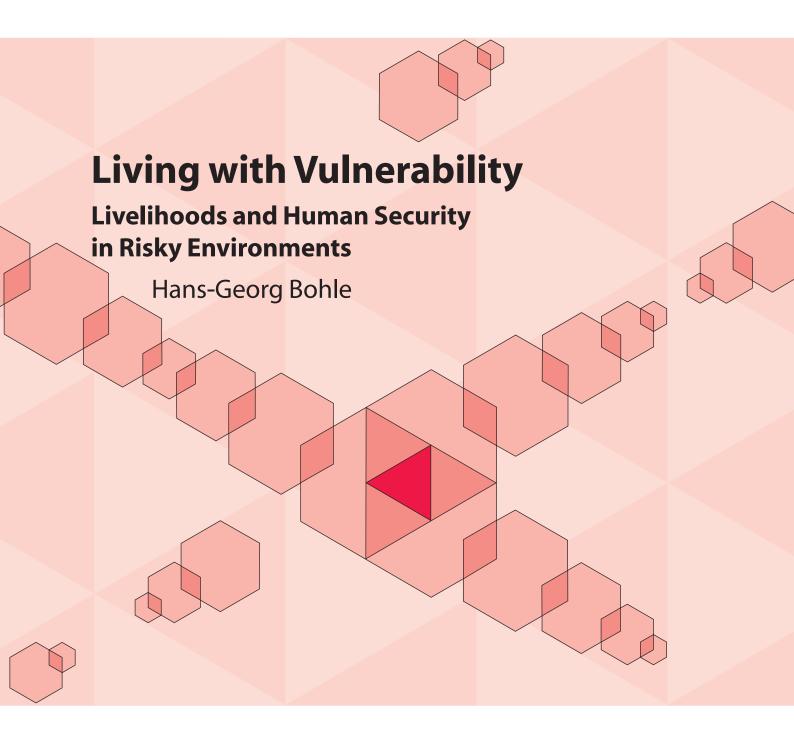


Institute for Environment and Human Security





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'Interdisciplinary Security ConnecTions' Publication Series of UNU-EHS

No.6/2007

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About the Author

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Living With Vulnerability

Livelihoods and Human Security in Risky Environments

Hans-Georg Bohle

Acknowledgements We would like to thank Ilona Roberts and Wesley Crock

We would like to thank Ilona Roberts and Wesley Crock for copy editing work. Koko Warner and two anonymous peers reviewed this article. We would like to thank them for their critiques and comments of individual chapters.

We appreciate the collaboration of the Munich Re Foundation in promoting the publication of social vulnerability-relevant research. The partnership UNU-EHS enjoys with the Munich Re Foundation makes the Munich Re Foundation Chair on Social Vulnerability, held by Professor Hans Georg Bohle, possible.

Foreword

"Living with vulnerability" is a title that challenges the reader to look at vulnerable groups in a new lens – a lens that requires a pragmatic approach to vulnerability which is dynamic and may resist technological change. The title chosen by Prof. Bohle also invites the reader to view the vulnerable as agents reacting to and shaping their own resilience.

In this publication the author explores social vulnerability through the perspective of those who have to live with vulnerability. He conceives vulnerability as embedded in social and environmental arenas where people struggle for, negotiate, and achieve or lose human security, freedom and human rights. A unique contribution of this paper is to analyze social vulnerability from an agency perspective. This actor-oriented, human security perspective on social vulnerability points to opportunities to reduce social vulnerability by enabling the vulnerable to develop their capabilities to secure their livelihoods in a sustainable manner.

This article provides insights into how those characterized as "most vulnerable" deal with the multiple stressors that affect them. He shows how these groups cope with risks in highly flexible, innovative and adaptive ways. This message, explained in case studies of Nepal and Sri Lanka, provides hopeful evidence that the vulnerable are not passive recipients of policy and other forms of assistance – they actively shape their coping strategies and have a degree of dynamic resilience in the face of shocks. However, the sometimes experimental coping approaches of socially vulnerable groups fail. These failures are linked to social capital, or the position of these vulnerable groups in the social and power frameworks in villages or urban places.

This paper has important implications for policy discussions on human security. Prof. Bohle explores the fragility of marginalized groups, particularly in the face of new threats like climate change that may represent a change of states and not "only" a shock to a relatively stable system. As the environments in which vulnerable groups live change, so will the ability of these groups change to use commonly held assets to pursue stable livelihoods and human security.

