantly, the paper reveals how the complexity of the policy process, from the local to the national level, effectively dilutes the policy objectives of social inclusion and reaching the most vulnerable, and acts to reinforce structural inequity and marginalisation. Hence, the interests of the most vulnerable are set aside when their concerns are faced with the pre-existing social structures and power relations that dominate the policy spaces at local, district and national levels.

These findings of the thesis underscore the importance of understanding adaptation as a social and political process that shapes, and is shaped by, everyday life and decision-making processes at both individual and policy level (Pelling, 2011; Marino and Ribot, 2012; Taylor, 2014; Eriksen et al., 2015b). These findings therefore imply that the impacts of climate change on vulnerability cannot be analysed or effectively addressed in isolation from the broader vulnerability context that determines the options (and limitations) that people have when adapting to change. Hence, adaptation cannot be understood as an external intervention in a closed system. As long as the same power relations that drive local vulnerability dynamics play important roles in defining CCA policies, there is a risk that these policies will reinforce rather than reduce the causes of vulnerability.

Furthermore, the thesis shows that these power relations are part of a dynamic in which not only are the policy processes dominated by the narratives of the elites, but the subjectivity of the most vulnerable – formed through deep-rooted social structures – also reinforces these narratives and contributes further to the marginalisation of their knowledge and interest in the policy process. This finding is in line with those of other studies that have emphasised the importance of looking at power not only as a cohesive force in times of oppression and resistance, but also as the expression of knowledge and subjectivity divulged by dominant narratives and discourse that determine what knowledge counts and who has the authority to legitimise knowledge (Eriksen et al., 2015b). This thesis adds to the above by showing how policy processes reproduce structures of inequality and marginalisation by opening or using spaces that are dominated by narratives representing the views of local elites, at the expense of the views and perceptions of the most

marginalised. This is seen, for example, in the way better-off households hold the authority to produce knowledge in the name of “the local” as they promote technocratic and outcome-oriented responses to vulnerability. The authority is not openly contested by the vulnerable households in the CCA policy spaces that have been studied. This study identifies the need to better understand how subjectivities are constructed and the mechanisms by which policy processes reproduce certain kinds of knowledge

The domination of local elites in policy spaces at the expense of the most vulnerable occurs in spite of national policy objectives that stress the importance of targeting the most vulnerable through inclusive and participatory processes. This demonstrates that Nepal’s CCA policy processes do not challenge the current power structures that drive local vulnerability patterns. In response, this thesis emphasises that policies aiming at improving people’s adaptive capacity should be based on an understanding of “the mechanism through which decisions arise out of the exercise of power, struggles over whose knowledge counts, and how some actors are able to exercise more power in adaptation decision-making than others” (Eriksen et al., 2015, p. 4). For example, the CCA policy process in Nepal gives legitimacy to user groups for local knowledge production, without questioning whether this policy space reflects the existing power structures in the villages, or whether it enables locally marginalised actors to contest established power structures. Another example is the way in which local elites, through their networking power and through formal and informal contacts with NGOs and political parties, manage to influence decision-making processes at district level. The most vulnerable do not have this opportunity. These decision-making mechanisms represent power structures that are seldom challenged by donors and development agencies, which often prefer to bypass government structures that they perceive as weak and channel their aid through NGOs, without acknowledging the links that exist between NGOs and local elites. These links between local, district and national level underscores the need for studies of the politics of adaptation to go beyond the formal policies formulated at the national level and recognise the full complexity of the political structures and relations that shape the policies, their implementation processes and their outcomes.

Importantly, this thesis demonstrates that simply replicating the concepts and approaches from development policies is not enough to address the root causes of vulnerability. For example, the uncritical use of “the local” to legitimise knowledge in CCA presents the same

flaws as those that development scholars have been identifying in development practices for years (Cooke and Kothari, 2001; Hickey and Mohan, 2004; Mohan, 2014). At the same time, the recognition that vulnerability is a product of a sociopolitical context that is shaped by environmental, political, social and economic processes – and not by climate change alone – implies that adaptation cannot be separated from development, neither at the formal policy level, nor in the way in which we conceptualise and address contextual vulnerability. In that sense, climate change is a symptom or marker that can help to show how vulnerability and inequities are generated, but addressing the impacts of climate change in isolation may at best support the ability of households to cope with a crisis in the short term, but it misses the opportunity to better understand and respond to the root causes of vulnerability. Likewise, in order to understand the politics of adaptation it makes little sense to analyse the effects of adaptation policies *per se* on vulnerability outcomes. Rather, one must take into account how the full range of environmental, social and economic policies form part of the power structures that define and drive vulnerability and how CCA interacts with all of these policies and their outcomes.

Thus, acknowledging the importance of local power relations (expressed through dominating narratives, people's subjectivities and the intersectionality of marginalised groups and individuals) as drivers of differential vulnerability patterns, as well as in shaping the CCA policy processes, has several implications for policy makers and researchers alike:

First, one needs to be aware of, and reflect upon, the fact that any work to increase people's capacity to adapt to climate change – or open spaces for the most vulnerable to actively influence decision-making processes – implies an interpretation of adaptation as a political and a social process, where climate change is only one of various factors to which people are adapting. Thus, this thesis supports those scholars who claim that CCA needs to incorporate and build upon contextual approaches that recognise the complexity of vulnerability in order to contribute to the much-needed transformational changes of its root causes (O'Brien, 2011; Pelling, 2011; Eriksen et al., 2015b), as opposed to the outcome vulnerability approaches that have so far dominated CCA policies and interventions. However, to do so, CCA must go beyond the narrow framework of the prevailing development paradigm that insists on prescribing apolitical and technocratic solutions to problems that are of a social and/or political nature.

Second, one needs to analyse local vulnerability dynamics at the household level in order to better detect and understand differential vulnerability. Because important causes of vulnerability are found within the contexts in which people live, the solutions to building adaptive capacity also need to be found by identifying and addressing drivers of differential vulnerability at the household level, rather than limiting the analysis to the village level. In this regard, I support the argument raised by Cannon (2014), that the use of the word “community” tends to disguise the diversity, tensions and politics taking place within so-called communities. In addition, this thesis points to the need to take into account how differential vulnerability patterns at a local level are created and sustained when interacting with policy processes at the regional and national level.

The third implication is that relying on quantitative data alone, including scenarios based on climate change models, is a poor basis for formulating adaptation interventions. A focus on quantitative data, both physical and social, may incur the risk of masking the political drivers of vulnerability and delegitimising the more qualitative knowledge of vulnerable groups. This study has shown how the latter is crucial to understanding and addressing contextual vulnerability.

The findings of this thesis opens for a discussion on the importance of defining local-level policy spaces as spaces for contestation, where local practices meet policies, where the knowledge of vulnerable groups meets that of elites, and where subjectivities clash to alter unequal power relations that drive vulnerability. To achieve this, policies would need to give legitimacy to the knowledge of the most vulnerable groups and households. Focusing on these moments of contestation would draw attention to the conditions under which inequities are perpetuated and the voices of the vulnerable silenced, making it possible to consider how more fundamental changes, or transformational adaptation, rather than incremental adaptation within the same development pathways, could take place. This study shows that challenging local, district and national power structures and systems must be integral to transformational adaptation and that transformational adaptation cannot come about through a neat top-down process. For transformational adaptation to take place, the inherent complexity and unpredictability of any policy process that intends to address the dynamic and multidimensional phenomenon that is vulnerability must be taken into account.

However, addressing power structures will almost inevitably be controversial and meet resistance from those benefitting from the status quo, locally, nationally or internationally. Arguments such as the need to respect local culture and traditions are frequently used to defend discriminatory practices and exclusion. The unwillingness to challenge existing power structures may be one of the important reasons that efforts to build adaptive capacity seldom address the political and social relations that define local vulnerability. Furthermore, policies aiming to open spaces for contestation of local power structures would also present practical difficulties and real-life dilemmas for the most vulnerable households. The dependency of vulnerable households on those better off for survival in a crisis (for example, a drought) is one example of a social and economic barrier that prevents marginalised households from contesting the dominating power structures in the villages presented in this thesis. Jones and Boyd (2011) identify several other barriers that highlight the difficulties that villagers encounter when struggling to improve their capacity to adapt to changes including climatic stressors.

The finding that the CCA policy making process in Nepal does not challenge power relations at local level appears to be in contrast with some theories of power as presented by Foucault (1984) and Giddens (1984), which argue in favour of the capacity of people, including the most oppressed, to influence and change the power structures that constrain their ability to benefit from development. Indeed, while the study did find a few cases where the most vulnerable households were contesting dominant power structures, by, for example, not attending user group meetings or refusing to work in fields owned by a better-off household, I argue that this is not sufficient to address the drivers of vulnerability without fundamental changes in how policy processes are conceptualised and set up. Such changes will have to take into account how knowledge and subjectivity are cemented through what Foucault called the “disciplinary power” within the discourses and actions that shape everyday practices as well as policy processes.

Thus, while most discourses on CCA and development policies and programmes show a depoliticised adaptation and avoid interfering with local or national politics and cultures (paper 3, [Nagoda, 2015]), my findings show that adaptation is already very much politicised and integrated into local politics. These findings are also supported by the work of Nightingale, (2015) and Ojha et al., (2015) in Nepal. Exploring the space for research and policies between today’s “development as usual” and what is required for policies to

effectively transform these root causes of marginalisation and exclusion should be a priority area for future studies and an important contribution to the emerging agenda of the politics of adaptation. In particular, the dynamics by which structural marginalisation and subjectivity are reinforced need to be better understood in order for policies to become more effective in addressing vulnerability and building adaptive capacity. In the terminology of Giddens, this would mean exploring the extent to which policies can create spaces that enable the agency of the most vulnerable households to act outside the constraints of established power structures (Giddens, 1984).

This thesis emphasises that research should not limit the conceptualisation of CCA to be limited by dominant development approaches, but instead use CCA as an opportunity to challenge these approaches (Pelling, 2011). Its findings are also relevant for development scholars interested in understanding the mechanisms by which development paths risk contributing to reinforcing vulnerability patterns rather than challenging them. The study underscores Ribot's (2011) argument that by focusing debates on concepts such as climate change adaptation, rather than on vulnerability, scholars and policy makers are creating a positivistic interpretation of vulnerability with a narrow understanding of climatic stressors as problems that can be "fixed" through technocratic and apolitical measures, while distancing themselves from the opportunity to better understand the root causes of vulnerability. Similar criticism may be levelled against the use of other concepts, for example resilience, which are increasingly being referred to by development actors to justify interventions to limit the impact of climate change at local level.

Centring development and adaptation debates around the importance of addressing contextual vulnerability, including how the vulnerability context is driven by socio-political relations, would compel development scholars to recognise the multidimensional characteristics of vulnerability and disentangle the webs of power relations that constrain not only adaptation efforts, but all other efforts aimed at fighting poverty as well. This would provide valuable insights into a more coherent approach to development across sectors, where the voices of the most vulnerable are given authority to contest existing power systems. I argue that steps in the right direction would include acknowledging the importance of inequality as a driver of vulnerability, viewing local people as subjects rather than objects, and seeing decision-making processes and humanitarian interventions as internal rather than external parts of the context they try to influence.

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Part II

Compilation of papers

PAPER 1

11

THE ROLE OF LOCAL POWER RELATIONS IN HOUSEHOLD VULNERABILITY TO CLIMATE CHANGE IN HUMLA, NEPAL

Sigrid Nagoda and Siri Eriksen

Introduction: understanding vulnerability to climate change and food security

For effective adaptation to climate change, the complexities inherent in vulnerability must be understood and its fundamental driving forces dealt with (Watts and Bohle 1993; Ribot 1995; O'Brien et al. 2007; Eriksen et al. 2011; O'Brien 2011). An important aspect of these complexities is the fact that the causes of vulnerability vary between individuals, groups, areas and over time, and cannot easily be related to simple climatic characteristics (Handmer et al. 1999; Cannon et al. 2003; Huq et al. 2004; O'Brien et al. 2004; Ribot 2010). These insights have emerged against the backdrop of development and food-security interventions that have often focused on agricultural production, food distribution, and material assets in the face of climate-triggered events – although, under some conditions, these interventions may even exacerbate vulnerability (Barrett and Maxwell 2004; Sperling et al. 2004; Adhikari 2008). A major question emerging in climate change research is what is required if adaptation is to address the vulnerability context, and transform – rather than perpetuate – the developmental patterns that have created vulnerability in the first place (O'Brien 2011).

Vulnerability is a dynamic state, since the contextual conditions that comprise vulnerability are always changing (Eriksen et al. 2005; O'Brien et al. 2007). These conditions are driven by multiple processes that include shifting market conditions, conflicts, political marginalization and environmental changes (Ribot 1995; Eriksen and Silva 2009). Hence, in order to deal with vulnerability effectively, it is particularly important to understand the social dynamics at the local level that lead to differential levels of vulnerability between people and over time, and how these dynamics relate to societal processes of change, including national policies and development paths.

A focus on food security not only provides an opportunity for critically examining the nexus between adaptation and development policies, it can also serve as a starting point for empirically observing the local manifestations of vulnerability. Food insecurity and vulnerability are closely linked (Yaro 2004). Household food insecurity can therefore be used as an indicator of the outcome of the inherent state of vulnerability, which is often seen as a 'state of susceptibility to harm from exposure to stresses associated with environmental and societal change and from absence of capacity to adapt' (Adger 2006, p. 268). Although food insecurity can only provide an indication of vulnerability at a given time, it can serve as a useful starting point for gaining insights into which strategies for managing changes are available to whom, as well as the various motivations and objectives behind choosing particular strategies when faced with stress (Yaro 2004; O'Brien 2011).

Entitlements and sustainable livelihood frameworks (Sen 1981; Chambers and Conway 1991) describe food security in terms of the variation in entitlements and livelihood resources constituted by various types of assets (social, physical, economic, human and natural capital), but have limited value for explaining complex vulnerability dynamics. For example, they do not address the reasons behind the lack of entitlements or access to assets (Leach et al. 1997; Yaro 2004). In order to understand how to address vulnerability, it is therefore necessary to go beyond a focus on assets and access to resources, and to grasp how social and power relations operate in practice in local-level strategies for managing multiple stressors, including how this dynamic shapes vulnerability patterns over time.

Social and power relations play an important role in how people manage multiple changes that face them simultaneously, including weather events and changing climate conditions (Leichenko and O'Brien 2002; Nyborg et al. 2008; Eriksen and Lind 2009; Eriksen and Selboe 2012). Power is often used to enhance one's entitlement to resources by legitimizing (or delegitimizing) access to resources through social advantages (Bourdieu 1985; Watts and Bohle 1993; Ribot 1995; Adger and Kelly 1999; Tarrow 1998; O'Brien et al. 2008; Manuel-Navarrete 2012), hence influencing the coping and adaptive strategies of individuals and groups differently (McLaughlin and Dietz 2008). Similarly, actor-oriented approaches to rural development posit that the perception and strategies of different actors are fundamentally shaped by power, agency and knowledge (see Long 1992).

In this chapter, we examine the dynamics of vulnerability in rural households, and in particular the influence of local power relations on vulnerability patterns. We investigate how these relations create differential vulnerability outcomes as manifested in food insecurity through a case study of Humla, a remote and chronically food-insecure district in far north-western Nepal. Nepal is particularly well-suited as a case for examining the adaptation–development nexus. It is among the world's poorest countries, with an estimated 41 per cent rate of stunting in children below five years (World Food Programme 2012), and is also considered highly vulnerable to climate change (Jianchu et al. 2007;

Chhetri and Pandey 2009; Ministry of Environment of Nepal 2010; NPC 2010). Observations of climate conditions over the past century in South Asia reveal increasing temperatures in the Himalayan region and important seasonal changes in precipitation along with fewer but more intense precipitation events over the next 100 years (Christensen et al. 2013). Climate change and variability are expected to further worsen the food-security situation of small-scale farmers (Chaudhary et al. 2006), prompting humanitarian organizations to scale up their interventions (Oxfam 2009; World Food Programme 2009).

Our empirical analysis shows, first, that climate-change vulnerability cannot be seen as a simple product of traditional agricultural indicators at village level, since it encompasses various livelihood strategies at the household level as well. Second, we investigate how various social and political relations are central in determining access to strategies to secure food, thus driving differential vulnerability patterns. Finally, our analysis focuses on how stress situations, such as drought, influence dependency relations between those who have food and those who do not. Our findings indicate that deepening dependency between people is a key element in the local vulnerability dynamic because greater social inequities within and among villages aggravate the vulnerability of the poor. Understanding this dynamic has critical implications for how the humanitarian and development communities can approach solutions to the joint problems of food insecurity and adaptation to climate change, and effectively reduce the vulnerability of the poor.

Our analysis challenges the ‘development as usual’ approaches of governments and humanitarian organizations that distribute food and seeds in response to food insecurity in poor countries such as Nepal (Adhikari 2008), instead of addressing social relations and the distribution of power. With increasing attention and international funding being directed to climate-change adaptation in poor and food-insecure areas (Tanner and Mitchell 2008; Agrawal and Perrin 2009), it is particularly important that policies and actions be formulated on the basis of a sound understanding of the causes of vulnerability.

Studying vulnerability and food security in Humla

The study focuses on the mountainous district of Humla in far north-western Nepal, bordering Tibet in the north (Figure 11.1). Humla is one of the poorest districts in Nepal, as indicated by its very low Human Development Indicator (UNDP 2007 in Mission East 2010; Sanders 2010; Citrin 2012). Large parts of the district are regularly classified as highly food insecure (DFSN 2010). This situation may be worsened by climate change, which is likely to lead to increased incidence of heavy rainfall events during summer and less rain and snow during winter (NCVST 2009; Christensen et al. 2013). Practical consequences for small farmers in the study area may include higher risks of landslides, difficulties in predicting sowing time and decreased water availability (Eriksson et al. 2009; Oxfam 2009).

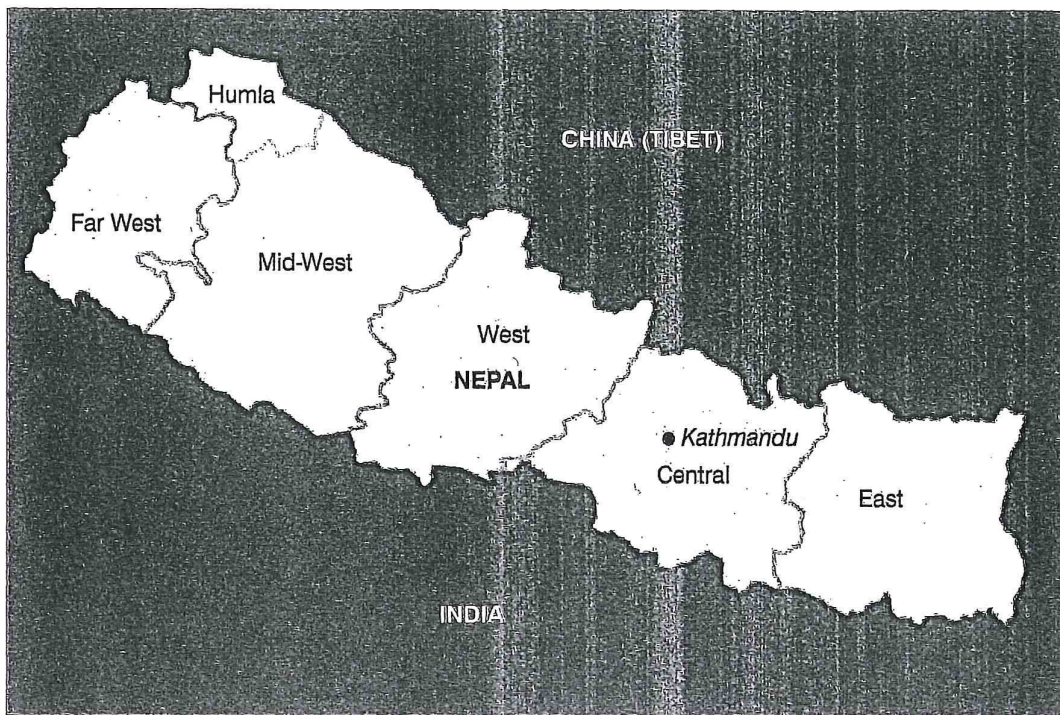


FIGURE 11.1 District of Humla (Map of the Foundation Nepal, <http://www.foundation-nepal.org/content/map>)

Humla is characterized by its physical remoteness as there is no road access to the district. The headquarters, Simkot, which lies at about 3000 metres above sea level (masl), is linked with two towns further south by a very unreliable small plane system, and is otherwise about one week on foot from the nearest road to the south. Humla is politically marginalized as well: the presence of the state outside Simkot is very limited, a situation further aggravated by the decade of civil war that ended with the overthrow of the monarchy in 2006.

Humla is divided into two ecological regions: Upper Humla in the north, bordering Tibet; and Lower Humla in the south, characterized by villages at lower elevations with a warmer climate and land better suited for agriculture than in Upper Humla. Data collection focused on three villages belonging to these two ecological regions and with different social structures: Khaagaalgaon and Syaandaa in Upper Humla and Khankhe in Lower Humla (Figure 11.2). All three are situated on relatively steep mountain slopes facing east¹ with access² to water through small rivers and nearby forests. Agriculture is mainly rain-fed, with small land holdings. While subsistence agriculture, animal husbandry and trade are the dominant livelihood strategies, the three villages differ in terms of livelihood strategies, food security, ethnicity, castes and social structure, as outlined in Table 11.1.