Bohle's essay describes the complexity of understanding social vulnerability. He underscores the need to understand the affected people within their context of resilience and capacities to help themselves, as well as their areas of fragility. We are enormously privileged to work with Professor Bohle as one of the Munich Re Chairs on Social Vulnerability. It sis a great satisfaction for me that our joint project with MRF, the Chair on Social Vulnerability at UNU-EHS could contribute with this excellent publication to the body of knowledge in the exciting field of livelihood and vulnerability research.

Janos J. Bogardi Director UNU-EHS

Foreword

The Munich Re Foundation (MRF), in partnership with the United Nations University Institute of Environment and Human Security (UNU-EHS), strives to foster understanding of people at risk and to move "from knowledge to action". The Foundation is a catalyst for knowledge accumulation and implementation. In 2005, the Foundation entered a partnership with the United Nations University Institute for Environment and Human Security (UNU-EHS) to foment policy-relevant research on social vulnerability. Together we established a Chair on Social Vulnerability at UNU-EHS. Hans Georg Bohle was the 2006-2007 Munich Re Foundation Chair on Social Vulnerability.

As part of his scholarly endeavors, Prof. Bohle wrote the current paper to further the science of social vulnerability. Hans Georg Bohle complements the work of UNU-EHS and the Munich Re Foundation, and works with three other MRF Chairs on the cultural and economic dimensions of social vulnerability including institutional and governance factors. His contribution represents an important milestone for discussions of how socially created environments affect the coping capacity of the most vulnerable groups.

Over the past two decades, vulnerability research has matured and expanded its focus to consider how social, economic and political conditions converge to differentiate people's vulnerability to the same environmental stress. The temporal and spatial aspects of vulnerability science are increasingly understood, witnessed by research that attempts to demonstrate the impact of development on social vulnerability. Academic occupation with social vulnerability aims to expand understanding that can support policies to reduce vulnerability and achieve livelihood security. Research along these lines is especially for addressing the needs and vulnerabilities of poor people living in especially risky environments. Social vulnerability research has become a fundamentally interdisciplinary science, rooted in the modern realization that humans are the causal agents of disasters. Experts increasingly agree that while natural hazards often occur independently from human action, natural disasters are rarely entirely "natural," but a consequence of social vulnerabilities and lack of coping capacities.

Research stems from the need to understand how social forces affect vulnerability to multiple stressors. These stressors include climate change, widespread environmental degradation, and global economic and social pressures that reach the poorest of the poor in every country worldwide. It is precisely the goal of a partnership established with Munich Re Foundation in 1995 to pursue scientific knowledge of social vulnerability. As part of a team of four Munich Re Foundation Chairs on Social Vulnerability, Hans Georg Bohle contributes his particular expertise on how the geography of vulnerability comes to bear for vulnerable populations.

Thomas Loster

Chairman of the Munich Re Foundation

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User Guide

The Margins of the InterSecTions Series – A Service for the Cursory Reader

The InterSections Series means to provide direct, knowledge-based recommendations as basis for well founded decisions. Our InterSecTions Series provides authoritative research and information for policy and decision makers; additionally we provide a service for the cursory reader. To receive the full message of the respective page one has to read the quotations provided in the margins. In those margins the reader will find thought provoking, but well researched policy recommendations and the quintessence of the page. Additionally the quotations are placed directly beside the position in the text, so if the reader wishes to find out more, he can easily find the text quotation and take the reading from there. The editorial team of UNU-EHS hopes this service will be well received. However, any comments and/or recommendations of improvements are very welcome.

1. Social Vulnerability as Human Agency

This contribution views social vulnerability as social practise and human agency, where human livelihoods and human securities are constantly contested and fought over. It conceives vulnerability as embedded in social and environmental arenas, where human security, freedoms, and human rights are struggled for, negotiated, lost and won. However, in these struggles and contestations, the vulnerable are not mere victims, but rather they possess a lot of agency. For them, living with vulnerability means they must constantly seek to cope with the shocks and stress that threaten their livelihoods, particularly when they have to live in risky environments. Living with vulnerability also means they deliberately and dynamically adapt to the shifting risks to which they are exposed; they always seek to negotiate options that might help them to reduce these risks and secure their livelihoods. "Living with vulnerability" therefore takes an actor-oriented approach to social vulnerability. It focuses on the actors and their actions to make a living in risky environments; it considers the arenas where conflicts over livelihoods and human securities are played out; and looks into the agendas where the entitlements of the vulnerable are at stake. Such an actor-oriented approach to vulnerability is exemplified by two empirical case studies on South Asia. One is on the slow and silent problem of environmental degradation in the high mountains of Nepal. The other is on loud, violent emergencies during the civil war in Sri Lanka. Both case studies show how the vulnerable cope with such risks in highly flexible, innovative, and adaptable ways, although their actions are not necessarily very successful. The focus of this paper is thus on the agency that poor people possess to live with vulnerability. It will highlight the capabilities of the vulnerable to secure their livelihoods rather than their weaknesses and failures to do so.