The first village, Khaagaalgaon, is situated at 2808 masl, about four days' walk from the Tibetan border and six to seven hours' walk from Simkot. The village has around 75 households (Roy 2010) and is inhabited by the Lama ethnic group, a Buddhist, Tibetan-speaking people. The Hindu caste system is not practised. In addition to agriculture and livestock, Khaagaalgaon villagers

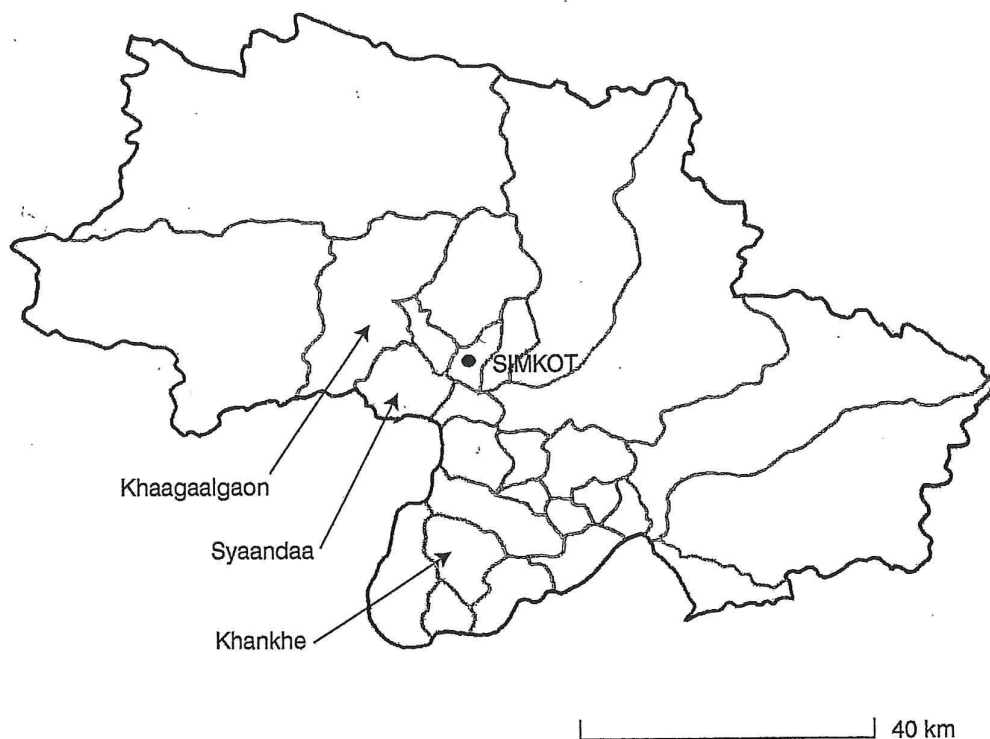


FIGURE 11.2 Location of case study sites in Humla District

base their livelihood on trade in non-timber forest products (NTFP), *furu* (a wooden cup used by Lamas and Tibetans for tea), grains, rice and salt, with Tibet and southern regions. Living conditions observed during fieldwork appeared relatively better than in the two other villages, with most households having improved cooking stoves and functioning sanitary facilities. In addition, the child mortality rate reported during interviews was much lower than in the other villages (see Table 11.1).

The second and the third case-study villages are inhabited by Nepali-speaking people where the Hindu caste system is a predominant aspect of the social structure. These villagers depend mainly on agriculture and livestock, in addition to some trade in NTFP and with rice and grain. Syaandaa has about 152 households (Roy 2010) and is situated on a mountain ridge at an elevation of 2747 masl (*ibid.*), a few hours' walk from Khaagaalgaon. The third village, Khankhe, is situated in Lower Humla, two to four days' walk to the south of Simkot, at an elevation of around 1700 masl, and is home to around 94 households (own data). While Syaandaa is inhabited mostly by people belonging to the Chhetri-Byansi group, a high caste in the Hindu caste system, the inhabitants of Khankhe are divided into two castes: the Dalits, low-caste groupings, and the higher-caste Thakuri. Poverty in Syaandaa and Khankhe is more pronounced than in Khaagaalgaon, and sanitation facilities are poor or non-existent. In Syaandaa, almost all households interviewed had lost at least one child under the age of one year, and some families had lost as many as six children.

TABLE 11.1 Characteristics of the three villages studied, Humla district

<i>Villages</i>	<i>Khaagaalgaon</i>	<i>Syaandaa</i>	<i>Khankhe</i>
Religion	Buddhist	Hindu	Hindu
Caste/ethnic group	Lama	Chhetri/Byaansi	Thakuri, Dalit
Persons per household	7*	8.6*	7.2
Child mortality per household	0.2	1.4	0.9
Food security**	Moderately food-insecure	Highly food-insecure	Highly food-insecure
Main livelihood strategies	Agriculture, trade	Agriculture, trade, wage labour	Agriculture, trade, wage labour, migration, food aid
Main crops cultivated	Buckwheat, millet, barley, potatoes, seasonal vegetables	Buckwheat, millet, barley, wheat, potatoes, seasonal vegetables	Rice, millet, barley, wheat, corn, seasonal vegetables
Main livestock	Yaks, yak/cow hybrids, horses, sheep, goats	Yaks, yak/cow hybrids, horses, sheep, goats	Cows, buffalo, sheep, goats

Data based on fieldwork 2010–2011 except for those denoted with an asterisk based on Roy (2010) and with two asterisks that are based on DFSN (2010).

Field studies were conducted over a three-year period from August 2008 to July 2011. A total of 68 semi-structured and 52 key informant interviews covering quantitative and qualitative data were carried out within the three villages. In addition, seven focus group interactions, including with Dalits, Thakuri, women, very poor and elders, were undertaken. In each village, households were ranked into four wealth categories. The semi-structured interviewees were selected as randomly as possible (through a list of household heads) in an attempt to get fairly equal representation of the different divisions (wards) within the villages and of each wealth category in each village.³

Although food security is formally defined as a 'situation that exists when all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life' (Food and Agriculture Organization 2002, Chapter 2), people's perception of what constitutes food security and insecurity may vary. To capture perceptions of food insecurity, we measured food insecurity by asking interviewees if they felt that their household had access to enough food to live a healthy life. As such, this is a contextualized (reflecting in part the past history of aid, political motivation and sense of identity as vulnerable or self-sufficient) rather than an absolute measure of food availability and consumption and is used as a starting point for analysing the causes of vulnerability.

Vulnerability patterns and dynamics

Food security, livelihood strategies and differential vulnerability patterns

Vulnerability, reflected here as food insecurity outcomes or households' perceived persistent ability to access sufficient food, is highly differentiated both between and within villages (Figures 11.3 and 11.4). Informants relate food insecurity mostly to seasonal and inter-annual variations in weather conditions; but our analysis also shows that food security is a result of the complex interactions of diverse livelihood strategies and that various social and political relations are central in determining access to these strategies and thus driving differential vulnerability patterns.

Food insecurity is most intense around February/ March when food stocks have been depleted after the October/November harvest and the snow still prevents people from travelling to Tibet to buy food. A second period of stress for food-insecure households is in May/June, also between harvest times. The analysis of household data identified changing climatic conditions, with decreasing rain in Lower Humla, more unpredictable precipitation in Upper Humla, and less snow during winter, as a major stress factor for most households. In Khankhe, lack of rain has been considered an increasing problem for the past eight to ten years, while in the two villages of Upper Humla unpredictability of rain is reported to have created challenges for the past five years. Observations related to changes in precipitation are in line with the expected impacts of climate change in the region (Ministry of the Environment of Nepal 2010).

However, the severity of stress due to climatic variability is perceived differently among the three villages, as well as by different households within the same village. In the relatively food-secure village of Khaagaalgaon, the unpredictability of rain was not viewed as a main concern for food security,

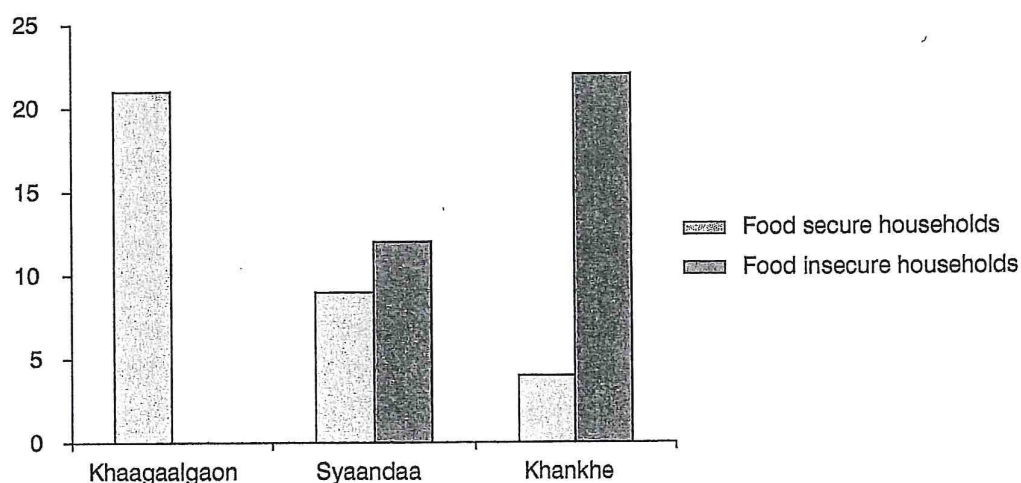


FIGURE 11.3 Number of semi-structured interviews in the three villages categorized into food-secure and food-insecure households

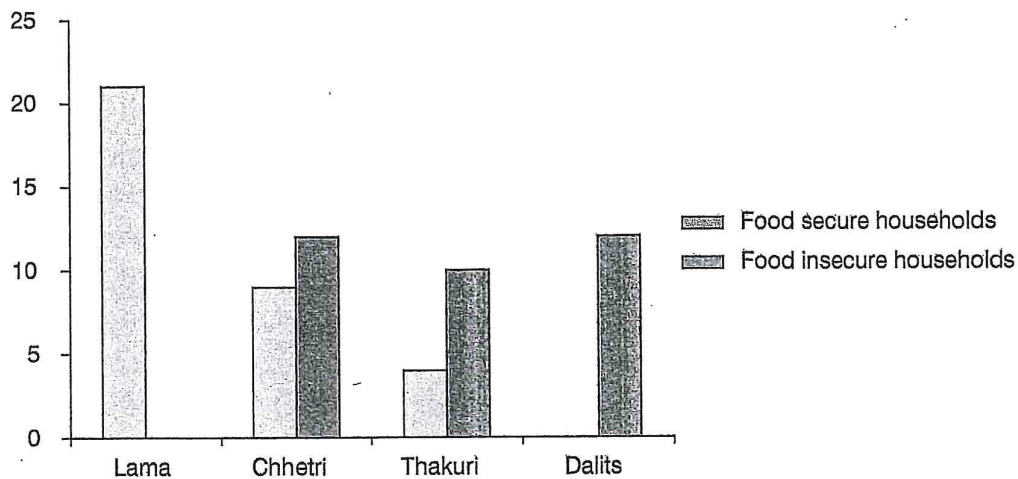


FIGURE 11.4 Number of semi-structured interviews in the three villages categorized into food-secure and food-insecure households related to castes and/or social group

while in Syaandaa and Khankhe, where only 23 per cent and 15 per cent of the interviewees respectively consider themselves food secure, the impacts of changing rainfall patterns are perceived as much more severe.

Interestingly, even though subsistence agriculture and livestock are the main livelihood strategies, agricultural production or access to agricultural assets are not necessarily the main determinants of vulnerability on the village level. Analysis of the quantitative interview data shows that while households in Khaagaalgaon and Syaandaa have on average similar production levels⁴ (7.5 quintals per year), their food-security situations are very different. Similarly, non-food-secure households in Khankhe cultivate plots quite similar in size to those of food-secure households in Khaagaalgaon (4.5 haal⁵ versus 4 haal, respectively).

This does not mean that access to agricultural assets is unimportant; however, it can be meaningfully understood only when seen as part of the larger vulnerability context at the household level. Analysis of the differences between households within the villages reveals important social inequities related to land access in the villages that are most food insecure; and that social, political and economic relations of exclusion, as represented in the caste system, are particularly powerful in explaining food insecurity.

In Khankhe, all of the households belonging to the lowest caste (Dalits) consider themselves food insecure, while 29 per cent of the higher caste (Thakuris) report food security throughout the year. An average Dalit household in Khankhe produces less than one third of the food, and has only about half as many livestock, as an average Thakuri household (9 versus 16 animals respectively). The better-off also have on average (median) five times as much land as the Dalits (16 haal versus 3.5 haal respectively). In Syaandaa, while all villagers belong to the same caste (Chhetri), food-secure households on average cultivate larger areas, produce more food and have more livestock than food-insecure households. In contrast, in Khaagaalgaon, differences between poor

households and better-off ones related to land area are minimal (4.5 haal for better-off and poor households). The type of land to which households have access is very important. Lack of access to quality land (i.e. land with irrigation, less steep land and/or land near the village) is more prevalent among food-insecure households, especially Dalits, and it makes them even more vulnerable to unpredictable rainfall or animals eating their plants. As one Dalit woman said, 'why should we work on our [bad] fields, since it doesn't rain they no longer produce any food anyway'.

Social structures, such as caste, determine not only access to land (quantity and quality), but also access to other (non-agricultural) livelihood strategies. In order to explain vulnerability at the household level it is necessary to look beyond the linear impacts of climate variability on traditional agricultural indicators. People use a range of livelihood and social strategies to manage what are in effect interactions between climatic and other social and environmental stressors and not one single climate stressor. According to household interviews, important stress factors in addition to climatic variability and change include lack of quality land, lack of manpower, lack of manure, failing trade, and high taxes to be paid to the Community Forest Groups in southern areas when sheep and goats are brought to graze during the winter.

The villagers in all three locations said that those with the most diverse livelihood options were the least vulnerable to climate variability. Very few households in Humla can produce enough food for the whole year, and most combine various strategies to access food. Trade is by far the second most important livelihood strategy after agriculture and livestock, as this allows households to purchase food at the Tibetan border or to buy subsidized rice from the Nepal Food Corporation (NFC). As one better-off informant in Khankhe explained, 'Without trade we would be poor.' Another, in Syaandaa, stated that without the market of Thaklakot in Tibet, 'there would be no village'.

However, capacity to engage in trade varies greatly between villages and between households. Trade is most important in the village of Khaagaalgaon. Families here have almost twice as high incomes from trade as do households in Syaandaa and nine times as much as the average Dalit household in Khankhe (a median of NR 92,700, NR 50,000 and NR 10,000⁶ respectively). Within the three villages, the difference is also striking: some families would make more than NR 200,000, while poor families reported incomes of less than NR 10,000 per year.

These differences in trade between and within villages can be explained partly by socio-cultural and geographical characteristics (see for example Fisher 1987; von Fürer-Haimendorf 1988), but also by the strength of networks and personal relations. All informants still consider access to political and social networks as essential for success in trading. Consequently, as is the case with access to land, trade is mostly concentrated in the hands of better-off families and households from high castes, leaving behind those with fewer resources and low-caste families that lack the necessary connections.

Role of social networks and power relations in vulnerability dynamics

Social status and access to social and political networks, including trading networks, are important in explaining the distribution of vulnerability in the study area, and form an integral part of the vulnerability context of the households. In this section, we discuss how social and power relations influence households' access to land, trade or development advantages – and, in turn, local vulnerability dynamics.

In Upper Humla, access to trade networks within and outside the district is a major factor distinguishing the better-off from the poorer families. For trader families of Khaagaalgaon, almost all had one or more family member living in Kathmandu. In Lower Humla, where households engage less in trade, interviews reveal that high priority is given to networking with political parties, local decision-makers and development/humanitarian organizations. Those active in political parties are mostly men from more prosperous Thakuri families; none of the Dalit households consider themselves part of political networks. A Thakuri informant of Khankhe put it this way: 'We must engage in politics so that we do not remain poor' and a Dalit said: 'We do not engage in politics because we are not heard, and so we remain poor.'

Likewise, many informants regard lack of access to quality land and other resources as determinants of vulnerability that are caused by unequal power relationships. Dalit interviewees in particular recounted many instances of 'elite capture' and oppression, where unequal access to land and water, as well as lack of education and information about development work and decision-making processes, were seen as major barriers to improving their livelihoods. Limitations and stress caused by the oppression of one group by another (Dalits versus Thakuri; men versus women; poor versus better-off) was clearly expressed by most Dalits, poor and women during informal interviews, but the sensitivity of this topic is shown by the fact that this was not mentioned in formal household interviews.

Nevertheless such unequal power relations were frequently referred to and observed during fieldwork. For example, some better-off households in Khankhe had access to improved varieties of wheat and rice from the District Agriculture Development Office, but none of the Dalits interviewed. The Dalits explained this by the fact that they have no lands suited for the improved seed varieties and had received no information from the authorities about the seeds. One Dalit recounted how he, hearing that the local authorities were providing irrigation systems to some villagers, applied – but that high-caste families (Thakuri) with fields close to the river blocked his application. Another Dalit described how government funds earmarked for the improvement of Dalit livelihoods never arrived, as the Dalits had not been aware of the existence of such funds. A similar narrative from the village of Syaandaa came from a poor old man: 'We [the poor] do not get to know what the development organizations do in

our village – those who benefit from these organizations are always the same few educated people.’ His comment was supported by several other informants, who stressed the importance of having an education and a good social network in order to obtain benefits from external interventions.

Most food-insecure households mentioned the lack of schooling, in particular among women and Dalits, as a key barrier to their active participation in village political life. Among Dalits in Khankhe, only three people (of the 16 households interviewed) had more than six years of schooling. By comparison, at least twice as many children from Thakuri households and better-off households in Syaandaa and Khaagaalgaon had completed between six and ten years of schooling, in some cases more.

We also noted a pronounced gender dimension to the power dynamics that contributed to food insecurity. Education is much less common for girls. No Dalit girls in Khankhe had more than six years of schooling, and only a few families in the three villages – most of them better-off – prioritize girls’ education. Women, especially in Syaandaa and Khankhe, pointed out that they were often excluded from decision-making processes and were overloaded with work. This prevented them from taking proper care of the children (such as breast feeding), and created important health problems. Women rarely participate in meetings on the village and regional level where local development issues are discussed; it was widely held that they did not have to go, since they were represented by their husbands. These gender dimensions to the local power dynamics act as a contributing factor to vulnerability in the villages, a point supported by other studies, such as Thomas-Slayter and Bhatt (1994), Nelson and Stathers (2009) and Nightingale (2011).

Entrenched inequities and dependencies

An important aspect of the dynamics of vulnerability is the tendency for highly unequal social and power relations, in combination with chronic food insecurity, to reinforce dependencies and inequities. Focus group discussions and individual informal interviews reveal how fewer livelihood options and unequal power relations aggravate existing vulnerabilities, whereas some of the better-off may even improve their position through a crisis situation. As one interviewee in Khankhe put it, ‘those who had food before also have food now, but those who did not have enough food before have even more problems now that the rains have stopped’. This statement is supported by household interviews findings that most of the very poor consider that their wellbeing has remained the same or worsened over the past ten years. By contrast, most of the relatively prosperous households feel that their wellbeing has improved over the last decade – due mainly to the increase in small trade – indicating that differential access to livelihood options is leading to increasing inequities. These findings are supported by other studies that have highlighted the linkages between vulnerability, power and social inequities (Chambers and Conway

1991; Watts and Bohle 1993; Blaikie et al. 1994; Ribot 1995; Adger and Kelly 1999; Yaro, 2004; O'Brien et al. 2008; Pelling 2008; Eriksen and Lind 2009).

Dependency relations are a critical part of the dynamic that reinforce differences in vulnerability between households. Borrowing food, money and seeds from the better-off in the village or villages nearby is the most common response to acute food shortage. The system of creditor and lender constitutes an essential informal network where the poorer and food-insecure households owe money (or food) to a few relatively well-off households. Food-insecure households often report having relatively large debts compared to food-secure households – some up to NR 200,000 (about USD 2400) – which is a lot of money for poor households that typically report annual incomes of less than NR 20,000). In addition, men from poor households engage more in daily labour to repay the debt, thus spending less time on agricultural production, and adding this task to the women's burden. For example, one very poor family in Syaandaa owed more than NR 100,000 (approximately USD 1200) to a better-off family due to loans taken over several years to buy food and clothes. The latter family took half of the lands of the poor family as a mortgage to recover the money. This left the poor family with barely enough land to produce food for about four months of the year. Moreover, whatever money the husband earned through daily labour went directly to the creditors, restricting any chances to invest in education for the children and/or small trade. Next time their harvest failed they would have no option but to increase their debt to the local creditors even more.

Among various social networks, the *lagi* system,⁷ a feudal arrangement similar to a patron–client relationship (or a form of bonded labour), is still practised in Humla, with Dalits having to work a certain number of days each year for 'their' *lagi* Thakuri families in exchange for food. These bonds are inherited, and although Dalits may have more freedom compared to a few years ago, this system is still much in use. About 60 per cent of the Dalits interviewed report that they turn to their 'Thakuri *lagi*' for food during crisis. In return for this support, the Dalits are expected to work for the *lagi's* household on a regular basis. However, most Dalits consider the help they could receive from the *lagi* system unreliable, since the Thakuri *lagis* might be unwilling or unable to provide them with sufficient food in times of crisis. The dependency inherent in this system is shown by the fact that if a Dalit has not already done a favour for his/her Thakuri *lagi* in the past, he/she has, in practice, no legitimate claim for assistance in time of crisis. For example, in the course of our fieldwork we observed how a Dalit man asked for food at a Thakuri house, but was turned down because he had not collected firewood for them. There were also a few cases where Thakuri and Dalits mutually helped each other, exemplifying the diversity of social relations. For example, one Dalit reported that he had been helped by his Thakuri *lagi* to sort out a dispute with the Maoists during the war.

The power and social relations represented by social networks – whether the deeply entrenched caste system in Lower Humla or the more informal creditor–

lender system in Upper Humla – become consolidated and tightened in time of crisis. Households with access to political and/or trading networks rely heavily on these, while households that lack access to networks outside their village typically borrow food and/or money from fellow villagers as their main coping strategy, thereby further constraining the possibilities of diversifying their livelihoods. The result is a deepening of the dependency and inequity between those who have access to networks and those who do not.

However, even if power relations produce and reinforce vulnerability in food-insecure households, these relations are not static. There are indications that in some cases traditional power relations are being challenged and new livelihood opportunities created. Discrimination against Dalits in Hindu societies and social exclusion and marginalization of certain groups, including women, have been practised for centuries in Nepal (Levine 1987; Bista 1994; Cameron 1995; DFID and the World Bank 2006; Khadka 2009). Such oppression and marginalization have been historically linked with practices of social hierarchies and land distribution in rural western Nepal, but have also been challenged through recent political changes and movements, not least the ten-year Maoist insurgency that called for abolition of the caste system. Several informants were of the opinion that systematic oppression, in particular of Dalits, is less of a problem today than it used to be. As one elderly Dalit woman put it ‘We are still very poor but at least they [Thakuri] cannot threaten us anymore’ – or as a Thakuri informant put it furiously when his *lagi* [Dalit] did not come to work: ‘*Mero lagi* [Dalit] *Thulo Maanche baisakyo*’ (‘My [Dalit] *lagi* has become a Big Man now’).