Living with vulnerability also means deliberately and dynamically adapting to the shifting risks.

2. Sustainable Livelihoods Security and Vulnerability

2.1 The Sustainable Livelihood Approach

Emerging from intensive work at the Institute of Development Studies (IDS) in Sussex during the 1990s, a set of core principles has been developed, which constitute what is now known as the "Sustainable Livelihoods Approach" (Chambers and Conway 1992; Scoones 1998; Carney 1999). This approach was adopted and formalised as the Sustainable Livelihoods Framework (SLF) by Department for International Development (DFID) in 1999 and published in the form of Sustainable Livelihoods Guidance Sheets (DFID 1999, constantly updated). According to Chambers and Conway (1992), a livelihood comprises the capabilities, assets (including both material and social resources), and activities required for a means of living. Livelihood security refers to secure ownership of, or access to, resour-

ces and income-earning activities, including reserves and assets to offset risk, ease shocks, and meet contingencies. Sustainability refers to the maintenance or enhancement of resource productivity on a long-term basis. An individual, household, or social group may be enabled to gain sustainable livelihood security in many ways – through ownership of land, livestock, or trees; rights to grazing, fishing, hunting, or gathering; through stable employment with adequate remuneration; or through varied repertoires of activities. DFID (1999, glossary) has identified six core principles of the Sustainable Livelihoods Approach in the context of [poverty-focused] development activities that serve to reduce social vulnerability (Bohle 2008, forthcoming):

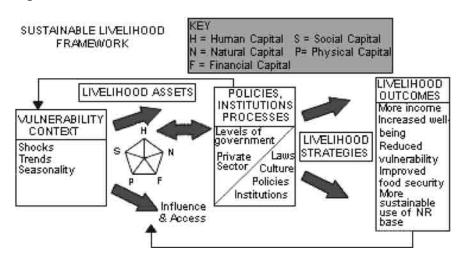
- People-centred: sustainable poverty elimination will be achieved only if external support focuses on what matters to people, understands the differences between groups of people, and works with them in a way that fits in with their current livelihood strategies, social environment, and ability to adapt.
- Responsive and participatory: poor people must be key actors in identifying and addressing livelihood priorities. Outsiders need processes that enable them to listen and respond to the poor.
- Multi-level: poverty elimination is an enormous challenge that will
 only be overcome by working at multiple levels, ensuring local-level
 activity informs the development of policy and an effective
 enabling environment, and higher-level policies and institutions
 support people to build upon their own strengths.
- Conducted in partnership: with both the public and the private sector.
- Sustainable: there are four key dimensions to sustainability economic, institutional, social, and environmental sustainability. All are important a balance must be found between them.
- Dynamic: external support must recognise the dynamic nature of livelihood strategies, respond flexibly to changes in people's situation, and develop longer-term commitments.

2.2 The Sustainable Livelihoods Framework

In order to help understand and analyse the livelihoods of the poor, the *Sustainable Livelihoods Framework* (SLF) has been developed by Scoones (1998: 4) and made a central part of the Sustainable Livelihoods Guidance Sheets by DFID (1999: 1.1). The framework, which is presented in schematic form in Fig. 1, views poor people as operating in a context of vulnerability. Within this context they have access to certain assets ("capitals") or poverty reducing factors. These gain their meaning and value through the prevailing social, institutional, and organisational environment. This environment also influences the livelihood strategies – ways of combining and using assets – open to people in pursuit of beneficial livelihood outcomes that meet their own livelihood objectives.

The sustainable
Livelihoods Framework
views poor people as
operating in a context of
vulnerability. They have
access to certain assets or
poverty reducing factors.

Fig. 1



The livelihoods approach to rural and urban poverty is based normatively on the ideas of rights, security, capabilities, equity, and sustainability. Rights-based approaches to development (DFID 1999: 1.1) take as their foundations the need to promote and protect human rights – the rights that have been recognized by the global community and are protected by international legal instruments. These include economic, social, and cultural as well as civil and political rights, all of which are interdependent. Running through the rights-based approach are concerns, which constitute central building-blocks of the livelihoods concept: concerns with empowerment and participation, and with the elimination of discrimination on any grounds. These are the basic preconditions for any agency-based conception of reducing social vulnerability.