As the local economy has become monetized and more diversified, and as the uncertainty of rain has led small farmers to diversify their livelihood strategies, more households turn to small trade as a source of income to access food. Indeed, while the traditional trading system in the region, the salt trade with Tibet, used to be dominated by a few powerful traders (von Fürer-Haimendorf 1988; Bishop 1990), informants say that trading systems today are more diversified (mostly with NTFP) and involve more small traders. This shift has occurred mainly in the course of the past decade or so, and may have challenged some traditional power relations as more households now have cash incomes. However, it also appears that the relatively better-off households have benefited the most from these new opportunities.

Conclusions: implications for adaptation and challenging ‘development as usual’

This chapter, based on case studies from north-western Nepal, has shown that understanding the dynamics of local social and political processes is essential for explaining differential vulnerability among households. While local power structures enable some people and/or groups to adapt better to stresses like climate change by creating and/or exploiting political and social opportunities,

the same power structures also effectively act as barriers for other households seeking better ways of adapting to the new, changing situation. This finding is consistent with McLaughlin and Dietz (2008, p. 106): 'adaptation by some actors can and often does entail increased vulnerability for others'. Our study adds to these insights by demonstrating that social and power relations also can create a dynamic of deepening dependency and inequity when households are faced with stress. We argue therefore that greater emphasis should be placed on understanding and challenging local power dynamics in order to effectively reduce the vulnerability of the poor when seeking to tackle food security and vulnerability to climate change.

In the case of Humla, 'development as usual' is represented by measures that address vulnerability and food security as an outcome of low and unreliable agricultural production in the face of climatic stressors. Consequently, a main focus of the humanitarian actors in recent decades has been on distributing food and seed to vulnerable households and villages to improve their food security. We would argue that this approach is fundamentally flawed as a strategy to reduce vulnerability in the long term. Our study has shown that networks and power relations influence agricultural production as well as access to other livelihood strategies, including trade. Thus, seeking to address the production gap solely by distributing food does not deal with the underlying drivers of vulnerability.

Instead of challenging structural relations, current development and aid interventions in Humla appear to be embedded in the local power dynamic, in part reinforcing inequities and vulnerability. For instance, most interviewees held that, in order to benefit from aid, one needed to have the right contacts in district headquarters, in addition to some cash and other resources. Similar findings from western Nepal have been reported by Adhikari (2008) and Bishokarma (2010).

Nevertheless, relations are not static. They can be challenged, and new livelihood options can be created, shifting the patterns of vulnerability. For example, in Humla, education targeting low castes and girls should be considered as part of a comprehensive approach to break down intra- and inter-village power relations, so as to reduce the vulnerability of the poorest. In all three villages studied here, measures to improve decision-making access for the most vulnerable could help address the dynamic that now exacerbates inequities. The case of Humla has demonstrated some opportunities for formal measures that can act to strengthen local strategies, reduce dependencies and contribute to 'adaptation as *unusual*'. Such adaptation would affect not only how people can manage climatic variability and change, but development pathways more widely. Challenging relations, inequities and dependencies as part of adaptation measures would contribute to driving what Eriksen et al. (Chapter 1, this volume) describe as deliberate transformation, which, they argue, is required as a contrast to 'development as usual'.

However, for development organizations that have to work with and within existing structures and institutions, there remains a fundamental dilemma as

those very same structures may act as major barriers to challenging important drivers of vulnerability. Tackling these social hierarchies and power structures, locally or nationally, can be highly controversial, and even considered outside the mandate of most humanitarian organizations. A critical area for future research will involve identifying the space for manoeuvre available for altering current approaches, so as to address key drivers of vulnerability and challenge 'development as usual' in practice. How are the values and hierarchies that legitimize current power relations enacted? And how may they shift over time as part of adaptation efforts aimed at deliberate transformation? These are issues particularly relevant to Nepal, where poverty, inequities and vulnerability are prevalent – but can be highly important also in other contexts (including wealthy countries), where power relations determine which adaptation decisions are made and how vulnerability is distributed within the population.

Notes

- 1 The village of Khaagaalgaon faces slightly more to the north than do Syaandaa and Khankhe, resulting in more shade in Khaagaalgaon and greater capacity to retain humidity in the soil.
- 2 Because of the lack of meteorological data on temperature, precipitation and environmental situation in the area, informants' perceptions as well as own observation are the main sources of information.
- 3 In Khaagaalgaon and Syaandaa, however, some of the selected respondents were absent, leading to a slight overrepresentation of interviewees from the higher wealth categories.
- 4 Because the quantitative information was in some cases based on estimates rather than measurements, they are used only to illustrate the relative variation between households, groups and/or villages, and not in absolute terms.
- 5 The area cultivated is presented using the local measurement system, as this is most precise and meaningful locally. The *haal* (1 haal = approx. 0.128 hectares, according to Bishop 1990) corresponds to the number of days used to plough the land with the buffalo/yak hybrid.
- 6 USD 1 = NR 86.1 (Nepali Rupees) at the time of the fieldwork.
- 7 The term varies from village to village.

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PAPER 2

Rethinking food aid in a chronic food insecure region – effects of food aid on local power relations and vulnerability patterns in north-western Nepal

(Submitted to Development Policy Review)

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Abstract

The impacts of repeated food aid programmes on household's livelihood strategies and capacity to adapt to stressors such as climate change were investigated in the chronically food-insecure district of Humla in Nepal, using food security as an entry point for analysing vulnerability. The study does not find that food aid creates aid dependency per se, but questions its capacity to reduce vulnerability over time. The article argues that food aid may indirectly impede the enhancement of food security because it contributes to reinforcing inequalities and local power structures that drive household vulnerability, and concludes that a refocus that address social dynamics that shape local vulnerability patterns is needed before food aid can contribute to enhancing households' long-term adaptive capacity.

Key words: Vulnerability, climate change, humanitarian aid, food security, power relations, Nepal

1 Introduction

In many areas, climate variability and change are increasing the stress on already pressed farming systems (CCAFS, 2012; Olsson et al., 2014; Porter et al., 2014), leading to an increased focus on food security programmes and disaster risk reduction measures as ways of reducing vulnerability (IPCC, 2012; World Disasters Report, 2014). Food aid is one of the main tools used by the humanitarian community to address food insecurity and to alleviate acute food shortages. In 2011, the United Nations World Food Programme (WFP) delivered 3.6 million metric tons (MT) of food to 99.1 million people in 75 countries (WFP, 2012a). However, food aid is not without controversy. While some consider it a key tool for saving people from hunger (WFP, 2012b), others have raised concerns that food aid may undermine livelihood strategies of already marginalised households and cause aid dependency among recipients when provided repeatedly over a long period of time (Bauck et al., 2007; Adhikari, 2008; OXFAM, 2011). Such criticisms of food aid have contributed to increased attention on the need for humanitarian assistance to be redesigned so that it is able to address vulnerability to multiple stressors, including climate change, more effectively (O'Brien et al., 2008; IPCC, 2012; Olsson et al., 2014; Eriksen et al., 2014).

The climate change literature increasingly describes vulnerability as being driven by multiple social and environmental processes including economic and political change, marginalisation and inequity, rather than by climate change alone (Eriksen et al., 2005; Adger, 2006; O'Brien et al., 2007; Ribot, 2010; Olsson et al., 2014). In particular, power through social relations has been identified as a key factor affecting and creating vulnerability, since it influences peoples' entitlement to resources, access to formal and informal networks of support, as well as their extent of decision making, thus enhancing or hindering their capacity to adapt to stress in the long term (Adger and Kelly, 1999; Nyborg et al., 2008; McLaughlin and Dietz, 2008; Eriksen et al., 2011). An important dynamic identified by Nagoda and Eriksen (2014) is that in times of food crisis, local vulnerability patterns may be reinforced through a deepening of the inequality and dependency relations between those with access to resources and decision-making opportunities, and those who are excluded.

It is within such a complex vulnerability context that governments and humanitarian organisations face the difficult task of responding quickly to people suffering from acute food shortage, without negatively influencing their long-term household capacity to adapt to stressors such as climate change. Addressing this challenge requires an enhanced understanding of how aid affects the social drivers of climate change vulnerability, in particular power relations and marginalisation processes.

This paper contributes to such understanding by investigating local vulnerability patterns and food aid interventions in two villages in the chronic food-insecure region of Humla, north-western Nepal. The study undertakes a twofold analysis: First, it investigates the impacts of repeated food relief distribution in enhancing or substituting local livelihood strategies, including the extent to which it creates food aid dependency at the household level. Secondly, it considers how food aid influences power and interdependency relations within the villages, and the impacts of such interactions on household vulnerability. With growing attention and resources directed to promoting climate change adaptation worldwide (Agrawal and Perrin, 2009; IPCC, 2014; O'Brien et al., 2014), it is hoped that this study will contribute to enhanced understanding of how humanitarian interventions can better address the related problems of chronic food insecurity and vulnerability to climate change in poor rural households.

2 Theoretical framework

Food security has been defined as “a situation that exists when all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life” (FAO, 2002: Chapter 2). Building on an earlier World Food Summit definition from 1996 (World Food Summit, 1996: Paragraph 1), the Food and Agriculture Organization (FAO) definition emphasises *social*, in addition to physical and economic access to food, underscoring the work of Sen (1981) that *availability* of food in sufficient quantities is in itself not enough to achieve food security.

The FAO (2006) elaborates that in addition to food availability and entitlements for acquiring appropriate food for a nutritional diet, non-food inputs such as clean water, sanitation and health care, as well as stability in access and availability in the face of economic or climatic crises, are important components of food security.

The reasons for food insecurity are multidimensional and there is a complex dynamic between food insecurity, livelihood strategies and vulnerability, where vulnerability can manifest itself as an inability of livelihood strategies to secure food and other basic needs (Devereux and Maxwell, 2001). Insufficient access to food is often regarded as an outcome of vulnerability (Yaro, 2004; Porter et al., 2014), and building on Adger's definition of vulnerability as "the state of susceptibility to harm from exposure to stresses associated with environmental and societal changes and from absence of capacity to adapt" (2006: 268), this study uses food insecurity as an entry point for assessing vulnerability. In this investigation, a failure of livelihood strategies to provide sufficient quality and nutritious food in the face of climate stress is seen as an outcome of the processes and structures driving the inherent state of vulnerability.

Contributing to academic work on the role of power in shaping vulnerability, some development actors have commissioned studies to gain deeper insight into the political economy of the development context (DFID, 2003; SIDA, 2006; NORAD, 2008; DFID, 2009). Important gaps remain, however, in the knowledge of how aid influences local political, social and economic relations and dynamics (De Haan and Everest-Philips, 2007; Unsworth, 2009; Brown, 2009; Tanner and Allouche, 2011; Eriksen et al., 2014). In particular, the danger of creating aid dependency, also referred as the "dependency syndrome" (Dagnachew Siyoum et al., 2012), is frequently raised as a criticism of humanitarian aid (Lentz et al., 2005; Barrett and Maxwell, 2005; Dagnachew Siyoum et al., 2012). Most definitions of food aid dependency converge with Little's (2008: 861) claim that it is "a condition where farmers modify their social and economic behaviour in anticipation of food aid." The assumption is that by abandoning their livelihood activities in expectation of food aid, households may become more vulnerable to climate variability and change. However, identifying cases of dependency when food aid is only one

among several factors affecting livelihood strategies in a dynamic context has proven difficult (Lentz et al., 2005; Harvey and Lind, 2005; Barrett and Maxwell, 2005).

Furthermore, a definition of dependency that focuses only on the direct consequences of the anticipation of aid may be too narrow to explain how aid interventions affect vulnerability. The indirect influence of aid on pre-existing socio-cultural and power relations among households may be at least as important in determining long-term household vulnerability. Externally planned interventions that meet with local interests in a complex socio-political context may have unintended impacts (Fergusson, 1994; Nagoda and Fowler, 2003; Sperling et al., 2004; Mosse, 2005; Barnett, 2008; Bridges, 2010). For example, “elite capturing” of development projects has been highlighted by various scholars (Kumar and Corbridge, 2002; Boyce, 2002; Waghmore, 2012; Yates, 2012). Duffield et al. (2000), and Lind and Jallela (2005) also found that food aid may impact on local social relations and pre-existing *interdependencies* between individuals and households, as well as between populations, groups and communities. In Humla, such interdependencies are formed by formal and informal socio-political structures and networks along the lines of caste, class, gender, ethnicity, kinship and social groups that are important in shaping local vulnerability patterns (Nagoda and Eriksen, 2014). The same authors observe that dependence between people within the villages in the study area is often expressed by marginalised households borrowing food or money from better-off households in order to survive a crisis. By increasing its debts, the poor household is left with fewer options to prepare for the next crisis, while the better-off household sees its status and position in the village reinforced.

Since vulnerability is dynamic and ever changing (Eriksen et al., 2005; O’Brien et al., 2007), this article analyses the effects of food aid as part of a contextual vulnerability dynamic where environmental, socio-cultural, economic and political factors interact, and where food aid is one of various factors leading to changes. Building on the actors-oriented approach (Long 1992) as well as on studies of subjectivity and intersectionality (Foucault, 1995; Butler, 1997; Nightingale, 2011), we investigate to what extent food aid impacts on the long-term capacity of the recipients to face multiple stressors, including climatic uncertainty and change. Long’s

actors-oriented approach to rural development shows that the perceptions and strategies of different actors are shaped by power, agency and knowledge (Long, 1992). Intersectionality highlights the importance of an individual's social position as a result of the intersection of his/her belonging to different dominant or subordinate groups according to race, class and gender (Berger and Guidroz, 2009). In our case, we investigated how formal and informal systems of power are deployed, maintained and reinforced through axes of caste, class, ethnicity and gender. This approach is particularly helpful when studying food aid and power relations in Nepal as it pushes the conceptualisations of group identity beyond a static study of people within defined 'boxes' and highlights the complexity of relationships between and within groups, where subjectivity, - that includes people's own perception of their ability to influence decision making processes - and resistance are often part of the same dynamic that governs the everyday life of the villagers.

3 Approach and methodology

3.1 Research question

The main question this study addresses is "*How does food aid impact on people's vulnerability in the context of climate stressors and socio-economic changes?*" First, to analyse the effect of food aid on livelihood strategies, we examine the importance placed by the interviewees on food aid as a coping strategy in times of crisis and how it influences various livelihood options such as agriculture, trade and daily labour. This analysis builds on the assumption that if food aid leads to strengthened and/or diversified livelihood options, it may have a positive and lasting reduction on households' vulnerability to stress. On the contrary, if food aid has weakened livelihood options, one might argue that such interventions run the risk of enhancing vulnerability and creating aid dependency among recipients.

Nagoda and Eriksen (2014) found that unequal socio-political power relations in the area lead to social inequity and marginalisation and are important drivers of differential vulnerability patterns. In order to assess the consequences of food aid on vulnerability, it is therefore essential

to understand how aid interventions interact with local power relations and interdependencies. Hence, a second part of the analysis examines how local power relations are affected by food aid and how changes in local interdependencies enhance or undermine access to livelihood opportunities.

Since people's perception of their food security situation is subjective, this information is not interpreted as an absolute measure of food security, but rather as an entry point for analysing causes and processes driving vulnerability. Hence, and in line with the contextual interpretation of vulnerability (O'Brien et al., 2007; IPCC, 2014), discussion with the villagers involves not only the challenges and possibilities people experience in securing food, but also other factors they consider important for their well-being and adaptive capacity, such as health, education, dignity and freedom from oppression.

3.2 The vulnerability context of the study sites

The district of Humla in far north-western Nepal (see Figure 1) is particularly appropriate for studying the impacts of repeated food aid on local vulnerability to stressors, including climate change. The district is one of the poorest in Nepal (UNFCO 2013), is highly food insecure (DFSN, 2010), and has received food aid for decades (Adhikari, 2008). Humla is also vulnerable to climate change (NPC, 2010; Ministry of the Environment of Nepal, 2010b), which contributes to further deterioration of the region's food security situation (WFP, 2012b).

Humla is a mountainous district with altitudes varying from 1,524 to 7,337 m.a.s.l. (Roy, 2010) and is characterised by its remoteness, limited infrastructure (i.e. the nearest road is about one week's walk away), and by weak and sporadic presence of government institutions, in particular beyond the district headquarters at Simkot (Roy, 2010; Nagoda and Eriksen, 2014). Humla is divided into two sub-ecological regions: Upper Humla, in the North bordering Tibet and Lower Humla in the South, with villages located at a slightly lower altitude with a warmer climate and land better suited for agriculture.



Figure 1: District of Humla (Map of the Foundation Nepal- <http://www.foundation-nepal.org/content/map>)



Figure 2: Map of the villages visited in the district of Humla, Nepal (Nagoda and Eriksen 2014)

The main livelihood strategies are subsistence agriculture and trade with Non Timber Forest Products (NTFP), rice and salt exchanged with Tibet, and *Furu*¹, in addition to daily labour and temporal migration. (Roy, 2010; Nagoda and Eriksen, 2014). Ownership of livestock is an important part of these strategies. Of Humla’s surface area of 5 655km² (DDCO, 2006), only around 98km² are cultivated and less than 11km² are irrigated (UNFCO, 2013). Land endowments are small, with an average of about 0.5ha per household, but with important differences between households, especially in Lower Humla where better off households may have up to 2 ha while destitute households have only 0.1 ha of lands (Nagoda and Eriksen, 2014).

Although data about temporal and spatial climate variability in Humla are scarce, people report that in the last five to ten years more unpredictable rain patterns have had a negative influence on agricultural production (Nagoda and Eriksen, 2014). Winters are dryer with less snow, leading to too little water for the winter crops and rare but heavy rainfalls during summer increase the frequency of landslides and make predictions of the agricultural season difficult. These

¹ *Furu* is a cup made by wood collected by the Lama people of Upper Humla in forests in the southern parts of Nepal.

observations are in line with those of national and regional level studies (Practical Action, 2009; Ministry of the Environment of Nepal, 2010a; Hijioka et al., 2014).

In 2010, the District Food Security Network (DFSN) estimated that about 41 000 of the nearly 50 000 inhabitants of Humla suffered from food insecurity based on a set of 12 indicators developed by the Nepal Food Security Monitoring System, the NeKSAP (DFSN, 2010). Food insecurity is most prevalent between harvest periods in March and June when trade with Tibet is limited by snow or landslides.

Local social, political and economic networks and relations are essential parts of people's survival strategies in this context of physical remoteness, environmental change, and political and economic marginalisation (Bishop, 1990; Nagoda and Eriksen, 2014). Such networks are shaped by social inequities and marginalisation processes based on castes, classes, ethnic groups and gender; and form part of a broader system that enhances or inhibits people's access to various assets (Bista, 1994; Cameron, 2007; DFID and the World Bank, 2006; SIRF, 2009; Khadka, 2010). People in Humla may roughly be divided into two groups based on religion and mother tongue: the communities of Buddhist Tibetan speaking *Lamas* who live in Upper Humla, and the Hindu Nepali speaking communities that live in southern parts of Upper Humla and in Lower Humla. The Hindu Nepali speaking people are further divided according to the caste systems of the Hindu religion. The most important castes present in Humla are Bramhan, Chhetri and Thakuri who are considered high castes, and Dalits who are considered low castes (untouchables). The *lagi*² system, a patron-client relationship similar to a feudal system with bonded labour based on inherited relationships, is still widely practised in Hindu Nepali communities, with low castes having to work a certain amount of days on the lands of the higher castes in exchange for food.

Nagoda and Eriksen (2014) show that marginalisation of the poor, Dalits and women is particular powerful in explaining food insecurity and vulnerability in the study area. These groups often lack access to agricultural assets, land and networks and are underrepresented in

²Other names are also used to refer to the *lagi*, such as *sarki* and *loar*.

local decision-making processes. Women tend also to be overloaded by work, and when the men migrate during winter or engage in trade, women typically stay in the village taking care of the children, livestock and lands.

3.3 Data collection

Field studies were carried out over a five-year period from 2009 to 2014. A total of 74 interviews were conducted with policy makers, donors and representatives of aid agencies, in Kathmandu (46 interviews) and in Simkot (28 interviews). At the local level, the villages selected are Syaandaa in the Village Development Committee (VDC) of Syaandaa in Upper Humla and Khankhe in the VDC of Kalika in Lower Humla (see Figure 2). These two VDCs were considered highly food insecure in 2010 (DFSN, 2010) and have received much food aid in the past. Both VDCs are situated on the eastern part of a mountain range with access to forests and rivers but with different environmental and socio-cultural characteristics (see Table 1).

Table 1: Characteristics of the villages studied, Humla district (developed from Table 1 in Nagoda and Eriksen, 2014).

Village	Syaandaa	Khankhe
Region	Upper Humla	Lower Humla
Altitude (m.a.s.l.)	2745*	1700
Religion	Hindu	Hindu
Caste	Chhetri	Thakuri and Dalits
Number of households	152*	90
Persons per hh	6.3*	7.2
Child mortality per hh	1.4	0.9
Main livelihood strategies	Agriculture, trade, wage labour	Agriculture, trade, wage labour, migration and food aid
Main crops cultivated	Buckwheat, millet, barley, wheat, potatoes, seasonal vegetables	Rice, millet, barley, wheat, corn, seasonal vegetables
Main livestock	Yaks, yak/cow hybrids, horses, sheep, goats	Cows, buffalo, sheep, goats

Data based on fieldwork 2010 – 2011, except those denoted with an asterisk that are based on Roy (2010).

In Syaandaa, the household level analysis is based on 21 semi-structured and 27 informal interviews and in Khankhe, 26 semi-structured and 23 informal interviews were undertaken. The semi-structured interviewees were randomly selected by choosing every fourth household on a list of all the households in the village. Informal interviews were done with targeted key informants identified while staying in the villages.

Further interviews were undertaken to broaden the understanding of the regional vulnerability context in villages nearby: 21 qualitative interviews in the moderately food-insecure village of Khaagaalgaon (situated in Upper Humla and inhabited by *lamas*), and 5 informal interviews in the highly food-insecure village of Yangu (near Syaandaa and inhabited by a large number of Dalits). Data collected through participant observation are also included in the analysis.

In each village, an introductory focus group discussion was organised during which an informal wealth ranking classification of the villagers was conducted. In addition, seven focus group interactions, including with different castes, women, very poor, better-off, traders and elders were undertaken to follow up particular issues raised in household interviews. Many women were not willing to give a 'formal' interview, in part because they felt their husband 'knows better' than them, but also because they were busy with other work. However, most women were keen to share their knowledge and experiences informally when accompanying them in the field, collecting firewood, or when working with them in the house. In total, 37 women were interviewed in this manner.

4 The effect of food aid on vulnerability in Humla

For the purpose of this study, food aid is understood to be an external intervention where food is either distributed to the beneficiaries for free, provided as 'payment' for participation in development programmes, or sold at subsidised prices. In the following sections we present some main features of the food aid programmes in Humla.

4.1 Food aid in Humla

According to interviews with government officials, food distribution in Humla began in the 1950s through the Nepal Food Corporation (NFC), an agency under the Ministry of Industry, Commerce and Supplies that sold rice at subsidised prices in food-insecure regions. Although sporadic during the early decades, food distribution in the region increased steadily during the 1990s due to the support of the World Food Programme (WFP) (Adhikari, 2008; Bishokarma, 2010). Today, both WFP and NFC airlift large amounts of food, in particular rice, into Humla using the irregular flight system to Simkot. In order to purchase the subsidised rice from NFC, the villagers have to organise their own transport to and from Simkot. WFP also transports some of its rice to remote villages.

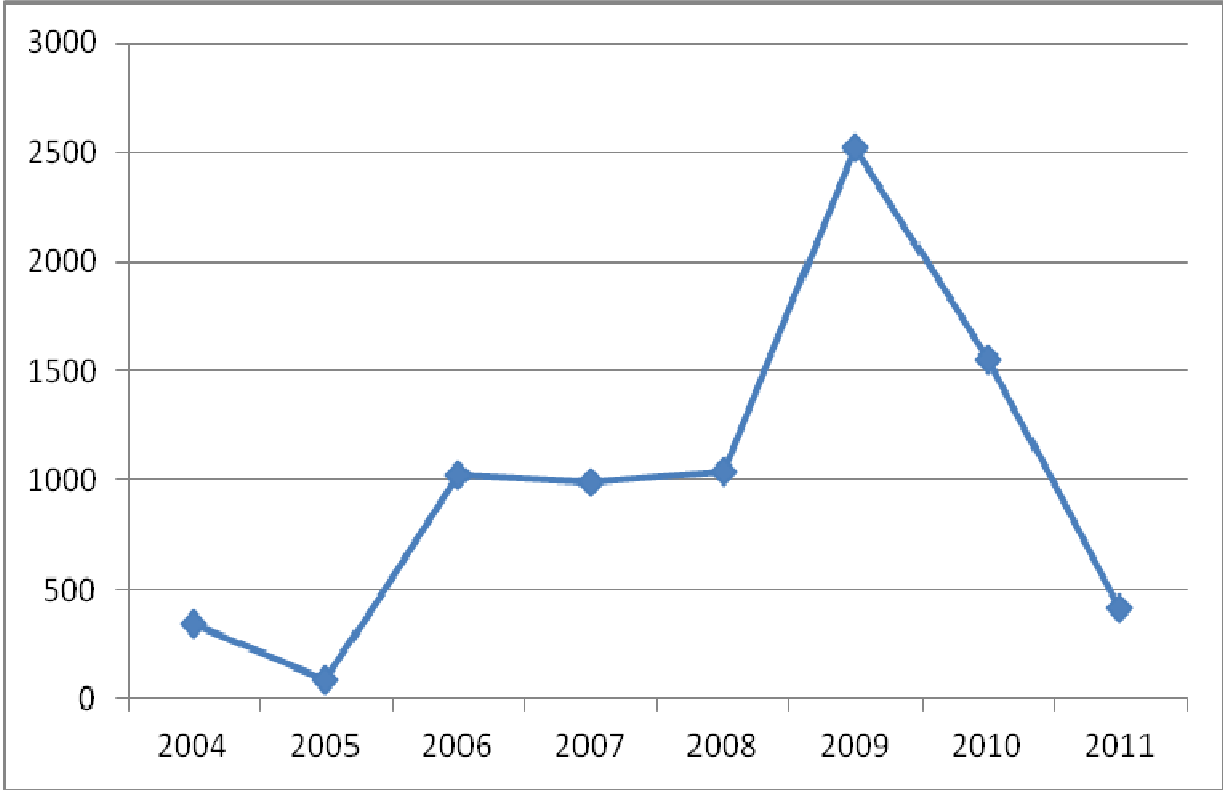
Currently in Humla, the WFP is implementing ‘Food for Work’ and ‘Food for Assets’ programmes (FFW/A), previously part of the Rural Infrastructure Community Work (RCIW) and since the 2000s, under the Protracted Relief and Recovery Operation (PRRO). The objective of the PRRO is to “strengthen the resilience of the most vulnerable households and communities by building long-term human capital and productive assets” (WFP, 2012c: 9). The focus is to create new income generating activities by building irrigation systems, roads, paths, community buildings, and cultivating new crops for commercialisation (e.g. *attis*³ and apples). All households are eligible to receive food, as long as they participate in the projects (interviews with WFP). Locally elected User Committees (UC) in each village, facilitated by WFP’s local partners, decide which activities will be carried out as part of the FFW/A projects.

Data on food distribution in the region are scarce and difficult to access. At the district level, data regarding food distribution by WFP are available only from 2004 to 2011, and at the VDC level, only data from 2008 to 2013 could be accessed through interviews (Figures 3 and 4). Data regarding NFC distributions could be obtained only for the years 2009 and 2012, through interviews. The available district level data show that WFP distributed about 7 980 Metric Tonnes (MT) of food in Humla from 2004 to 2011, with large annual variations (Figure 3).

³ *Attis* is an herb with an economic value in Humla of about 500 Nepalis Rupees per kg (see also Roy 2010).

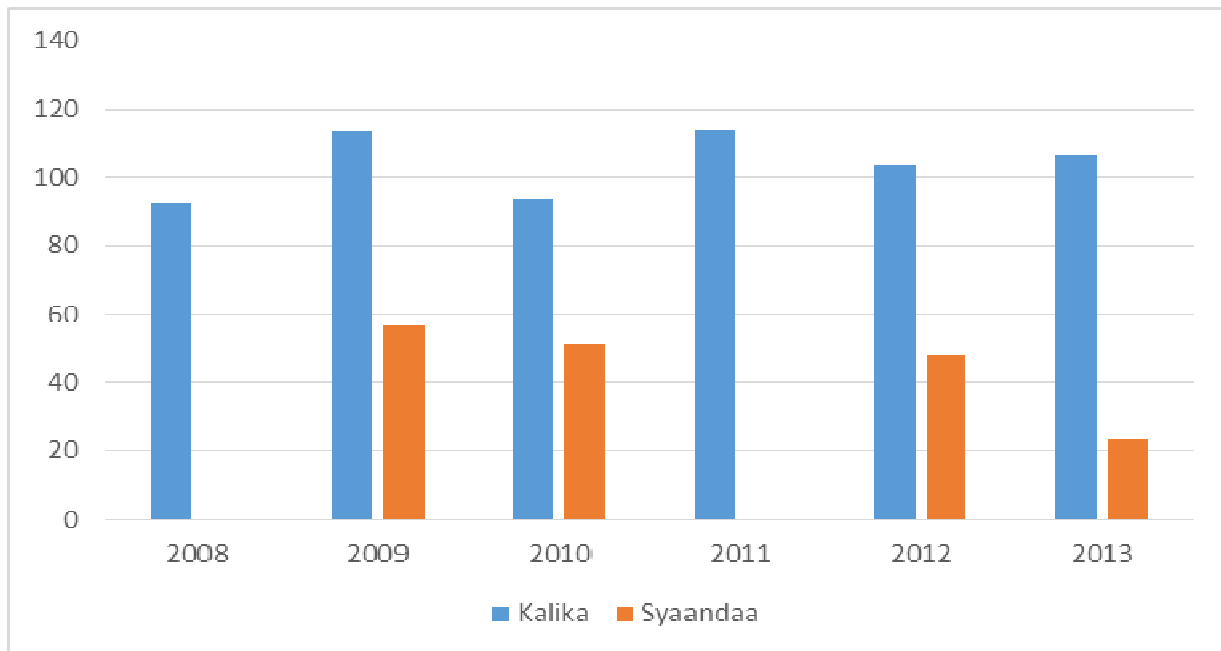
These variations were due mainly to WFP’s budget constraints, evident when volumes diminished drastically from 2 523MT in 2009 to 417MT in 2011/2012 as a result of the world economic crisis (Interviews with WFP staff). The annual variations are also reflected in the amount of food distributed by WFP to the VDCs of Syaandaa and Khalika⁴ (Figure 4). According to interviews with NFC staff, NFC distributed about 600MT of rice in Humla in 2009 and about 1 000MT in 2012.

Figure 3: Food aid distribution by WFP in Humla in MT from 2004 to 2011 (source: interview with WFP staff).



⁴ Data regarding amounts of food distributed per village were not available; hence Figure 4 shows the total amount of food distributed to the VDCs that include the villages visited. Data were not available for the years 2008 and 2011 for the VDC of Syaandaa.

Figure 4: Food aid distribution in MT by WFP in the VDCs of Kalika and Syaandaa (source: interview with WFP staff).



4.2 Effects of food aid on livelihood strategies and vulnerability. Does food aid cause aid dependency?

Government officials and development workers frequently express concerns that repeated food aid may create aid dependency in the region of Humla, make “people lazy” and have negative long-term impacts on people’s vulnerability. Investigating the ways in which food aid forms part of local livelihood portfolios may shed light on the extent to which food aid has replaced other livelihood strategies, or if it has enabled households to build up livelihood assets and options over time.

First, food aid is not found to replace farming or other livelihood strategies, in spite of three trends observed during fieldwork that would appear to support such a dependency narrative: 1) more land is left fallow today than 10 years ago; 2) villagers consume more rice and eat less of the traditional crops; and 3) food trading patterns have changed over recent years. However, as

shown below, these changes in livelihoods cannot be attributed to food aid alone, but are the result of the interaction of complex social and environmental changes.

The observed increase in fallow lands was primarily explained in household interviews as the result of changes in climatic conditions, and by a lack of manpower and manure. For example, finger millet (*l.n. kodo*), a crop that needs abundant rain and manpower and which is cultivated mostly in the Hindu villages, has become difficult to cultivate because of changes in rainfall patterns. Informants attributed the lack of manpower to more children going to school rather than working in the fields. The lack of manure is partly related to the lack of manpower – as more children go to school, there are less people to take care of the livestock. In addition, poor households reported having sold their animals because they could not afford the increased fees claimed by the Forest User Groups (FUG) in the south for the grazing of their sheep and goats during the winter. Although a few better-off households mentioned the increasing costs of hiring day labourers, partly because of competition from WFP's food for work projects, more importance was placed on the fact that trading with NTFP has become a more attractive livelihood strategy than working in the fields. Hence, the study does not support the argument that food aid has created disincentives for agricultural production. In fact, only 5% of the informants in Syaandaa and 7% in Khankhe considered they had a surplus of food annually and none of the households would work less on their fields because of food aid. As one informant said: *“people are just too poor to take the chance of not working on their fields”*.

Furthermore the data do not suggest that increased access to rice from food aid has led farmers to neglect local crops, even if many young persons stated that they prefer eating rice rather than some of the traditional crops. Farmers are well aware of the value of each of their traditional crops and their health related benefits. Participants in a focus group discussion in Khankhe easily listed seven varieties of wheat (*l.n. Ganhu*), 14 varieties of rice (*l.n. bhat*), and many varieties of finger millet (*l.n.kodo*), foxtail millet (*l.n. Kaguni*), Panicum millet (*l.n. Chino*), buckwheat (*l.n. tite faper*), and beans (*l.n. simi*) that are cultivated according to weather conditions, manpower capacity and taste preferences. Informants suggested that the shift towards higher consumption of rice could be attributed mainly to the increasing movement of people, including those working

for development projects, and the growing influence of Hindu societies in neighbouring districts where rice holds a high socio-cultural status.

During interviews, some policy makers recounted how food aid creates disincentives for local trade, referring specifically to the reduction in the traditional salt-rice trade between Tibet and neighbouring districts. Indeed, for centuries, the salt trade was a major livelihood strategy in the region, where traders would buy salt in Tibet and exchange it for grains in southern Nepal (Von Fürer-Haimendorf, 1988; Bishop, 1990). However, reasons for the decline in the trade are complex. In addition to the rice distributed by WFP and NFC, the Nepali Government has distributed salt at subsidised prices since 1963 (Salt Trading Corporation of Nepal, 2013). While some informants confirmed that the incentives for the trade were gradually reduced as salt became more accessible in the South and rice in the North, none considered that these changes could be attributed to food aid alone. Older informants, including some who had previously been involved in the salt trade, said that the decline of the salt/rice trade started in the late 1960s with the closing of the Tibetan borders by China. The salt trade is known to be a tough and time consuming activity that requires both manpower and animals, and was conducted mostly by better-off *lama* people in the North. Nowadays better off *lama* households prefer the more lucrative trade in NTFP with neighbouring communities, districts and regions (Nagoda and Eriksen, 2014) and to buy rice from the NFC office in Simkot.

Likewise, traders and villagers reported that food aid from WFP has little effect on local food prices, as only small quantities of the rice distributed by WFP enter into local markets and it is reputed to be of lower quality. Buyers choose to either purchase NFC rice at subsidised prices or travel to the markets in Tibet. A perhaps unexpected consequence of food aid on the local economy was expressed by traders and shopkeepers at the district headquarters, who complained that food aid from WFP and NFC occupies such a large share of the limited air transportation capacity that the costs of transporting other goods has increased sharply. As a protest against the high transportation costs, locals occasionally block the landing strip in Simkot. Many interviewees in villages near Simkot said they prefer to walk several days to Tibet to buy their goods, including rice, as they consider Simkot to be too expensive.

Second, food aid appears to have only limited importance in building longer-term adaptive capacity and reducing long-term vulnerability. Analysis of household interviews shows that the perceived importance of food aid varies greatly between villages and between different wealth categories within each village. Fifty-four percent of the households interviewed in Khankhe consider that food aid is important in times of acute food shortage, while only 19% of the interviewees in Syaandaa felt the same. While the high importance ascribed to food aid among households in Khankhe may be related to them having higher expectations of receiving food aid as the village has received food aid on a regular basis (see Figure 3), it may equally be an expression of Khankhe being more vulnerable to stress and having little access to alternative sources of survival in times of crises. Household interviews, as well as key informant interviews and focus groups, confirmed that households in Khankhe engage less in trade and rely more on drought sensitive crops such as rice and finger millet than households in northern Humla, thus leaving them more vulnerable to climatic unpredictability. In addition, Nagoda and Eriksen (2014) describe how marginalisation processes operating through social, political and economic exclusion represented in the caste system, are important drivers of food insecurity in Khankhe.

Importantly, despite variations ascribed to the importance of food aid between the two villages, none of the poorest households interviewed claimed that food aid, including participation in the FFW/A programmes, has improved their long-term food security. Informants were confused about the purpose and benefits of the FFW/A programmes, in which many participate only half-heartedly. For example, stating that they work on the *attis* and apple farms to get rice, and because “*the other villagers ask me to do so*”, only a few of the better-off households knew what to do with the apples and *attis* at the time of harvest. Some people also aired concerns that the apple and *attis* production contributes to a reduction in grazing lands and that the new roads linking Simkot with Tibet would lead to further depletion of local forest resources with timber sold (legally or illegally) to Tibet, thus potentially undermining community adaptive capacity in the long term.

Third, food aid is seen to be too unreliable to replace other coping strategies. No interviewees relied on food aid in times of crisis; and even the most food-insecure households stated that the food received is insufficient and too unpredictable to meet their needs in times of stress. For example, in Khankhe in 2011, people were told they would receive four 40kg bags of rice, but at the time of a visit in the village they had only received two bags and were not sure whether they would get the remaining two. Also, in Syaandaa, many households reported that they received less than they had been promised and they suspect the reason is corruption or theft. None of the food-insecure households considered accessing subsidised rice from NFC as a feasible coping strategy during harvest failure as this requires money, transportation capacity, and good relations with local officials, assets which poor people often do not have. The fact that households cannot rely solely on food aid to cope with a food crisis is reflected in the volumes of food aid provided by WFP and NFC being relatively low compared to the estimated needs. In 2008/2009, the food deficit in Humla was estimated at 7 507MT per year (Ministry of the Environment of Nepal 2010b), while WFP distributed 1 042MT and NFC about 600MT in 2008 (Interviews with NFC and WFP staff).

In fact, borrowing food and money from fellow villagers is a much more important coping strategy than receiving food aid. Indeed, 83% of the food-insecure households interviewed in Syaandaa and 81% in Khankhe said they would borrow food and money within the village in order to survive a food shortage, thus highlighting the importance of local social networks and relations in times of crisis. Other coping strategies include daily labour (48% of interviewees in Syaandaa; 12% in Khankhe), trade (23% in Khankhe, 9% in Syaandaa), selling assets (12% in Khankhe and 5% in Syaandaa) and seasonal migration (12% in Khankhe, none in Syaandaa). In times of crisis, food aid is appreciated as a short-term opportunity to access food. For example, one informant explained how, for a few weeks, quick access to rice through food aid programmes enabled him to engage in daily wage labour and repay his debts. Few informants in Khankhe also stated that they may remain in the village in time of a FFW/A project, instead of migrating in search of uncertain job opportunities. However, apart from some temporary changes in coping strategy for a few households, no informants claimed that food aid has replaced more erosive coping strategies, like eating seed or selling land, or taking their children out of school.

Hence, food aid is found to be only one among several factors influencing the production systems, economy and trading patterns in the study area. Other factors such as changes in climatic conditions and diversification in trading opportunities are more important in altering livelihood activities. There is little evidence that food aid has caused disincentives for food production or replaced more viable livelihood opportunities in other ways. Using Little's (2008) definition of food aid dependency, it may be therefore argued that food aid has not created a situation of 'aid dependency' in the study area, as households have not "modified their social and economic behaviour in anticipation of food aid" (Little 2008, p. 861). On the other hand, food aid is found not to have long-term effects on reducing vulnerability of the poorest, a finding that is supported by independent evaluations of WFP's activities in Nepal (Bauck et al., 2007; Frankenberger et al., 2010; O'Reilly et al., 2013). The next section investigates how food aid influences power relations that shape vulnerability patterns at the local level.

4.3 Effect of food aid on interdependencies, power and inequity

Food aid occurs in a context of pre-existing structural and cultural intra-village dependency relations. As described by Nagoda and Eriksen (2014), a crisis such as a weather event affecting harvests reinforces the interdependency situation between those who are better off and lend food or credits, and those who have to borrow and find that their social or financial indebtedness increases. This leads to a precarious situation for those in debt, as the need to repay their debt, for example by working on other people's land, limits their capacity to manage their own livelihoods. At the same time, the better-off households see their status and position in the village being reinforced. Our investigation suggests that food aid interventions affect and consolidate households' vulnerability patterns over time by reinforcing interdependency relations in two main ways that are closely interlinked: first, by inadvertently reinforcing the gap between the better off and the poor; and second, by reinforcing existing power dynamics and unequal power relations in decision-making processes at the village level. These two aspects are discussed below.

First, livelihood opportunities created by food aid and accompanying programmes (FFW/A) remain confined mostly in the hands of the better-off members of society. The analysis shows, for example, that in Khanke, irrigation systems supported by FFW/A programmes were built to bring water to the rice fields of the Thakuris and not to the Dalits, since the fields of the Dalits are of poor quality, in areas too steep for cultivating rice or too far from the village. Some interviewees (both Thakuris and Dalits) expressed that the Dalits might indirectly benefit if they receive more rice from their Thakuri *lagi* ('patron') when working on their now irrigated fields. One could also argue, however, that this would more likely serve to reinforce the Dalits' dependency on the Thakuri during a food crisis, and thus further consolidate their vulnerability over time. Changes in trading opportunities can serve as another illustration of how the poorest tend to remain excluded from the benefits of food aid interventions. The construction of new paths through FFW/A programmes to improve the circulation of people and animals in the region and the cultivation of *attis* and apples aim to create new livelihood options by facilitating access to new markets. Although the study reveals a positive trend in that more households now engage in trade, the poorest and most food-insecure families are still effectively excluded due to their lack of access to trading networks and credit to buy animals for transportation or land to plant the *attis* and/or apples. They carry debts that have to be repaid to their creditors, and suffer a shortage of time and manpower required to take advantage of trade opportunities. Likewise, only the better off households were said to benefit from the NFC programme since they could pay for the transportation costs and had the necessary contacts with government officials in Simkot to access the rice.

The differential impact of food aid interventions means that not only do poorer households benefit relatively less than wealthier households, but participating in the projects may also have other unintended effects that can undermine their future adaptive capacity. For example, families with little manpower are usually among the most food insecure and some informants admitted to taking children out of school in order to manage all the work or neglecting their land to give priority to WFP projects to secure some food. Informants from WFP stressed that WFP policy takes the local agricultural calendar into account when organising projects, and that children under 16, pregnant women and the elderly should not be working. However, villagers reported

that projects could also be implemented during the peak agricultural season and that everybody needs to work for WFP to secure food; alternatively they let the children work in their own fields and send the adults to work on the WFP projects. During fieldwork, women and children were frequently observed carrying stones for a WFP project. Furthermore, FFW/A projects often add to the already heavy workload of women. Although during interviews, women praised the food received from WFP, they also explained that the work associated with the activities has to be undertaken in addition to all their daily tasks. Some women from poor households said that at the time of FFW/A projects, they had even less time to look after their children, breastfeed their babies, and cook for the household, thus inducing worries about child malnutrition.