Rights-based and security-driven livelihoods approaches are complementary perspectives seeking to achieve many of the same goals. For example, concerns with empowerment and participation of the most vulnerable aim to strengthen the capacity of the poor to achieve stable and secure livelihoods. Although there is a strange absence of explicitly applying the notion of security in the sustainable livelihoods approach, livelihood security is implicitly always present as a precondition of the poor to cope with and adapt to the risks of their lives, to ease shocks, and to meet contingencies. While the shortest definition of a livelihood "as a means of securing a living" (Chambers and Conway 1992:6) strongly underscores agency and security issues, the working definition of sustainable livelihoods by the same authors fails to encompass the notion of security. It has been argued it was not sustainability, but social vulnerability and security that presented Chambers' central concerns when formulating the livelihoods approach. However, it seems Chambers brilliantly embraced the momentum of the environmental sustainability discussion, then at its height because of the 1992 UN Conference on Environment and Development, and then re-interpreted sustainability as a matter of vulnerability reduction and promotion of human security (de Haan and Zoomers 2005: 30).

The rights-based approach [constitues of] the basic preconditions for any agency-based conception of reducing social vulnerability.

Livelihoods are considered sustainable when they: are resilient in the face of external shocks and stresses; are not dependent upon external support; maintain the long-term productivity of natural resources; and do not undermine the livelihoods opportunities open to others, including future generations.

In addition to rights-based and security-driven concerns, capability, equity, and sustainability were explicitly taken as the normative base to the concept of sustainable livelihoods. The three concepts are again closely linked. Each has two sides, normative and descriptive; each is also both end and means. Linked together, capability, equity, and sustainability can be viewed and understood as a framework for developmental thinking, which is both normative and agency-driven. The term "capability" has been used by Sen (1984, 1987) to refer to the ability of the poor to perform certain basic functions. Quality of life is seen in terms of valued activities and the ability to choose and perform those activities. Within Sen's framework of capability, there is a subset of "livelihood capabilities" including being able to find and make use of livelihoods opportunities, as well as being able to cope with stress and shocks (i.e. gaining security). Such capabilities are not just reactive, but also proactive and dynamically adaptable. In conventional terms equity is measured by the way of relative income distribution. However, Chambers and Conway (1992:4) used the word more broadly, to imply a more equal distribution of assets, capabilities, and opportunities, and especially enhancement of the livelihoods activities of the most deprived and vulnerable. In "developmental prose" sustainability has replaced "integrated" as a versatile synonym for "good". Livelihoods are considered sustainable when they: are resilient in the face of external shocks and stresses; are not dependent upon external support; maintain the long-term productivity of natural resources; and do not undermine the livelihoods opportunities open to others, including future generations (DFID 1999: 1.4). The sustainability of livelihoods raises two questions: whether a livelihood is environmentally sustainable in its effects on local and global resources and other natural assets, and whether it is socially sustainable, allowing it to cope with stress and shocks, and retain ability to continue and improve the livelihood opportunities of the poor. Sustainability is thus a function of how assets and capabilities are utilised, maintained, and enhanced to preserve livelihoods. From this perspective livelihood security is clearly an agency-based approach to social vulnerability.

3. Human Security and Vulnerability

Together, all these normative bases of the livelihood approach bear a remarkable resemblance to the current discourse on human security (Bohle 2008). Explicit links to this discourse, however, are curiously absent in the discussion on livelihoods. On the contrary the origins, influences, and development of the livelihood approach are usually only linked to the sustainability discourse. It was the *World Commission on Environment and Development* (WCED 1987b), who put forward sustainable livelihood security as an integrating concept and made it central to its report (WCED 1987a). However, in the further development of the concept, the notion of security got lost. Nevertheless, closer scrutiny of the current discourse on human security

reveals most of its debates during the past decade have revolved around the notions of rights, capabilities, and equity, which are central to the livelihood approach. When the notion of human security was introduced as a new paradigm of sustainable human development in the 1994 UNDP *Human Development Report* (HDR 1994: 3), the arguments for proposing the concept were much in line with what is now termed "the livelihood approach." It was proposed for most people today, a feeling of insecurity arises more from worry about daily life than from the dread of war or a catastrophic world event. This means different security concepts are needed for states and people, and it acknowledges even state security will be precarious (and empty), unless based on and consistent with the security of individuals. Thus, a new paradigm for human development is needed that puts people at the centre of security concepts and enables individuals to fully develop their human capabilities (HDR 1994: 4).