Second, food aid interventions tend to strengthen the decision-making authority of those most influential over the vulnerable; an example is the formation of user committees (UCs). The UCs are formed to ensure that projects are well planned and implemented related to needs at the local level. However, although the names of women and Dalits appear on the lists of UC members, these complain that they are not heard during meetings, and that decision-making processes are dominated by the existing power dynamics in the communities. Many Dalits and poor families are of the opinion that the UCs are corrupt and do not represent their interests and some choose not to attend the meetings, feeling that it is a waste of time since they cannot influence any decisions. A woman belonging to a UC expressed that she felt excluded from decision-making, since “the men did not want to listen to the women”. Discussions with development workers show that most of them are aware of these challenges, but feel that they do not have the mandate to challenge social structures at village level. As one development worker put it: “Dalits and women only participate on paper, but are not part of the decision-making process. Unfortunately, we [development organisations] can do little to change this, since the UC is formed by the community itself”. Other Dalits affirmed that projects are decided by the Thakuri or by people outside the village, and that Dalits do not have much say in the selection or implementation of projects.

The above shows that power relations are important in defining who benefits from food aid projects and illustrates how a technocratic approach (as food distribution, construction of

irrigation systems or path) to food insecurity fails to challenge pre-existing, structural, intra-village dependency relations. It also shows how people's subjective perceptions of their ability to change and improve their situation in relation to interlocking systems of oppression defined by the caste, class, gender and ethnic groups matrix highlighted in the intersectionality approach (Tracy Berger and Guidroz, 2009; Nightingale, 2011), drive differential livelihood trajectories over time under the influence of external factors (such as a drought or aid programmes). Such differential livelihood trajectories were also outlined in Olsson et al. (2014).

The above suggests that current food aid interventions do not challenge power structures and increase opportunities for the poorest. The investigation goes a step further, by suggesting that food aid, through using and thus legitimising existing power structures and relations (exemplified here by the UCs), risks consolidating the very inequities and power relations that cause household vulnerability in the first place. As long as food-insecure households remain heavily dependent on the better-off to cope with a crisis, existing interdependencies and inequities that determine vulnerabilities will continue to reinforce themselves, and may even be further strengthened through mechanisms such as “elite capture” of external aid.

5 Conclusion: Questioning food aid's capacity to reduce vulnerability

Using food security as an entry point to assess vulnerability to stress among households in two villages in Humla, this study finds that while food aid may alleviate short-term food shortages, it does not effectively reduce vulnerability or enhance long-term livelihood strategies. We suggest that the reasons for this apparent *failure* of food aid to create new livelihood opportunities and reduce vulnerability can be found in the very design of the aid programmes, since they do not address the drivers present in the local vulnerability context. Indeed, several researchers have argued that programmes and interventions that respond only to vulnerability outcomes are unlikely to enhance people's capability to adapt in the long term (Ayers and Huq, 2009; Eriksen et al., 2011; Marino and Ribot, 2012), and may even lead to negative impacts on local social relations (Thomas-Slayter and Bhatt, 1994; Duffield et al., 2000; Harvey and Lind, 2005; Waghmore, 2012).

Our findings do not suggest that food aid has caused aid dependency in the study area. Even when repeated on a yearly basis to the same recipients, there is little evidence that food aid *per se* has resulted in a reduction of agricultural productivity, undermined local food markets or in other ways permanently replaced viable livelihood strategies such as trade. The recipients do not rely on food aid, and in the absence of such aid, they would be likely to return to their traditional coping and livelihood strategies.

At the same time, food aid programmes are found to influence households' livelihood and coping strategies in an unequal manner, and to consolidate rather than challenge power relations and inequities that drive household vulnerability. Food aid and the accompanying development programmes (FFW/FFA) in Humla provide more advantages to the better off than to the poor, more to the high castes than the low castes; and they do not challenge the gap between men and women within the communities. As such, food aid itself forms part of the complex dynamic that shapes the local vulnerability context. Critically, food aid may reinforce power relations and inequities that drive vulnerability by legitimising existing power structures at the village level and where the food insecure, in times of crisis, have no choice other than to rely on the better-off households for survival. In this sense, it is argued that food aid may indirectly impede the enhancement of food security in the region, because it contributes to consolidating the status quo rather than challenging the local power structures that drive household vulnerability.

Our study shows that social relations, as understood in terms of inequity, intersectionality and subjectivity, are a fundamental part of a vulnerability analysis, together with environmental, political and economic factors. In particular, it sheds light on the vulnerability dynamics that increase inequities between households within a community in the face of multiple stressors, including climate change. The case of Humla shows how shocks (such as weather events) coupled with institutional and policy reforms (in our case, food aid), lead to differential livelihood trajectories over time in communities where households have unequal access to resources and decision-making processes. Humanitarian responses that reinforce both economic inequities and unequal power relations may increase the gap between better-off and poor households, thereby increasing the vulnerability of the poorest when faced with future crises.

Instead, policy interventions should address drivers of vulnerability, including the type of dependencies between households that plunge some households into long-term vulnerability during a crisis.

The issue of climate change adaptation is an urgent one in the study area. The unpredictability of rain is aggravating food insecurity and the vulnerability of the poorest families. Humanitarian aid is regarded by some as a mechanism that could potentially boost adaptation efforts when activities are appropriately planned (WFP, 2012c; IPCC, 2012). However, this study underscores the need to understand the role of aid in terms of the social dynamics that shape the vulnerability context. Clearly, aid is not neutral and any changes to centuries-old traditions used to justify the inequities and the marginalisation of people and communities require a much more comprehensive and long-term approach. Development policies, humanitarian and climate change adaptation efforts must act together in order to address the complex causes of vulnerability. A refocus that addresses the power imbalances and social dynamics that drive local vulnerability is needed before food aid can contribute to enhancing households' long-term adaptive capacity.

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PAPER 3



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New discourses but same old development approaches? Climate change adaptation policies, chronic food insecurity and development interventions in northwestern Nepal

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ABSTRACT

The study investigates whether Nepal's Climate Change Adaptation (CCA) policies represent new conceptualizations and approach to address local vulnerability, compared to the country's food security policy and local level perceptions of vulnerability in four villages in the region of Humla, northwestern Nepal. The study finds that Nepal's National Adaptation Programme of Action, NAPA, and Local Adaptation Plans, LAPA, consistently address "outcome vulnerability" at the expense of "contextual vulnerability", and that they offer little new in terms of challenging the structural root causes of vulnerability compared with "development as usual" approaches. Because these CCA policies build on an apolitical analysis of vulnerability, they not only promote one-dimensional technocratic solutions that ignore the drivers of local vulnerability, they also run the risk of reinforcing existing vulnerability patterns and even reducing the adaptive capacity of the most vulnerable. This article argues that – in order to effectively respond to the impacts of climate change on local vulnerability – adaptation policies need to integrate a contextual vulnerability analysis and promote responses that contribute to change the conditions that create vulnerability in the first place.

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Introduction

There is growing recognition that traditional development approaches are insufficient to address the challenges posed by climate change in food insecure farming communities (Ribot, 2010; Pelling, 2011; Eriksen et al., 2015b). Various scholars, including post-developmentalists such as Escobar (1994), have criticized "development as usual" approaches for focusing too much on short term, technocratic approaches and economic growth as a means to reduce vulnerability without responding to social and political drivers of poverty and vulnerability (Gardner and Lewis, 1996; Hughes and Hutchison, 2012; Best, 2013). Recently, increased attention and resources devoted to climate change adaptation (CCA) have created expectations that it will herald new and more efficient approaches to reducing vulnerability (IPCC, 2014). However, criticism is increasing that CCA offers no real alternative to "development as usual" pathways (Cannon and Müller-Mahn, 2010; Tanner and Allouche, 2011; Oppermann, 2011; Nightingale, 2015), as it merely responds to the outcomes of vulnerability but does not take into account the social and political contexts within

which vulnerability is created and sustained (Eriksen and O'Brien, 2007; Marino and Ribot, 2012). More specifically, power relations have been identified as important drivers of differential vulnerability patterns, since these influence peoples' access to resources and decision making, thus enhancing or hindering their capacity to adapt to stress in the long term (Adger and Kelly, 1999; McLaughlin and Dietz, 2008; Eriksen et al., 2011). By ignoring local, national and international structures and power relations that systematically contribute to the marginalization of individuals and groups, CCA policies and interventions may even run the risk of reproducing the type of development currently contributing to vulnerability (Manuel-Navarrete, 2010; Eriksen et al., 2011; Waghmore, 2012; Marino and Ribot, 2012).

To ensure that the most vulnerable households do benefit from CCA, recent policies often emphasize the importance of social inclusion and locally based adaptation programs (such as community based adaptation (CBA)) (Ayers and Forsyth, 2009; Schipper et al., 2014). Nepal is a case in point. The country's National Adaptation Programme of Action (NAPA) was adopted in 2010 after a "genuinely consultative and inclusive processes" (MoE, 2010a, p. 3), and Local Adaptation Plans of Action (LAPAs) are being developed to ensure that CCA projects take into account local level concerns and vulnerabilities (GoN, 2011a). However, there is a gap in our knowledge when it comes to the potential of current CCA

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approaches in addressing the local social dynamics that lead to differential levels of vulnerability between people and over time. The Nepal case provides an opportunity for examining the extent to which CCA policies address the structural root causes of vulnerability at the household level.

Several studies show that vulnerability to climate change and food insecurity mutually enforce one another (Bohle et al., 1994; Downing et al., 2003; Yaro, 2004). This is confirmed for the research area by a recent study which shows that households often regard food insecurity as a main outcome of their vulnerability situation (Nagoda and Eriksen, 2015). Moreover, Nepal's NAPA and LAPA framework strongly focus upon the impact of climate change on food insecurity in rural areas. This study therefore pays particular attention to the relationship between climate change and food security when investigating how vulnerability is addressed in policies and the implications of policies on household vulnerability.

This article fills an empirical gap by investigating the extent to which the adaptation policies conceptualize and address social and power relations as drivers of household's vulnerability in food-insecure farming communities within the district of Humla in northwestern Nepal. By comparing these aspects of Nepal's CCA policy with the country's food security policy, the paper also contributes to the broader discussion about inherent limitations in the concepts of adaptation and development when faced with complex local vulnerability contexts, and how current adaptation approaches are related to and limited by prevailing development paradigms. The district of Humla is particularly appropriate for investigating how interventions following from national level policies interact with local level vulnerability patterns. Indeed, Humla has been classified as one of the most food insecure district in Nepal (DFSN, 2010; NPC, 2010), and is part of a region where marginalisation and social exclusion based on caste, gender and class have been presented as important causes of poverty (Levine, 1987; Nightingale, 2011; UNFCO, 2013). Humla is also vulnerable to climate change (MoE, 2010a) and has been the target of food security interventions for decades (Adhikari, 2008).

The paper undertakes a two-fold analysis: First, through a qualitative content analysis of the NAPA and LAPAs, it investigates to what extent CCA policies in Nepal conceptualize and address outcome versus contextual vulnerability, and compare CCA policy documents with the country's main food security policy, the Agricultural Development Strategy (ADS) (MOAD, 2014). Second, based on a qualitative analysis at the household level, it studies to what extent the NAPA and LAPAs and the type of interventions they propose, reflect contextual vulnerability as perceived locally, and discusses the possible implications of these interventions on differential vulnerability patterns at the household level. The paper concludes with a discussion of the importance of a contextual vulnerability approach in order for CCA policies to promote the transformational changes necessary to address the root causes of local vulnerability.

Study approach: from CCA policy to projects—a novel approach or “development as usual”?

Addressing vulnerability has proven difficult. Despite decades of effort and billions spent, governments and aid agencies still struggle to provide development interventions that effectively reduce the vulnerability of the poorest (Watts, 1983; Escobar, 1994; Eriksen et al., 2015b). But our understanding of vulnerability is constantly evolving and vulnerability is increasingly understood to be driven by complex and multidimensional elements that include environmental, social, political, economic and historic factors (Ribot, 1995; Füssel and Klein, 2006; Smit and Wandel, 2006; O'Brien et al., 2007). The dynamic nature of vulnerability both conceptually and empirically makes it a much debated concept,

and since reducing vulnerability is a central aim of both development and climate change adaptation, CCA, (Adger, 2006; Eriksen et al., 2015b) how we choose to interpret and measure vulnerability has important implications for the design and scope of development and CCA policies.

Indeed, contrasting ideas of development promote different approaches to reducing vulnerability. Interpretations of development vary greatly and may include economic growth, technological advancement/change, cultural change and improvement in social conditions, and are driven by a multitude of conflicting ideologies and interests that over time have been subject to intense negotiations by different actors (Mosse, 2005; Li, 2007; Desai and Potter, 2014). Development and adaptation efforts are implemented simultaneously in many developing countries (McGray et al., 2007) and research has demonstrated that the prevailing processes, projects and discourses of development influence how CCA is translated into policies and practices (Pelling and Manuel-Navarrete, 2011; Tanner and Horn-Phanthanothai, 2014; Eriksen et al., 2015b). Thus, understanding how CCA relates to the concept of vulnerability and how different interpretations of vulnerability in development processes and discourses influence current CCA approaches is essential in order to analyze if CCA provides novel approaches capable of addressing the drivers of local vulnerability in poor farming communities.

Many of the theories that have dominated the development debate since the second world war, particularly modernization and dependency theories, have been widely criticized for not being able to respond to the root causes of vulnerability and for focusing too much on macro-economic processes at the expense of understanding how local contexts contribute to marginalization and poverty, including people's role in influencing this context (Long, 1992; Gardner and Lewis, 1996). In part as a response to such criticism, new approaches and concepts have been introduced within development discourses over the last few decades, such as sustainable development, local participation, social inclusion, rights-based, bottom-up and community based approaches (Potter, 2014; Binns, 2014). CCA, after its integration into the development debates in the 90s, has been influenced by these approaches that share a focus on grassroots action and enhancing livelihood strategies as a basis for reducing vulnerability more effectively (Reid and Schipper, 2014).

However, although new ideas and approaches have enriched the development debate, they have not necessarily replaced the old ones (Peet and Hartwick, 2009; de Haan, 2009; Potter, 2014). On the contrary, several scholars argue that the neoliberal approaches that are supported by modernization theories' belief in a reduced role for the state, economic growth and technocratic solutions still dominate most development practices, whether under the guise of enhancing food security, improving livelihoods or poverty reduction (Cowen, 2007; Peet and Hartwick, 2009; Murray and Overton, 2011; Best, 2013). Taking this criticism a step further, some scholars including post developmentalists like Escobar (1994) and Esteva (1992), argue that new concepts are in fact arbitrarily introduced in development discourses to rationalize development in its current form, what Escobar termed the “repetitive reality of development” (Escobar, 1992, p. 25). On this backdrop, one may ask if CCA is able to go beyond the prevailing development framework to generate a novel approach to reducing vulnerability, or if it is only a new twist in the development vocabulary used to justify “development as usual” approaches.

CCA is a field under constant development, and from focusing on managing climate change as a physical threat on the economy of countries and communities, the debate has broadened to also include experiences and concepts from the fields of food security, risk management and sustainable development, among others.

However, the nature of climate change with its unpredictability, speed and scale of change presents new social-ecological challenges that demand CCA approaches move beyond existing development approaches in more profound ways (Ribot, 2010; Pelling, 2011; Tanner and Allouche, 2011; Eriksen et al., 2015b). In this regard, Pelling (2011) states that today's climate change debate represents a new opportunity to question the dominant forms of development, and asks whether CCA can reinvigorate a much needed debate about political and economic processes that create conditions for marginalization and vulnerability at the local level. In this study, I draw upon the definition of adaptation used in the introduction to this volume as "a social-political process that mediates how individuals and collectives deal with multiple types of simultaneously occurring environmental and social changes" (Eriksen et al., *this issue*). I use Adger (2006) definition of vulnerability as "the state of susceptibility to harm from exposure to stresses associated with environmental and societal change and from absence of capacity to adapt" (p. 268); and take household food insecurity as an entry point to analyze the impacts of policies on local vulnerability dynamics. These analytical choices allow for a multi-dimensional analysis of CCA as a way to adapt to a future characterized by multiple external changes that influence people's vulnerability.

Several scholars have shown that our orientation towards reducing vulnerability depends on whether we regard vulnerability as an end point (outcome) of the effects of climate change or as a starting point where certain pre-existing conditions make some people more vulnerable than others (see Kelly and Adger, 2000; Füssel and Klein, 2006). Building on this, and to guide our understanding of the implications of different conceptualizations of vulnerability in policies, O'Brien et al. (2007) have developed a diagnostic tool that distinguishes between "outcome vulnerability approaches" and "contextual vulnerability approaches". Outcome vulnerability on the one hand, is associated with a scientific framing of CCA where vulnerability is considered "a linear result of the projected impacts of climate change on a particular exposure unit (which can be either biophysical or social)" and tends to lead to apolitical and technical approaches in addressing the consequences of climate change (O'Brien et al., 2007, p. 75). A typical outcome oriented approach may for example focus on improving irrigations systems or distributing drought resistant seeds in order to support economic growth in a community experiencing water shortage.

A contextual vulnerability approach on the other hand, can be understood as being "based on a processual and multi-dimensional view of climate society interactions" (O'Brien et al., 2007, p. 75). Thus, a contextual vulnerability approach will typically be based on a broader analysis, in which climate change is regarded as one among several causes of vulnerability and where vulnerability is generated and influenced by the continual interaction of environmental, political, economic and social factors (Tanner and Mitchell, 2008; O'Brien et al., 2007). Within a contextual vulnerability approach, social and power relations are seen as important drivers of vulnerability as they define the entitlements of groups or individuals by legitimizing (or delegitimizing) their access to resources and decision-making (Adger and Kelly, 1999; McLaughlin and Dietz, 2008; Ribot, 2010). For CCA policies to address contextual vulnerability effectively these inherent complexities must be conceptualized and addressed when designing programs and implementing interventions (Adger et al., 2009; Agrawal et al., 2012; Eriksen et al., 2013).

This paper builds on previous studies that have highlighted the need for greater focus on contextual vulnerability in CCA (Ribot, 2010; O'Brien, 2012; Pelling, 2011; Eriksen et al., 2015b). This does not suggest that outcome oriented and technocratic CCA approaches are necessarily wrong. Rather, it highlights that they

often prove to be insufficient in effectively reducing vulnerability in the long term if the local and historical contexts of socio political processes behind inequity and marginalization are not taken into account. Investigating to what extent CCA in Nepal conceptualizes and addresses social and power relations as drivers of household vulnerability and food insecurity as compared to the country's food security policies, provides an opportunity to discern whether Nepal's CCA policies are able to go beyond the prevailing development paradigms when addressing the complex dynamics of vulnerability.

Research approach and methodology

In this study I undertake a qualitative analysis of the content of selected CCA and food security policy documents in Nepal in order to understand how the concept of vulnerability is interpreted and addressed. Indeed, several scholars have shown how qualitative policy analyses are particularly useful in shedding light on the broader political interests and ideologies hidden behind problem and solution framing, and why specific approaches and interventions are prioritized by some policies and not by others (Escobar, 1994; Apthorpe and Gasper, 1996; O'Brien et al., 2007; Pieterse, 2010; Ireland, 2012). Considering the importance ascribed to social and power relations as key drivers of vulnerability within local dynamics, I pay particular attention to how the policies regard social and political structures and relations (such as historical, social, cultural and political contexts leading to social exclusion, gender, caste and class differences, and access to power to control resources and/or decision making processes) as intrinsic parts of the vulnerability context that they intend to address.

The main policy documents chosen for this study are the National Adaptation Programme of Action (the NAPA) (MoE, 2010a) and the framework for the Local Adaptation Plans of Action (the LAPA) (GoN, 2011a) including its highlights for the Mid-Western and Far-Western Regions (HTSPE, 2012). Supported by the Climate Change Policy (GoN, 2011b), these documents constitute Nepal's main CCA policies, and they are for the purpose of this analysis jointly referred to as 'Nepal's CCA policies'¹. The NAPA was endorsed by the Nepali government in 2010, under the lead of the Ministry of Science, technology and environment, MOSTE, and by 2014 more than 70 LAPAs were being developed countrywide, including five in the district of Humla. The analysis of the country's food security policy is based on the final report of the Nepal's Agricultural Development Strategy (the ADS) (MoAD, 2014). Although the selected policy documents may not be fully representative for how vulnerability is understood and addressed by development and CCA policies in general, they do reflect important tendencies in a Least Developed Country that in spite of decades of intense development efforts is struggling to enhance food security and reduce vulnerability in poor farming communities. As such, the Nepal case can contribute to a larger debate about whether CCA addresses vulnerability differently than development efforts aiming at enhancing food security.

The CCA policies and the ADS were developed around the same time and represent the most recent national level policies within their fields in Nepal. However, the NAPA, the LAPAs and the ADS have been influenced by different institutions and national and international processes. The NAPA is regarded a product of Nepal's commitment under the United Nations Framework Convention on Climate Change (UNFCCC), funded by bilateral donors and its formulation has been largely guided – and constrained – by global

¹ The NAPA was developed in parallel with the Pilote Programme for Climate Resilience, PPCR, that was facilitated by the Asian Development Bank. At the time of the fieldwork, discussion was ongoing on how to integrate the PPCR into the NAPA.

level and pre-defined guidelines and processes (see for example Hardee and Mutunga, 2009; Ayers et al., 2011). It is the first policy of its kind in Nepal, thus limited national and local experience was available during its formulation. While the LAPAs are also largely funded by external donors, they are conceived and implemented locally in a policy process coordinated by district government (GoN, 2011a). The ADS, on the other hand, was facilitated by the Asian Development Bank (ADB) under the lead of the Ministry of Agricultural Development, MOAD, and funded by various international aid agencies. The ADS replaces the Agriculture Perspective Plan (APP) from 1995, which had been heavily criticized for, among other, not actively involving key stakeholders in its formulation (MOAD, 2014). In contrast to the NAPA, the formulation of the ADS was nurtured by the national and local experiences from previous policies.

Data for the study were collected over a five-year period from 2009 to 2014 and are analyzed using a two-fold approach. First, I analyze the NAPA, the LAPA and the ADS with regard to how vulnerability is conceptualized on an outcome versus contextual vulnerability axis, based on the diagnostic tool developed by O'Brien et al. (2007), presented in Table 1. Document contents were coded into the five levels of analysis suggested by the tool and compared for similarities and differences between each other. These five levels are the *diagnostic level* (how is vulnerability explained and understood?); the level of *focal issues* (what are the main concerns?); the level of *methodology* (what kind of analysis is used to assess the impacts of climate change?); the identified *results* (what are the actual and projected impacts of climate change?); and the level of *policy responses* (what kind of measures are proposed to reduce vulnerability?). I regard outcome and contextual vulnerability as constituting a continuum where a

policy may be characterized by elements of both approaches, and I use the guiding questions provided by the tool to place each of the interpretations on this continuum.

In order to enrich the understanding of the political context in which the NAPA, LAPA and ADS were developed, I undertook 74 qualitative interviews with policy makers, donors, United Nations, Non-Governmental Organizations and government officials on different levels in Kathmandu and in the district headquarters in Humla. The interviews centered on how the different actors understand concepts such as vulnerability, adaptation, resilience, climate change and food security and were coded for the same themes as the analysis of the policy documents.

Second, I analyze the extent to which the policies reflect contextual vulnerability as perceived locally. My previous research showed the influence of local power relations on livelihood strategies and how these impact on differential vulnerability patterns using in depth qualitative interviews at household level in four villages in the study area (Nagoda and Eriksen, 2015). This provides an opportunity to identify disconnections between policy discourses and local narratives, and to analyze the possible implications of the type of interventions proposed by the NAPA/LAPA and the ADS on differential vulnerability patterns on the household level.

The vulnerability context and effects of food security projects on differential vulnerability patterns

Understanding how adaptation is conceptualized in policies and put into practice locally is particularly relevant in a country like Nepal. Even after the 10-year civil war ended in 2006, the country has been through constant political turmoil, with unstable

Table 1
Diagnosis tool from O'Brien et al. (2007) (www.tandfonline.com).

	Outcome ←	→ Contextual
Diagnosis	Are human activities contributing to dangerous climate change? Who is negatively affected by climate variability and change? Which sectors are likely to be negatively affected?	Is climate change a relevant problem? Why are some regions and groups affected more than others?
Focal points	Future climate change Sectoral sensitivities	Current Climate Variability Political Economy Livelihood and coping strategies
Methods	Scenario-Based approaches Dose-Response Models Integrating Assessment Models	Household Surveys Agent-based Modeling Case studies Indicator approaches
Identified results	Measurable Gains and Losses Sectoral impacts Inappropriate Practices	Relative winners and losers Key Interacting Processes Institutional and socio-economic constraints to local responses
Policy responses	Reduce Sectoral sensitivities Technological adaptations Reduce GHG Emissions	Capacity building Adaptive management Address local constraints to responses Reduce inequities Alternative development pathway Address power structures

national governments and shifting political alliances. There has been no local elections since 1997; thus the country lacks legitimate local political and administrative structures and bodies. Political marginalization and social exclusion have been highlighted as main barriers in the fight against poverty in a country where access to resources, livelihood options and decision making processes is defined to a large extent by one's caste, class, ethnic group and gender identity (Bista, 1994; Khadka, 2009; Nightingale and Ojha, 2013). The recent earthquakes in April and May 2015 have shown how devastating natural disasters can be in a country that lacks essential political, administrative and technical capacity to reach the poorest. Such contemporary and historic processes of marginalization are no less important in shaping the vulnerability context in the district of Humla in the far northwestern corner of Nepal.

The northwestern region of Nepal has experienced centuries of economic and political marginalization under the government based in Kathmandu (Bishop, 1990; Adhikari, 2008). Humla, a mountainous district bordering Tibet in the North, is also characterized by its physical remoteness – the nearest road begins about one week's walk south of the district headquarters, Simikot – and by a weak and only sporadic state presence, especially outside Simikot. The people of Humla are diverse and may be divided roughly into two social groups: the Buddhist Tibetan-speaking people in the north and the Hindu Nepali-speaking people in the south. The latter are categorized according to the Hindu caste system; the most common castes in Humla are the Brahman, the Thakuri and the Chhetri representing high castes, and the low castes Dalits who are still socially and politically marginalized in Nepal (Levine, 1987; Cameron, 2007; Nightingale, 2011).

Humla is classed among Nepal's most food-insecure districts, with subsistence farming being the main livelihood strategy among its approximately 50,000 inhabitants (UNFCO, 2013). The District Food Security Network (DFSN) estimated that around 80% of the inhabitants suffered from food insecurity in March and April 2010, based on a set of 12 indicators developed by the Nepal Food Security Monitoring System, the NeKSAP (DFSN, 2010). Recently, climate change and variability, most commonly manifested by less frequent but heavier rainfall during summer, leading to more landslides and less rain and snow during winter, is adding stress to these already fragile farming systems (GoN, 2011a).

In a previous study in the same area, I found that local socio-political and environmental factors interact and lead to differential vulnerability patterns at the household level (Nagoda and Eriksen, 2015). This is in line with other studies in neighbouring regions that have observed how gender, caste, and class shape access to, control over and distribution of resources, as well as participation in community decision making (Nightingale, 2005, 2006). As a consequence, the impacts of climate change on local vulnerability vary greatly between households within the same communities. Food insecure households, mostly belonging to low castes and low income families, were found to be more vulnerable to external stressors including climate change than food secure households (Nagoda and Eriksen, 2015). In addition, my work in Humla showed that local level perceptions of vulnerability can broadly be divided into two main narratives, which are closely associated with caste, gender and wealth status identity. The better-off households that are the least food insecure and have the greatest adaptive capacity, often identified technological and physical constraints as the main reasons for their vulnerability, including drought, lack of irrigation, lack of manure, and lack of technical assistance from research institutions. The most food-insecure households, on the other hand, explained their vulnerability mostly by referring to social barriers such as oppression which limits access to land and water, no access to political networks, lack of education, and exclusion from development initiatives and decision-making processes

(Nagoda and Eriksen, 2015). As a consequence, the measures suggested by these two broadly defined groups also differ, with the most food insecure households calling for efforts to reduce social inequality and oppression and the better off households asking for more technical assistance.

Furthermore, interviews and observations reveal that past food security interventions in the study area were often insensitive to the local contexts and in some cases reinforced existing inequities and interdependency relations. For example, new irrigation systems facilitated by World Food Programmes, WFP, were in one village found to benefit the better-off farmers at the expense of the poorest whose lands were too poor and/or too far from the river. When affected by food shortage, the poorest households have to turn to the better off to borrow food or money, thereby increasing their financial and social debt and dependency on their creditors. To ensure that food security projects take local level interests and priorities into account, humanitarian actors have facilitated the formation of user committees (UCs) at the village level. However, these committees were found to largely reflect the local power dynamics, where those excluded from decision-making processes at the village level, that is women, low castes and very poor, are also marginalized in the UCs (Nagoda and Eriksen, 2015). Similar findings related to elite capture and under-representation of marginalized groups in local level decision-making bodies were also observed by scholars as Thoms (2008) and Nightingale (2005, 2006) in other regions of Nepal, and by Du Toit (2004) and Hughes and Hutchison (2012) in South Africa, Cambodia and the Philippines.

Interpretations of vulnerability in Nepal's CCA and food security policy documents

The section above describes a region with complex, dynamic and highly differential vulnerability patterns, where the impacts of climate change as well as of humanitarian interventions vary greatly between households within the same communities. On this background, the following sections analyze how vulnerability is interpreted in Nepal's NAPA/LAPA and ADS, according to the five levels of the diagnostic tool developed by O'Brien et al. (2007). The main findings are summarized in Table 2.

At the diagnostic level, the NAPA/LAPA view climate change as an external physical threat to the country's development goals caused by excessive emissions from developed countries. The stated goal of the NAPA is to reduce poverty (MoE, 2010a, p. 3), thus recognizing the links between poverty and vulnerability. However, the influence of socio-political processes on vulnerability is only referred to on a general level in a paragraph that states "climate vulnerability is also aggravated due to socio-cultural and institutional arrangements" (MoE, 2010a, p. 14). Gender is presented as a cross-cutting issue, but not used as a point of departure to address the consequence of the exclusion of women on local vulnerability. Weak governance structure and that the country finds itself in an unstable post-conflict phase are listed only as limiting factors, and statements such as "NAPA recognizes that the dire situation facing agriculture and food security is, to a great extent, a result of climate change" (p. 25) illustrate a linear and apolitical understanding of vulnerability and how climate change contributes to it. These findings are supported by Ojha et al. (2015) and Nightingale (2015) who also point to an outcome and apolitical oriented understanding of vulnerability in the NAPA.

In contrast, the ADS shows slightly more characteristics typical of policies with a contextual understanding of vulnerability at the diagnosis level, in which problems related to social exclusion, marginalization, inequity and poverty are highlighted, and weak governance is seen as an important reason for food insecurity

Table 2
Summary of main findings of the vulnerability analysis based on the diagnostic tool developed by O'Brien et al. (2007)

	← Outcome	→ Contextual
Diagnosis	NAPA/LAPA: Climate change is a serious problem caused by emissions in developed countries with grave consequences for vulnerability in Nepal.	ADS: Climate change is one of several factors creating food insecurity and vulnerability in a context of poverty and weak governance.
Focal issues	NAPA/LAPA: The actual and potential impacts of rising temperatures and unpredictable precipitation is understood as a linear causal relationship to vulnerability.	ADS: Issues related to low agriculture production as well as social exclusion, marginalization and weak governance are seen as contributing to food insecurity.
Methods	<p>NAPA/LAPA: Vulnerability is quantified as a function of exposure, sensitivity and adaptive capacity; supplemented by transect appraisals of vulnerability, meetings and workshops at national and local level.</p> <p>ADS: Vulnerability to food insecurity is assessed through a sector approach including various meetings and workshops at national and local levels. However, vulnerability to climate change is mostly limited to scenarios developed by the NAPA.</p>	
Identified results	<p>The ADS refers to the results of the NAPA/LAPA, namely that an increase in temperature and variation in precipitation will cause more extreme events including droughts, and incidences of pests and diseases. Likely impacts include too much and/or too little water affecting agriculture, health, more floods and landslides, changes in agro-biodiversity, more forest fires and disasters affecting infrastructure such as roads, bridges, water supply and schools.</p>	
Policy responses	<p>The focus of the NAPA/LAPA is on enhancing agricultural productivity and linking communities with markets to minimize negative impacts of climate change on the local economy. Measures include promoting crop varieties and animal breeds adaptable to climate uncertainty, early warning systems, flood management and irrigation systems. They suggest actions to enhance environmental protection through integrated watershed management, on-farm soil and water conservation, and sustainable forest management.</p> <p>The ADS recalls the climate change measures that focus on agricultural productivity and economic growth proposed by the NAPA.</p>	

(MOAD, 2014). Although references to socio political causes for vulnerability had been weakened compared to earlier drafts (see ADB 7762-NEP, 2011, 2013), the final version of the ADS still recognizes that socio political conditions may contribute to vulnerability and the importance of gender equity and social and geographic inclusion in decision making processes (MOAD, 2014).

On the level of focal issues, the NAPA highlights six areas where actual and projected temperature increases are expected to have the greatest impact. These are agriculture and food security, water resources and energy, climate-induced disasters, forests and biodiversity, public health, and urban settlement and infrastructure (MoE, 2010a). The stated objective of the NAPA is that CCA activities should become mainstreamed into the national development agenda. The priority is for the six named areas to be organized nationally within nine combined profiles framed by Nepal's national development programs, with a strong emphasis on community based adaptation measures (MoE, 2010a). While the focus of the ADS is to reduce food security by agricultural sector

growth, it also points to the need for improved governance, and social and geographic inclusion (MOAD, 2014).

On the level of methodology, however, the discourses in both the NAPA/LAPA and the ADS can be placed somewhat closer to the centre of the outcome versus contextual vulnerability axis. Both policies claim to be the result of inclusive and participatory processes and the LAPA framework is especially designed to ensure that the process of integrating CCA into local planning is "bottom-up, inclusive, responsive and flexible" (GoN, 2011a, p. 3). The NAPA/LAPA employed a "special vulnerability assessment mapping" exercise following the framework developed by the Intergovernmental Panel on Climate Change, IPCC (MoE, 2010b, p. d), using both quantitative and qualitative measures of climate change and human indices related to gender, development, poverty and empowerment developed by UNDP (2004). Since the ADS tends to present climate change as only one among several factors influencing food security, it bases its methodology on a broader thematic approach that may affect the agricultural sector in Nepal, including references to migration, globalization and trade. Both the

NAPA/LAPA and ADS documents are based on consultations through policy roundtables, national and regional workshops, thematic group meetings, expert assessments and focus group discussions at district and village levels, as means to include local level analysis, at least in a perfunctory sense.

Nevertheless, when it comes to the projected consequences of climate change on food security (i.e. the identified results level), the NAPA/LAPA and the ADS share a strong emphasis on the technical and physical impacts on crop and livestock production—an approach that is typical of an outcome interpretation of vulnerability. At this level, the ADS simply refers to the results of the NAPA, and provides no independent analysis based on its own methodology. Both the NAPA/LAPA and the ADS describe vulnerability to climate change in rural farming communities as a result of reduced agricultural production due to too much or too little rain, more floods and landslides, changes in agro-biodiversity, more pests, an increase in forest fires and disasters affecting infrastructure like roads, bridges, water supply and schools. While both policies acknowledge that the poorest and women are likely to be more affected by climate change, they make only weak attempts to elaborate on the mechanisms by which gender inequity and poverty influence local vulnerability patterns. Although efforts are made under the LAPA framework to collect household level data, interviews at policy level reveal that the reasons why certain households are more vulnerable than others are not specifically assessed.

At the policy response level, and consistent with the view that vulnerability in farming communities is a direct outcome of a projected drop in local food production, the NAPA/LAPA and the ADS promote very similar outcome-oriented types of interventions. They propose technocratic and apolitical measures aimed at enhancing economic growth through increased agricultural productivity and linking communities with markets, rather than measures that would address the social causes of inequality and vulnerability. The NAPA/LAPA specifically promote environmental conservation through on-farm soil and water conservation activities, enhanced irrigation systems, crop varieties and animal breeds adaptable to climate change, early warning systems, and integrated natural resources management. Although the ADS emphasizes the need for improved governance in the agricultural sector in addition to increased productivity, competitiveness and commercialization, none of the policies provide specific tools or approaches to challenge social and political processes leading to marginalization in the face of climate change.

Although neither policy is only outcome nor contextual in all respects, the above shows that the NAPA/LAPA policy tends to be placed on the outcome side of the diagnostic tool. The ADS, on the other hand, is found to have a more contextual approach on the levels of problem understanding, focal issue and methodology, but this is not reflected on the levels of identified results or proposed solutions, both of which tend to remain technocratic with a strong belief in market forces and very similar to those proposed by the NAPA/LAPA. Furthermore, the measures for addressing vulnerability to food insecurity when faced with climate change are found to offer few if any novelties when compared with current food security projects implemented in Humla by WFP. Existing food security projects in Humla and the NAPA/LAPA focus both on increased market access and technological solutions to increase food production, for example, through building irrigation systems or distributing improved seeds of plants with economic value.

To explain this orientation towards outcome oriented approaches, development workers and donors involved in the NAPA/LAPA and ADS policy processes stated during interviews that addressing local social structures and power relations was regarded as too controversial, and that organizations lack the tools and mandate to do so. Furthermore, rather than conducting a

separate assessment of the impacts of climate change on food security, the ADS integrates the NAPA findings into its analysis. The result is a mismatch between a relatively contextual understanding by the ADS of the problems creating vulnerability, and the outcome oriented types of solutions that it proposes.

The mismatch is even more striking when the outcome oriented responses proposed by the NAPA, LAPA and the ADS are compared with the contextual and highly differential perceptions of vulnerability among households in Humla. Indeed, the understanding of vulnerability within the ADS and the NAPA/LAPA tends to converge with the better off households' perception that vulnerability is caused by a lack of technical assets, at the expense of addressing the concerns of the most food-insecure households that social inequities and oppression inhibit their access to resources and/or decision making processes.

Importantly, the risk that interventions may influence negatively on unequal power relations or contribute to elite control, is not considered in the policy documents. These findings underwrite observations by Nightingale (2015) and Ojha et al. (2015) that Nepal's CCA policies are facing difficulties in reaching the most vulnerable in a society where access to political processes is largely dictated by one's caste and group identity. While the policies explicitly refer to the formation of community user groups (for the LAPAs) or farmers' cooperatives (for the ADS) as a means to ensure that interventions respond to local needs, these fora are not problematized as spaces defined by pre-existing power and social relations, in which exclusion and repression of certain groups and individuals influence decision making. Hence, by not taking into account the important differences in perceptions of vulnerability among households within communities, the policies fail to capture the complex and highly dynamic state of vulnerability at the local level, and even run the risk that such policies contribute to reinforcing rather than diminishing household level vulnerability patterns by sustaining unequal power relations.

Implications of the outcome vulnerability focus

This study has shown that Nepal's CCA policies remain firmly rooted in current development paradigms that focus on economic growth and market development, thus confirming the claim made by others that neoliberal development approaches still prevail (Murray and Overton, 2011; Best, 2013) and may not be challenged by current CCA policies (Manuel-Navarrete, 2010; Pelling et al., 2011). While the policy documents give importance to participatory processes, social inclusion and good governance, this has not resulted in interventions that address contextual vulnerability locally. The case of Nepal also demonstrates the influence an outcome vulnerability CCA approach may have on limiting other development approaches when integrated into national development strategies. Indeed, while the ADS has a more contextual understanding of vulnerability at diagnosis level compared to the NAPA, since the ADS refers to the NAPA when assessing the impacts of climate change on food insecurity, its proposed interventions turn out to be very similar.

A major methodological difference between outcome and contextual vulnerability approaches is that the former tends to view communities as homogenous entities, while the latter seeks to identify reasons for differential vulnerability at the household level as part of a context influenced by various factors (social, economic, political and environmental) at different levels. An adaptation policy (or development policy for that matter) that disregards the processes leading to differential vulnerability within communities has several implications: First, it effectively disguises local vulnerability patterns and ignores local drivers of vulnerability (Ribot, 2010; Pelling, 2011). Second and as a consequence of the first, the policy is likely to be unable to

address these root causes of local vulnerability. Third, such a policy is unable to assess the consequences of its interventions on local vulnerability patterns, including the risk of elite capture or reinforcing existing power relations when forging local partnerships with political and/or development organisations. Other studies have shown that power relations operate as much at the household as at the village, district and national levels, therefore showing how social relations and networking with elites, political parties and/or development organizations that influence decision making outcomes operate across all levels (Fergusson, 1994; Mosse, 2005; Nightingale and Ojha, 2013; MacKinnon, 2011; Yates, 2012). Thus, any analysis of differential vulnerability within communities and households needs to include qualitative information at a sufficiently detailed scale and take the exercise of power between levels into account. Also, to avoid reinforcing local inequality, mechanisms must be developed that ensure effective involvement of the most vulnerable when designing and implementing interventions.

However, because the NAPA conceptualizes CCA as being limited to operating within the boundaries of the existing development framework (MoE, 2010a), CCA is effectively constrained from reaching beyond current development approaches when addressing vulnerability. This observation underwrites findings by Cannon and Müller-Mahn (2010) who point out that while a development policy aims at reducing vulnerability in order to permanently improve the situation for the beneficiaries (i.e. fighting poverty), an outcome oriented CCA policy runs the risk of focusing only on minimizing negative impacts of climatic events and changes. Clearly, if adaptation is not understood as a tool for identifying and addressing the multiple causes of local vulnerability, it is unrealistic to expect that CCA policies shall bring about innovative and transformative approaches to reducing vulnerability in the long term. This is particularly true when CCA is framed within the rigidity of a development framework that continues to view economic growth as supreme over environmental and social justice, local people as objects rather than subjects, and decision-making processes and humanitarian interventions as external rather than as part of the context of vulnerability processes they try to influence.

It is noteworthy that on the global level, Nepal's vulnerability to climate change is described in the NAPA as a product of unequal global power relations and international historical injustice that developed countries have a moral responsibility to compensate for by financing the costs of adaptation (MoE, 2010a). This view is shared by many Least Developed Countries (LDCs) and grassroots organizations and appears consistent with the dependency theory that regards poverty as a result of unequal power relations between rich and poor countries (see Frank, 1972; Wallerstein, 1979). This perception is, however, in great contrast to the NAPA's technocratic and apolitical discourse of causes and responsibilities on the national and local levels, in which the CCA policy is more consistent with modernization theorists who argue that technological solutions will create economic growth that will eventually "trickle down" to the poor (Eriksen et al., 2015b). By using these discourses alternately, development and government actors are seemingly distancing themselves from dealing with the root causes of vulnerability while arguing for increased funding for CCA.

The CCA debate is constantly evolving, however, and the NAPA in Nepal, which was finalized in 2010, has not incorporated the findings from the most recent literature such as IPCC's fifth Assessment Report with its greater focus on how social processes contribute to vulnerability (IPCC, 2014). The second generation CCA policies will also have the opportunity to build upon a wealth of national and local experiences with CCA that may contribute to a shift towards conceptualizing adaptation as a political process to transform the power and social relations that drive differential

vulnerability patterns at the local level. However, this analysis has shown that even when a policy includes elements of a contextual vulnerability approach, such as in the case of the ADS, measures still may remain mostly technical and apolitical. Hence, it is not only the conceptualization of vulnerability that determines the types of interventions, also the politics that lie behind the prioritization of certain measures are important to understand. Further analysis related to political processes within development and adaptation policies are required to investigate why current CCA policies and practices tend to ignore important root causes for vulnerability, and if and how CCA can become a tool for broadening, rather than limiting the way the development community addresses vulnerability. This is a challenge, of course, not only for the climate change community, but for everyone committed to reducing the vulnerability of the poorest and most marginalized.

Conclusion

The paper argues that Nepal's CCA policies, the NAPA and the LAPA, do not challenge the existing development paradigm in Nepal and provides few, if any, new approaches to reducing local vulnerability in poor farming communities compared to the country's food security policy. The NAPA/LAPA have an outcome oriented and apolitical understanding of vulnerability and when compared with the country's Agricultural Development Strategy, ADS, the adaptation policies even represent a step backwards in terms of being narrower and less sensitive to how social, economic and political processes on different levels shape the vulnerability context of households in rural farming communities.

This observation supports Pelling and Manuel-Navarrete (2011) argument that CCA has only "opened up policy space for environmental reform within the existing development discourse without challenging existing structures . . . The result is a sense of lock-in with the institutionalized status quo" (p. 9). Paradoxically, rather than widening our understanding and providing the development community with new insights and tools that can reduce vulnerability more efficiently, it can be argued that the contribution of CCA to the development agenda has been to narrow its approaches to reducing vulnerability and adapting to climate change. The case of Nepal clearly shows that CCA is not understood as a new opportunity that questions the dominant forms of development which give priority to market forces and economic growth at the expense of looking at the root causes of inequity and marginalization. Based on this, I argue that as long as CCA literature and policies are conceptualized within existing national and international development policies and dominated by approaches that narrowly address vulnerability, they will continue to promote responses to the symptoms rather than the causes of vulnerability, and may exacerbate inequities and power asymmetries that hinder or delay local adaptation efforts.

Building on previous work (Ribot, 2010; O'Brien, 2012; Eriksen et al., 2015a), I advocate for a better balance between approaches addressing outcome and contextual vulnerability. At the same time, I stress that a shift in policy discourse from an outcome to a context focus will be insufficient in itself to address contextual vulnerability, if such a change is not followed through on all levels of the policy process and implementation. My findings support the argument that CCA needs to be re-defined as a political process wherein the economic, social, political, cultural and environmental causes of vulnerability are addressed (Eriksen and Lind, 2009; Pelling, 2011; O'Brien, 2012; Eriksen et al., 2015b). This requires, however, that CCA cannot continue to be limited conceptually by the existing development framework, but must be understood as a tool to challenge and broaden this framework in order to address the contextual causes of vulnerability.

There may be political reasons why CCA becomes depoliticized in policy processes. For example, O'Brien (2012) points out that a reorientation of CCA is unlikely to be prioritized by policy makers and elites who currently benefit from maintaining the status quo. Indeed, this analysis serves to illustrate how vulnerability interpretations and measures land in a local political context to converge with the interests of local elites at the expense of addressing the concerns of the most vulnerable households. Further studies are needed to understand how CCA can contribute to transformational change in the conditions creating household level vulnerability, and to disentangle the myriad of interests, negotiations and resistances that constitute power and social relations between actors at different levels of the policy process.

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PAPER 4

Producing Vulnerability in Climate Change Adaptation Planning: how vulnerable households are marginalised within participatory food security programmes

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Abstract:

This article probes the participatory processes within food security programmes and climate change adaptation (CCA) policies in northwestern Nepal in order to assess whether they are effective in addressing vulnerability to climate change. Despite the fact that policies emphasise the importance of local participation and inclusion of the most marginalised people in project planning and implementation, we found that CCA action plans are not addressing the conditions that shape vulnerability in poor farming villages. We show that instead, CCA policies can play an important role in exacerbating the vulnerability of the marginalised people who are the target of such adaptation efforts. Adaptation policies are developed in a complex political space in which different interests shape political and social processes of participation, which in turn define the boundaries of whose voices and knowledge are taken into account in policy deliberations. Yet CCA policies tend to ignore such social and power relations as inherent parts of vulnerability. We show how policy implementation can serve to reproduce local vulnerability patterns by reinforcing the same power relations that shape the vulnerability context that these CCA policies are supposed to address. As a consequence, our analysis draws into question whether current CCA policies are an adequate response to vulnerability and adaptation needs. It also suggests that further research and attention are required as to how future CCA policies can provide inclusive policy spaces in which the unequal power relations that drive differential vulnerability patterns can be contested and transformed.

Key words: Vulnerability, power relations, Climate Change Adaptation, Policy Processes, Food Security, Nepal

1 Introduction

“The WFP (World Food Programme) works closely with the government of Nepal and the local communities to reduce food insecurity and to build climate resilience for the most vulnerable people.” (WFP interview)

“The projects have not made us less vulnerable [*asurachit*] to climate change. Next winter I will again lack food and I will have to increase my debt to survive.” (Household interview with Dalit)

The above statements illustrate how the same humanitarian interventions are perceived differently by national-level project staff and the most vulnerable households in a remote part of western Nepal that suffers from severe, chronic food insecurity. This paper explores how the gap between these perceptions continues to exist, despite ambitions to promote local participation and incorporate the needs of the most vulnerable into policy formulation and project implementation. We argue that social and power relations play out at all levels of CCA planning and implementation, in such a manner that they disguise the lack of capacity of national and international actors to effectively address social exclusion and marginalisation at the local level. While these insights are supported by other studies (Mohan and Stokke, 2000; Cooke and Kothari, 2004), we also point to how CCA programmes themselves form part of vulnerability contexts and risk contributing to, rather than mitigating, the vulnerability of the most marginalised households.

In most countries, the CCA policies and action plans currently in place have been developed as a means of building resilience and adaptive capacity to climate change (Pelling, 2011; Inderberg et al., 2015). Special attention has been paid to social inclusion and local-level participation in the formulation and implementation of these policies (Ayers and Forsth, 2009; Schipper et al., 2014). However, the exclusion of the most marginalised people from participatory development processes as a result of unequal power and social relations is well documented (Cooke and Kothari, 2004; Hickey and Mohan, 2004; Korf, 2010), and the Nepal case is no exception (Khadka, 2009; Nightingale, 2015; Ojha et al., 2015). More specifically, critics point to the risk

that CCA policies may contribute to further marginalisation of individuals and groups by ignoring the role of power relations at local, national and international levels in creating vulnerability (Manuel-Navarrete, 2010; Eriksen et al., 2011; Waghmore, 2012; Marino and Ribot, 2012; Ribot, 2014; Tanner and Allouche, 2011; Eriksen et al., 2015a). Given that global climate change adds stress to already vulnerable households, it is crucial to understand why policies are unable to promote real inclusion for marginalised people and address the underlying causes of vulnerability. We suggest that there is an urgent need to formulate policies that take social and power relations as a starting point, rather than treating them as unfortunate side effects of policy implementation.

In this study, we use the case of Nepal to show how CCA policy processes on all levels are strongly shaped by power relations that in turn influence differential vulnerability patterns at the village level. Nepal has long been upheld as a model of successful participatory development schemes, and its National Adaptation Programme of Action (NAPA) (Ministry of the Environment of Nepal [MoE], 2010) and subsequent Local Adaptation Plans of Action (LAPA) (Government of Nepal [GoN], 2011) have been celebrated for their commitment to grassroots consultation and participatory planning. Yet the design and implementation of CCA policies have taken place within a highly unstable political environment, and within a society that remains deeply entrenched in the Hindu caste system and a long history of social division and marginalisation (Jha, 2014; Ojha et al., 2015). The authors have shown in previous studies (Nightingale, 2005, 2015; Nagoda, 2015; Ojha et al., 2015) that even if formally included, the voices of the most vulnerable households have a negligible influence on how policy documents are formulated, and the proposed mechanisms do not address the root causes of vulnerability. In this article, we add to these insights by disentangling the narratives and interests of key actors in the policy process, in order to understand the mechanisms by which the most vulnerable are marginalised from the very outset.

The research for this paper draws on district- and local-level data from four villages in the mountainous district of Humla in the Karnali region of far northwestern Nepal, as well as analysis of CCA policy documents and key informant interviews with people involved in CCA policy formulation at the national level. Humla, a remote region bordering Tibet, is one of the

poorest in Nepal (UNFCO, 2013) and highly vulnerable to climate change, despite decades of humanitarian and development assistance (NPC, 2010; MoE, 2010). Because of the chronic food insecurity in the region, Humla is a key target for CCA policy efforts that emphasise enhancing food security in the face of climatic stressors (MoE, 2010). Given the importance placed on food insecurity as a cause and a consequence of vulnerability in local interviews, policy documents and research, we have chosen to study the implication of CCA policies on differential vulnerability patterns through the lens of food security.

The case of CCA in Nepal and the implementation of CCA policies in Humla are used to show how politics and power relations within the NAPA and LAPA policy processes influence the prioritisation of certain “knowledges” and interventions in the name of the poor, but leave untouched complicated political discussions about the root causes of differential vulnerability patterns at the local level. First, we present a contextual background for the development of CCA policies in Nepal in general, and Humla in particular. We then review literature that highlights the challenges associated with including the voices of the most marginalised within policy processes to ensure that their needs are adequately represented. In the methodology section, we describe how we use qualitative data to support our analysis. In the results section, we describe the mechanisms by which the concerns and needs of the most vulnerable are effectively excluded from Nepal’s CCA policy process. We show how policy spaces on all levels are strongly dominated by actors with an interest in maintaining the status quo, and how the resulting policy outcomes risk reinforcing the power relations that drive local vulnerability patterns. In the concluding section, we discuss the possible implications of our findings for the conceptualisation and implementation of future CCA policies that respond better to the root causes of vulnerability.

2 The Nepal context

The challenges facing the formulation of the Nepal’s CCA policy processes must be understood in relation to the history of the country’s institutional development and the dynamics of sociopolitical exclusion. One recent significant marker of political transformation is the 1990s revolution that overturned Nepal’s autocratic state and introduced multi-party democracy, ushering in development models predicating local engagement and participation (Whelpton,

2005; Jha, 2014). Of particular relevance to our topic is the fact that under past autocratic regimes, most of the population, except men from the so-called highest castes, were excluded from formal politics and government bureaucracy. This legacy continues to this day to shape the gender, caste and ethnic composition of the entire government and civil service structure. These exclusions sit awkwardly within a development machinery that is, at least on paper, committed to social inclusion. Indeed, protest against these exclusions is a fundamental contributor to ongoing political violence and instability (Jha, 2014).

In this highly complex socio-political context, Nepal developed a National Adaptation Programme of Action (NAPA) in 2010 following the United Nations Framework Convention on Climate Change (UNFCCC)'s work related to increase support for CCA projects in the Least Developed Countries. Under the leadership of the Ministry of Science, Technology and Environment of Nepal (MoSTE)¹, the programme aims to coordinate the implementation of, and international support for the country's adaptation efforts. Partly because of the particular legacies of participatory forest governance institutions combined with calls for greater political inclusion in the NAPA process in Nepal, it was decided to focus primarily on the local level by developing a series of LAPAs (Local Adaptation Plans of Action). The LAPAs are intended to ensure that the process of integrating climate change adaptation into local planning is "bottom-up, inclusive, responsive and flexible" (Government of Nepal [GoN], 2011, p. 3). At the time of our fieldwork, LAPAs were being developed in Nepal in 70 Village Development Committees (VDC)², including five VDCs of Humla.

Various mechanisms and political spaces have been created to ensure that local needs are taken into account in the formulation and implementation of the country's CCA policies. The main responsibility for ensuring local-level participation rests with the District Development Committees (DDCs)³, which are tasked with coordinating the formulation and implementation of LAPAs in particularly vulnerable VDCs in each district. Importance is also given to "user

¹ The Ministry of Environment changed its name to the Ministry of Science, Technology and Environment after the approbation of the NAPA in 2010.

² A VDC is the smallest administrative unit after the ward in Nepal and contains different villages. Every VDC is constituted by nine wards.

³ The DDC contains different VDCs. The DDC of Humla contains 27 VDCs.

groups”, which are formed at the village level to ensure the inclusion of the most vulnerable in decision-making processes (GoN, 2011). These can be new groups or groups that have already been established as part of previous or ongoing development efforts (MoE, 2010; Barrueta, 2012). It is generally required that the user groups comprise a minimum of 30 per cent women and minorities based on caste and ethnicity (interviews with policy makers).

The role of local governments in CCA is consistent with the country’s decentralisation policies, which were first drawn in the 1990s and have been subsequently strengthened⁴. The 90s also saw the beginning of an increased role for civil society in development and poverty-reduction efforts (Singh and Ingdal, 2007). Since then, the number of registered non-governmental organisations (NGOs) in Nepal has grown from approximately 200 in the early 1990s, to about 30 000 in 2006 (Singh and Ingdal, 2007). NGOs are now widely used by aid agencies and government to implement development projects and programmes at the local level (Singh and Ingdal, 2007). In Humla, the mushrooming and predominance of NGOs are particularly noticeable in the district centre of Simkot, where almost every one of the approximately 300 houses is labelled with an NGO logo.

The ongoing decentralisation process and the increasing role of NGOs and community-based organisations in development efforts in Nepal have undoubtedly contributed to the recognition that local participation is important for knowledge production and policy formulation. However, although the country’s CCA policy framework rests on the assumption that local vulnerability must be addressed by establishing mechanisms for local participation, previous studies have shown that the highly unstable political context has prevented Nepal’s CCA documents from engaging with contentious political questions, that in turn, has limited their capacity to address the social and power relations that drive vulnerability in the first place (Nightingale, 2015; Ojha et al., 2015). For example, struggles between political parties were deliberately kept out of NAPA discussions, yet it is through their affiliation to a political party that people most reliably gain access to crucial state channels for development and services (Author B’s fieldwork).

⁴ The Social Welfare Act 1992 (SWA), the Ninth Plan Document 1997-2002, and the Local Self Governance Act 1992 (LSGA). For example, the 2008 Local Governance and Community Development Programme (LGCDP) highlights the importance of placing responsibility for local and bottom-up planning processes within the DDCs and the VDCs (GoN, 2008).)

Indeed, despite the growing understanding that social and power relations – which are significantly shaped by caste, ethnicity, gender and income levels – are major drivers of differential vulnerability patterns at the local level, criticism points to overly technocratic CCA policies that fail to tackle these social and power relations (Nightingale, 2015; Ojha et al., 2015; Nagoda, 2015). This calls for a critical assessment of the inherent limitations of current CCA approaches in addressing the processes through which vulnerability itself is produced, and more specifically what is needed for CCA to transform, rather than perpetuate, the inequality and intra-village dependencies that create differential vulnerability between households.

3 Making sense of development politics on the ground

In order to understand how local adaptation politics are likely to play out, it is necessary to investigate how they seek to promote participation and inclusion on the ground. In many CCA plans, inclusion of the local is assumed to ensure the legitimacy of participation in knowledge production and policy development, and to lead to the integration of local needs and interests in resulting policies. Adaptation policies operate within a development paradigm (Tanner and Horn-Phathanothai, 2014; Eriksen et al., 2015a) in which the local is often described as a “homogenous” place and the “problem” is removed from political discourse in a way that permits interventions that are based on technocratic and apolitical approaches (Shore and Wright, 1997; Brock et al., 2001; Wedel et al., 2005). This strong belief in the participation of the local is too simplistic in its approach to include the interests of the most vulnerable in development processes, in part because it tends to ignore how the diversity of actors and interests within villages interact at different levels (Mohan and Stokke, 2000; Brock et al., 2003; Nightingale, 2005). Local diversity, as well as national and international relations, shape development policy outcomes to such an extent that they differ greatly from the stated intentions of programmes due to complicated power relations embedded within equally complicated policy processes (Fergusson, 1994; Brock et al., 2003; Mosse, 2005; Unsworth, 2008; Oppermann, 2011; Hickey, 2012; Hout, 2012; Hughes and Hutchison, 2012).

Importantly, these studies demonstrate that even policies with a strong emphasis on the local risk favouring local elites at the expense of poorer and more marginalised people. Indeed, local elites

tend to be better organised, more educated and better connected with development organisations and local authorities than the “less academically structured” poor people (Nightingale, 2005; Mohan, 2014). This usually results in the under-representation of the poorest in local NGOs, and increases the risk that local-level policy spaces created to include the voices of the marginalised are used by local elites to strengthen their interests and positions (Nightingale, 2005; Lange, 2010; Mohan, 2014). Despite these well-known pitfalls of participatory development mechanisms (Cooke and Kothari, 2001), CCA policies have uncritically adopted participation as a primary means of reducing vulnerability.

In order to see how CCA policies can be complicit in producing or exacerbating vulnerability, we need to understand that policy processes are formed by the complex and power-laden interactions of various actors, ideas and practices from which knowledge, negotiations and decision-making processes arise (Brock et al., 2003; McGee, 2004). This means that policy processes are not linear, but rather are influenced by complex social and power relations, and framed by a variety of actors who serve to promote or limit different kinds of knowledge. These “knowledges” are ultimately related to the ideologies, identities, expectations, perceptions and interests of the various actors (Shore and Wright, 1997; Brock et al., 2001; Wedel et al., 2005; Nightingale, 2005). Hence, the political spaces created or reproduced within policy processes for collecting input and discussing issues related to vulnerability, also define whose voices and knowledge are taken into account in these policy deliberations (Brock et al., 2001; Eriksen et al., 2015b).

In this study, we are particularly interested in understanding the mechanisms by which CCA policies that underscore the importance of social inclusion and local participation, offer no real opportunities for the most vulnerable to contest the power structures that define local-level vulnerability patterns. In this regard, we build on the works of power theorists such as Foucault (1980, 1984) and Butler (1997), who have argued that power is fundamental in shaping social relations and legitimising which knowledge is produced, and how it shapes policy processes and their outcomes. Importantly, recent studies highlight the necessity of investigating how power relations shape people’s subjectivity and the social construction of knowledge, which authority is

legitimised to produce knowledge, and how these factors influence CCA policy processes (Eriksen et al., 2015b).

It is important to note that policy processes are not always about power as a way of subordinating a group of people or households, as in the expression “to have power over”, and that policy processes are influenced by a variety of social and political dynamics through which the interests and expectations of differentially positioned actors are played out (Mosse, 2005; Wedel et al., 2005; Li, 2007; Eriksen et al., 2015b). As a consequence, we see at all levels unpredictable and often problematic intersections between complex social and power dynamics and interventions intended to address vulnerability, which serve to increase vulnerability for some (Nightingale, 2005; Taylor, 2014) and enhance social and political power for others. These findings highlight the risk that to focus on the local without looking at how social and power relations shape differential vulnerability, may in fact be counterproductive. Approaches that seek to de-politicise complex relations and promote technocratic solutions may effectively disguise the lack of capacity that international and national actors have to respond to the root causes of vulnerability.

Our research builds on the understanding of Eriksen et al. (2015b) of adaptation as a political process that involves “relations, contestations, negotiations and cooperation at multiple scales, from the individual to that of international negotiations” (p. 4). We do not limit our understanding of “politics” to the work of politicians, but instead we consider its expression in the everyday activities and struggles that are shaped by power relations, and through contestations and negotiations between actors to influence decision-making processes. The case of Nepal shows how the outcome of these interactions is a remarkable stabilisation of the status quo, with a focus on technocratic and apolitical approaches that exclude many of the most vulnerable from the long-term benefits of adaptation efforts.

4 Methodology approach: probing CCA across levels

Vulnerability is dynamic and driven by multi-dimensional elements that include political, economic, social and environmental processes of change (Eriksen et al., 2005; O’Brien et al.,

2007; Pelling, 2011; Marino and Ribot, 2012; Taylor, 2014). Given this complexity, many scholars have highlighted the difficulty of fully grasping the multi-dimensional characteristics of vulnerability and its causes (Turner et al., 2003; Adger, 2006; Füssel and Klein, 2006).

In the context of Humla, we have chosen to view and investigate vulnerability through the lens of food insecurity. Author A's research has shown that most households in the study area perceive food insecurity as both an outcome of and a measure of their vulnerability. Such links between food security and vulnerability are well documented in the literature, with studies showing how food deficits can enhance vulnerability to stresses including climate change, and how vulnerability may in turn aggravate food insecurity for certain groups of people (Bohle et al., 1994; Downing et al., 2003; Yaro, 2004). The NAPA and LAPAs identify food insecurity resulting from the negative effects of climate change on agricultural production as a main concern, and highlight policies that promote food security interventions as a means of building adaptive capacity in rural areas (MoE, 2010). In Humla, existing food security programmes are already facilitated with user groups to plan and implement interventions in the villages, using the same approach to local participation that is prescribed by the CCA policies. While at the time of the fieldwork no project had yet been implemented in Humla as part of the new CCA policies, we argue that investigating the implementation of current food security programmes at the village level is a good approach for probing the implications of CCA policies for local-level vulnerability.

In order to better understand the limitations of current CCA approaches in addressing vulnerability, we examine how various interests and narratives are expressed and negotiated in the main policy spaces on three levels of the CCA policy process: i) the district level; ii) the village level; and iii) the national level and its interface with the local level. National-, district- and village level data were collected through a total of 194 qualitative interviews over a five-year period from 2009 to 2014. Four villages in the district of Humla were selected, based on their particular vulnerability contexts, with differential vulnerability patterns at the household level closely associated with caste, ethnicity, gender and income levels (Nagoda and Eriksen, 2015). On each policy level, we identify the dominant narratives, how they travel within the political

and social processes involved in formulating the CCA policy, and to what extent the voices of the most vulnerable households are articulated.

On the local level, we analyse the dynamics in two existing user committees that were created as part of the World Food Programme's (WFP) efforts to increase food security and farmers' resilience to climate change. WFP has worked in Humla for decades and has recently made a commitment to supporting the Nepal NAPA's processes by focusing its food security efforts on enhancing farmers' resilience to climate change (Nepal Climate Development Portal, 2010; WFP, 2012). These user committees therefore provide a good context for examining the processes of marginalisation and social exclusion within participatory processes intended to address vulnerability.

At the district level, we interviewed local leaders, politicians, NGO representatives and local government officials about how CCA policies are introduced in the district and how they are governed. We also engaged in observation in order to gain insight into how different knowledges and interests are expressed and influence decision making in the district-level policy spaces. At the national level, we analysed CCA policy documents and used key informant interviews with donors, representatives of international organisations (international NGOs, World Bank, Asian Development Bank and United Nations) and the national government to unpack how policies are formulated and by whom. Seminars organised at the national level were used to bring together donors, government officers, international NGOs and research institutes, both as a means of gaining input to our preliminary research results, and to observe how social and power relations play out in such contexts.

Taken together, the three levels investigated in this case study allow us to analyse how social and power relations interact on different scales, from the bottom-up and from the top-down, to shape policy processes in a way that favours certain approaches to CCA at the expense of others. These dynamics have a significant influence on the capacity of CCA programmes to address the conditions that shape the vulnerability context for the most marginalised households.

5 Disentangling actors, narratives and interests within the CCA policy process: the case of Humla

Marginality in Nepal is not accidental. It has been produced over a long period of time through the political and economic marginalisation of a large part of the population (Rose, 1971; Bista, 1974; World Bank, 2006). Today, castes, ethnic groups and gender relations have a significant bearing on people's access to land, educational opportunities and health facilities (Bista, 1994; DFID and the World Bank, 2006). It is important to bear this wider political and historical context in mind when investigating how differential vulnerability at the local level is shaped today. The following section highlights how dominant narratives and interests interfold within policy processes, using the three levels of analysis described above. We start our analysis at the district level because of its central position in policy processes between the local and national levels.

Policy spaces at the district and village local government levels

CCA policies have placed significant emphasis on creating a facilitating environment at DDC and VDC levels, to allow the most vulnerable a voice within policy processes. However, as we demonstrate here, having a voice is not sufficient, nor does a facilitating environment guarantee that the needs of the poorest of the poor will be addressed. Indeed, we found a general perception at all levels that political leaders (local and national), representatives of NGOs, line agencies, and local community leaders are active in influencing and shaping CCA policies through both formal and informal channels, leaving little space for the poorest and most vulnerable.

The first important concern that emerged during interviews at national, district and local levels is the high degree of politisation of district-level policy spaces. A development worker from an International NGO based in Kathmandu expressed it this way: "Working in Humla is like walking on eggs and finding a local partner who is not engaged in politics is hard." (Interv #). At the same time, there is a shared perception that the district-level government lacks political legitimacy, leaving space for opportunistic political actors to grab the benefits of development projects, including CCA programmes. The belief that district-level authorities lack accountability

is underpinned by what is perceived to be high levels of corruption and the fact that the last local-level elections (for the DDC and VDCs) in Humla were held as long ago as 1997.

Indeed, many of our respondents described the highly politicised situation as an important reason that CCA efforts are struggling to reach the most vulnerable households. For example, the VDC chairman of a village told us, “A lot of NGOs come here and make agreements with the DDC but the people who are supposed to be the beneficiaries never receive anything from these projects ... There is no law here and the government doesn’t care about our problems.” Political leaders themselves also expressed a strong sense of distrust. One leader said: “[In] the name of development, the government and NGOs give millions, but the results are not good. They are only counting the numbers. The problem in Nepal is that the country is in transition. Everything is unstable and there are no control mechanisms. How can the government control NGOs’ funds when they don’t manage to calculate their own funds?” This deep-felt sense of state absence in Humla contributes to what we argue is an institutional accountability vacuum that is exploited by various actors to promote their own interests in local and national policy processes.

This institutional vacuum is being filled in rather traditional and predictable ways, via networks of patronage in which political party representatives, through their links with NGOs and local elites, appear to be particularly active. Development workers reported that they lose clarity regarding their own roles and responsibilities, particularly as the projects work their way through the INGO-DDC-NGO-VDC-village chain. Indeed, while local political parties do have a formal role in approving local development plans through established procedures in the DDC and VDCs, it is generally perceived that political leaders are more interested in projects with short-term and tangible results that will more directly promote their own political or economic interests, often through connections with local NGOs. For example, as a ministry official pointed out when asked why the government continues to supply food aid when the projects meet so much criticism: “The representatives of the area push the government to supply food.” We frequently observed these personal links between politicians and NGOs in operation at the district headquarters; and representatives of the three main political parties in Humla readily described the close links that they, or their family members, have with local NGOs.

The second concern is that these interpersonal connections between political parties, local governments and NGOs are particularly problematic, since the LAPA framework allocates an important role to local NGOs (also referred to as “service providers” in the LAPA framework) as a link between the policy spaces at the community level and the local governments (DDC and VDCs). The selected local NGOs are tasked with carrying out local-level vulnerability assessments and facilitate input from households and villages into the policy process at the district level. However, villagers do not regard these NGOs as neutral actors conveying the diversity of opinions and interests from the villages to the district level, but instead as representatives of powerful families with particular political and economic interests. One village informant said, “The NGOs don’t go to the people here but make projects just for their friends.” In another interview, an informant from the same village stated: “Those who benefit from the projects are always the same people that are educated and have good connections.” As a result, the very poor households do not feel that their concerns and interests are reflected in VDC- or DDC-level decision-making processes, and see no opportunity to influence the CCA policy process. They thus have little expectation that the development policy in general will address their vulnerability situation.

These kinds of patronage and personal networks were consistently hinted at or directly articulated by local interviewees concerned about the lack of transparency in the processes of selecting the villages and NGOs to participate in the CCA process. Similarly, the DDC and national actors involved in the LAPA formulation could not provide documentary evidence of the selection process or the criteria used to select the VDCs and the NGOs to implement the LAPAs, despite our direct request for that information. However, development workers told us how the struggle by local political leaders to influence the selection process of the villages and the NGOs eligible for the implementation of the LAPAs has created serious tensions. In the district headquarters of Simkot, for example, one person was reportedly murdered in the wake of disputes between political parties and NGOs attempting to gain access to CCA funding, and for the sake of our own security we were advised by one donor official not to investigate the power struggles relating to the LAPAs.

Clearly, these findings underscore the fact that CCA forms part of, and cannot be analysed separately from, the broader vulnerability context that determines the options people have in the process of adapting to change; in fact, CCA may even produce new sources of vulnerability. These new sources include the concentration of project benefits on those already well connected, the exploitation of new projects for political ends, the threat of violence linked to such exploitation, and further exclusion of the poorest. In the following section, we provide a more detailed analysis of the village level policy spaces provided by the CCA process, and show how the mechanisms for local participation fail to provide the local government with the necessary input to address the differential causes for vulnerability.

Actors' interests and dominating narratives in policy spaces at the village level

Nepal's NAPA considers the so-called user groups as key mechanisms for ensuring social inclusion, identifying particularly vulnerable groups and households, and proposing measures to reduce their vulnerability (GoN, 2011). However, our analysis of user groups facilitated by WFP, in two villages in Humla reveals that these village level policy spaces are not neutral arenas where households participate and contribute on equal terms; rather they are spaces where pre-existing power relations influence whose knowledge and/or concerns count and whose are ignored. These findings are supported by work in the region of Karnali, which explores how the same factors shape benefits received by from participatory programmes (Nightingale, 2002, 2005, 2006).

At the time the fieldwork was carried out, the two user groups and analysed during this study consisted of nine members. The user *groups* are name user *committees* by WFP and included both men and women, as well as representatives of households from the different caste and wealth categories in the villages. The formation of these committees was conducted by the NGO responsible for implementing WFP's projects at the local level. The NGO facilitated the meetings of the user committees, and each activity was discussed and agreed upon with the NGO. The NGO was also responsible for conveying input from the user committees to WFP on the district and national levels, as well as to the government through the Nepal Food Security

Monitoring and Analysis System (NeKSAP). In every ward⁵, one person was responsible for ensuring that as many as possible participated in the activities decided on by the user committees and agreed with the NGO and WFP. The main activities implemented by the user committees in these two villages were the construction of irrigation systems, *attis*⁶ cultivation and the building of fences to control livestock.

Although the chairman of one user committee assured us that the committees are very inclusive and in particular that women and low castes households of Dalits are encouraged to participate, interviews with villagers, including with several members of the user committees, revealed that the decisions made by the user committees tend to coincide with the perceived interests of the better-off and high-caste households, rather than those of the marginalised and Dalit households. As a result, many vulnerable households choose not to participate in the meetings or are not interested in becoming members of the user committees, as they do not think that their participation will change anything. As one interviewee from a Dalit household stated, “It is a waste of time [to go to these meetings], these people are not interested in listening to us.” A female member of a user committee said, “The men don’t pay attention to the women anyway, so I rather work on the fields than go to the meetings.” Thus, even if people may perceive the causes of their marginalisation differently, as illustrated by these examples, the result of unequal social and power relations is that they don’t believe in their own deliberative capacity; they see themselves as observers of local participation initiatives rather than as active members of local-level policy processes.

The asymmetry in power relations among members of the user committees and at village level is illustrated by comparing the different perceptions of vulnerability and needs, as analysed in a previous study in the same area (Nagoda and Eriksen, 2015) with the user committees’ narratives. Indeed, this previous study shows that most food insecure households – often those belonging to Dalit families and the very poor – make a direct link between their vulnerability situation and the oppression they feel from other better-off or high castes households who have greater access to resources or decision-making processes. For example, one Dalit explained the

⁵ VDCs are composed of nine wards. One village comprises one or more wards.

⁶ *Attis* is a non-timber forest product considered to have high market value in the region.

difficulty he encountered when trying to connect an irrigation channel to his land. His request was blocked by the high-caste Thakuris of the village and he withdrew it for fear of repression. Another Dalit said, “We [Dalit] could do much more with the development organisations (such as to work on new lands) but the Thakuris are oppressing us, and then we can’t do anything.” These deep concerns regarding oppression and marginalisation contrast with the narratives of the better-off and high castes, who are more concerned that climate change will negatively influence their agricultural productivity and other economic activities such as trade. Based on their concerns, high castes and better-off households pointed to the need for more technological adaptation measures, such as improved irrigation, access to new varieties of crops and access to income-generating activities, such as the planting of apples or attis.

Thus, we see a split within the villages between the better-off, high-caste households and the low-income, low-caste households regarding what they consider to be “adaptive activities”. Not only do they prioritise different types of interventions, but more profoundly, they also believe that vulnerability derives from different foundations: social relations versus access to assets. Importantly, the convergence of the type of projects prioritised by the user committees with the interests expressed by the better-off or high-caste households, with a strong focus on technocratic interventions, is a clear indication that the voices of the most vulnerable remain marginalised in policy spaces that are dominated by the same power relations that drive local vulnerability patterns at village level. This divergence of concerns between very poor people and better off households poses a challenge to development and adaptation policies that rely on village-level policy spaces to plan and implement their projects. As a political leader at district level said, “NGOs’ work on inclusion is not satisfactory because the organisation chooses the whole village and the village choose their own members, so it is still unequal.”

The people identified as dominating the user committee meetings were without exception men from high castes or better-off households, who were referred to as local leaders by other villagers. Interestingly, interviews revealed that most of these local elites have connections with political parties, local governments at the VDC or DDC level, and/or NGOs present in Simkot. Their connections are regarded as important, sometimes vital, for obtaining resources for the village inhabitants, including food aid from humanitarian organisations. At the same time, their

role within the user committee and in the village helps them to promote their own interests on a higher level. For example, they are able to secure their social status within the village and at the district headquarters – an opportunity not available to the most vulnerable households.

While many development workers recognise that power and social relations may inhibit the active participation of the most vulnerable in the user committees, they stated that they find themselves limited to encouraging women and Dalits to attend the meetings. They often argued that they have neither the mandate to change power dynamics at the local level, nor are they provided with the tools or guidance necessary to identify and analyse the causes of differential vulnerability within villages. An NGO staff member said in an interview: “There are criteria about women’s and Dalits’ inclusion in users groups but they just sit down and do not participate. Thus, the name of inclusion is just symbolic. The benefits for them [women and Dalits] are just to get food, but no progress on inclusion will be done if the government does not work on it.” The result is meetings with lists of participants that “look good on paper”, according to the same NGO worker, but do not address the context and dynamics through which the most vulnerable are marginalised. One interviewee at the VDC level went a step further by claiming that most lists of user committees at the village level are fake and include names of Dalits just to get more money from donors. He argued that “everybody can write whatever they want, since donors never come to check what their projects look like”. While it is outside the scope of this study to verify such claims, the fact that many villagers and development workers expressed deep mistrust of the mechanisms established for local participation seriously undermines the legitimacy of the CCA policy process in the study area.

Although the comments mentioned above refer to user committees from WFP projects, an interview with a local NGO responsible for implementing the LAPA in Humla confirmed that no new tools have been provided for identifying and ensuring the participation of the most vulnerable households in the CCA process. This highlights the risk that pre-existing power relations within villages will continue to inhibit the ability of village-level policy spaces to promote the views and priorities of the most vulnerable and socio-politically marginalised households within these newly adopted CCA policy processes. This dynamic, instead of being challenged through the CCA process, risks being reinforced by the institutionalisation of the

links between NGOs, political parties, local governments and local elites. Importantly, by failing to include the voices of the most vulnerable, the development and adaptation processes that view the local as a homogenous place, do not provide local and national governments with the information that they require in order to address the causes of differential vulnerability within the villages.

We have demonstrated how the lack of effective and legitimate local governments has created an institutional vacuum that is used by political and economic elites to dominate local-level policy spaces provided by the CCA process. In the following section, we explore how the objectives of social inclusion and participation of the most vulnerable are effectively diluted when national policies are faced with different interests and the power relations different actors use to negotiate their positions.

Dominating interests in the interface between national policy objectives, donors and local-level political spaces

At the third level of our analysis, we show that the most marginalised households are excluded from the CCA policy process, in spite of the strong emphasis in donors' and national-level policies on social inclusion as a tool to reach the most vulnerable. The following section highlights several features of the policy dynamics that take place in the interface between national policy objectives, local-level policy spaces and international aid agencies as donors and International NGOs, that contribute to a prevailing preference for apolitical and technocratic CCA approaches that do not challenge inherited power relations.

First, on the district level, government representatives highlight the fact that they lack the necessary financial and human resources to implement the CCA policy. The government's periodic development plans are notoriously underfunded and nowhere close to meeting the basic needs of the population. The representatives admit to a very limited presence outside the district headquarters and stress the difficulties they face in reaching remote villages. One officer said, "If the community is far from Simkot, we ask the NGOs to go in our place." When asked what they

would do if there were no NGOs working in these villages, he responded: “If there are no NGOs [that have a presence in the village], we do not need to go there.”

In addition to lacking financial resources, DDC officers emphasise that the lack of legal links between the district government (DDC), the MoSTE and the various line agencies at DDC level makes coordination of the CCA policy process extremely challenging. Indeed, while the DDC reports to the Ministry of Federal Affairs and Local Development (MoFALD), line agencies are accountable to their national-level ministries and not to the DDC. At the same time, the MoSTE, which is responsible for the national CCA policy, has no line agency at the district level to support the local implementation of CCA plans, and has to channel support to CCA projects through the different line agencies and NGOs. Representatives of the district government expressed concern about the high risk of duplication of projects carried out by line agencies and NGOs. One district government official said: “There are a lot of NGOs here and they are doing their own projects. We are responsible for coordinating but we have no authority.” District government officials also complain that development projects are usually designed at the national level and directly implemented in the villages by NGOs without prior consultation. A DDC representative endorsed this opinion: “We are supposed to give the ideas to the upper level, but in reality it is a very top-down approach.” A representative of a line agency in Simkot expressed a similar concern in an interview: “The development work is centralised in Kathmandu and it is not specified to Humla. We get the recommendation from Kathmandu and we have to implement it here.” As a result of the fact that projects are often approved at the national level before being presented to the local government, there is very little room to adjust them to local CCA priorities.

To strengthen the cross-sectoral coordination capacity at the DDC and VDC levels in relation to CCA programmes, new mechanisms have been created under the LAPA framework. These include the District Energy, Environment and Climate Change Committee (DEECCCC) and the Village Environment, Energy and Climate Change Coordination Committee (VEECCCC). According to the MoSTE, efforts are being made to integrate the LAPAs into local development plans. However, local development workers expressed little hope that the CCA policy framework, in its current form, would be able to challenge the dominant role played by powerful

actors at national and local levels in defining local development priorities. This scepticism is captured in the following interview statement: “The line agencies are instruments of the central government and work in parallel with the DDC [...] and because there has been no local elections since 1997, nobody is accountable to the DDC. [...] If it [LAPA] was under the MoFALD, it might have been easier.” One important consequence of this lack of capacity and authority to coordinate the CCA policy process at the district level, is that no official entity is accountable for ensuring that the policy objectives of social inclusion and targeting the most vulnerable villages and households are implemented. Instead, this responsibility is passed on to the NGOs as project implementers. However, as we have seen, the work of NGOs is often influenced by the interests of local elites and political leaders who prefer short-term technocratic approaches over addressing complicated political issues.

Second, the already weak policy and coordination capacity at the district level is further undermined by national-level interest and donors who mistrust Nepal’s institutional capacity to implement CCA interventions effectively. Most interviews with representatives of international agencies pointed to political instability, corruption and the personal agenda of politicians and civil servants as major hindrances to Nepal’s development capacity in the face of climate change. Several donors do support the capacity building of local governance structures, through, for example, the Local Governance and Community Development Program (LGCDP), but still hesitate to use government channels to reach villages because the risk of inefficiency and corruption is perceived as being too high. Hence, while acknowledging the role and responsibility of the state in ensuring social inclusion and implementing the CCA policies, they frequently choose to bypass the government and channel their funds directly to private entrepreneurs and local NGOs, which are more flexible and efficient in implementing projects at the local level. One donor representative admitted that donor agencies need to do more to help create the necessary capacity within the government to implement social inclusion policies, but acknowledged that donors are poorly coordinated and tend to pursue quick and measurable results. Clearly frustrated with the CCA process, he said: “The government wants 80% of the funds going to the local level but there are no mechanisms. The manual for the implementation of the LAPA from the government is not good, but on the other hand, we get pressure from our

own government to get these LAPAs guidelines done. It's a big mess [...]. There is no coordination between donors related to climate change in Nepal.”

Not surprisingly, most national-level government officials complained about the unpredictable, limited and short-term funding available for CCA through governmental structures. Central-level civil servants at the national level argued that more long-term funding is needed for local governments to build the necessary capacity to coordinate and implement the CCA policies. One government official said: “By bypassing the government they take capacity and ability to plan and implement projects away from the government.” Similar concerns about short-term funding were highlighted by some INGO representatives, who felt that they are being pushed by donors to produce quick and measurable results within a short time frame, without having the tools or the capacity to work for transformational change in the political structures of the country.

The findings of this study reveal a mismatch between the role allocated to local-level governments by national-level policies, and the degree of authority and extent of resources that these local governments have to coordinate the relevant actors and enforce the implementation of national policies. This situation was described by one of our informants as a “decentralised centralised system” – a system that is decentralised on paper, but in practice continues to be dominated by central-level powers and interests. The result is an institutional vacuum at the local government level that exacerbates the importance of social and power relations in influencing the policy spaces, in that the well-connected and better-off households can strengthen their positions, while the most vulnerable remain excluded and marginalised. Clearly, in a situation where local government institutions lack implementation and coordination capacity and when the national policy of social inclusion is diluted by the power relations that dominate the local and national level policy spaces, the political space for local governments to implement policies that address or transform these power relations is extremely limited.

6 Conclusions

In this study, we have demonstrated how the better-off households and local elites influence policy spaces at the community and local government levels, in order to promote their own

interests. We have also seen how their narratives, typically advocating for outcome-oriented CCA approaches with a focus on enhancing agricultural production and economic activities, are echoed and supported by powerful national-level interests, such as those of sector ministries, political leaders and many NGOs. The knowledge and interests of the most vulnerable households, on the other hand, continue to be marginalised already at the village level through processes of oppression, exclusion and subjectivity. Since the most vulnerable households do not have access to political networks beyond their village, and do not believe in their own deliberative strategies to make changes, they have little hope of benefiting from adaptation projects, let alone influencing policy formulation according to their interests. Hence, even though social inclusion and a more contextual approach to vulnerability are, to some extent, supported by donors and reflected in national-level CCA policies, the interests of the most vulnerable are effectively overshadowed by pre-existing social structures and power relations that dominate policy spaces at local and national levels.

Furthermore, this case study illustrates how a strong and uncritical focus on local participation in the CCA process may disguise the fact that local and national government and other development actors, including NGOs and village-based organisations, are themselves part of a complex system in which local, national and international perspectives are interlinked, with varying and contradictory interests. By studying the local and national levels conjointly, our study reveals a pattern in which the interests and choices of local elites, NGOs, national political leaders, donors and the sector agencies interact and work together to dominate the policy process so that it promotes apolitical and outcome-oriented approaches to vulnerability. This comes at the expense of social inclusion and a more contextual CCA approach that would benefit the most vulnerable households. From the bottom and up, the views and concerns of the most vulnerable households are effectively ignored, and from the top-down, national and international policies of social inclusion and equality are just as effectively diluted. Consequently, differential vulnerability patterns remain unaddressed and the interests of the local elites prevail.

Importantly, this case study has demonstrated that several of the very same actors, interests and political and social processes involved in defining CCA policies are also shaping the vulnerability context these policies are supposed to address. Hence, we argue that as long as the

same power relations that are driving local vulnerability dynamics, such as caste, income levels, gender, and access to social and political networks, play important roles in defining CCA policies, there is strong reason to expect that CCA will contribute to institutionalising and reinforcing, rather than transforming, the underlying causes of vulnerability.

Promoting technocratic and apolitical approaches, legitimised through so-called processes of local participation, appears to be convenient for many actors involved in the CCA process. For example, Mohan and Stokke (2000, 2008) have shown how national governments may have varying reasons for agreeing to decentralise projects in which civil society is strongly involved. These reasons include the obviously advantageous shift of the burden of welfare provision and service delivery onto local stakeholders, and the strengthening of the political base through the delivery of short-term benefits directly to local villages. This “obsession with the local” (Hickey and Mohan, 2004, p. 11) may also be convenient for humanitarian actors who prefer not to deal with bureaucratic government structures they do not trust –, and to avoid confronting national and local elites with an agenda of social inclusion where they risk being accused of “imposing Western values” or “interfering in internal affairs”. Additionally, as pointed out by one national-level government official, since most aid agencies need to demonstrate quick and measurable results of their CCA investments to their constituencies in their home countries, they lack both the incentive and a mandate for engaging in the longer-term process of addressing power relations that drive local vulnerability patterns.

It is a paradox that the de-politicisation of CCA approaches at international and national levels in fact contributes to an over-politicisation of local-level policy spaces, where local politics expressed through unequal social and power relations play a dominant role in marginalising the voices of the most vulnerable. In this sense, the strong focus of international CCA discourses on building local-level adaptive capacity can be used – intentionally or unintentionally – as a reason to avoid addressing the complex socio-political dimensions of vulnerability. Hence, our findings suggest that local-level policy spaces need to be designed so that they create real opportunities for contestation, where local practices can meet policies, and where the knowledge of vulnerable groups combines with that of elites to alter the unequal power relations that are currently determining vulnerability. To achieve this, however, CCA must be re-conceptualised as a social

and political process that aims to transform the conditions creating local vulnerability (Eriksen et al., 2015b). This, in turn, implies the need for an integral transformation of local, district and national power structures, whereby the dominant interests at different levels are challenged, using tools and approaches that go far beyond current development paradigms and economic models.

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