This first discursive strand around human security initiated by the *United Nations Development Programme* (UNDP 1994) applied the languages of safety, protection, and freedoms and defined human security as freedom from want and freedom from fear. According to the HDR (1994: 3), human security means safety from the constant threats of hunger, disease, crime, and repression. It also means protection from sudden and hurtful disruptions in the pattern of our daily lives. Loss of human security can be a slow, silent process or an abrupt, loud emergency. While "human development" is the process of widening the range of people's choices, "human security" focuses on how people can exercise these choices freely and safely, and how they can be relatively confident their opportunities they have today are not lost tomorrow.

This concept of human security is also central to the Global Environmental Change and Human Security programme (GECHS), an international core project of the International Human Dimensions of Global Environmental Change Programme (IHDP). With foci on conflict, gender, and health security in the context of global environmental change, the GECHS Science Plan (1999) has defined human security to be a state that is achieved when and where individuals and communities have the options necessary to end, mitigate, or adapt to threats affecting their human, environmental and social rights. Security is attained, when individuals and communities have the capacity and freedom to exercise these options, and actively participate in pursuing these options. While most definitions of human security have so far been based on the concept of freedom from fear and freedom from want, the GECHS definition focuses specifically on freedom to take action on one's own behalf in response to changing environmental conditions. In particular, it emphasises the ways environmental changes contribute to (or exacerbate) pervasive threats and critical situations, while at the same time undermining the capacity to respond to these threats. It interprets environmental change in the context of ongoing social changes, which together may affect the security of some individuals and communities.

For most people today, a feeling of insecurity arises more from worry about daily life than from the dread of war or a catastrophic world event. The human security perspective on social vulnerability offers a normative framework for agency-based approaches, reducing social vulnerability by enabling the vulnerable to develop their capabilities to secure their livelihoods in a sustainable manner.

A third strand of the discussion on human security was initiated by the *UN-Commission for Human Rights* (UNCHR 2003). It takes a rights-based approach and employs the language of freedom. In addition to sheer existence, the requirements for being "human" can go far beyond freedom from want and from fear. According to the Commission for Human Rights (Robinson 2003), freedom from humiliation, indignity, and despair, have to be added to fully grasp the notion of human security (Gasper 2005: 225).

A fourth discursive strand of the debate on human security revolves around Sen's (2003) capability approach. It is concerned with the stability of the effective (i.e. attainable), valued opportunities available to poor people. Instead of addressing freedom "from," the capability approach views human security as freedom "to," especially the freedom "to act" and "to attain." In this respect it is very similar to the GECHS approach to human security.

A last and currently most important discursive formation within the human security discourse has been stimulated by the Commission on Human Security's report "Human Security Now" (2003). Here, human security is to safeguard the "vital core" of all human lives from critical pervasive threats, without impeding long-term human fulfilment. This commission (known as the Ogata-Sen commission) suggested human security as a fundamental set of human functions related to survival, dignity, and livelihood. The current discourse on human security brings together the ethics of capabilities, human needs, and human rights, just as the livelihood approach does. All these types of ethics are closely related and complementary, not competitive: "human security discourse builds on this potential, bringing together what was previously artificially separated" (Gasper 2005: 232). In conclusion, the human security perspective on social vulnerability offers a normative framework for agency-based approaches, reducing social vulnerability by enabling the vulnerable to develop their capabilities to secure their livelihoods in a sustainable manner.

4. Framing an Actor-Oriented Approach to Social Vulnerability

The present contribution views social vulnerability as social practise, where human needs and human securities are constantly contested and fought over. It conceives the geographies of vulnerability as arenas, where human freedom and rights are struggled for, negotiated, lost and won. However, in these struggles the vulnerable are not mere victims, rather they possess a lot of agency. They constantly try to cope with threats to their livelihoods, they deliberately adapt to the shifting regimes of vulnerability, and they always seek to negotiate options that help to secure their livelihoods. This paper therefore employs an actor-oriented approach to social vulnerability.

In an effort to frame social vulnerability as agency, an actor-oriented analytical framework will be employed addressing the four funda-

mental building-blocks of this approach: the vulnerable actors and their activities; the agendas and arenas of vulnerability (Fig. 2).

To analyse social vulnerability from an agency perspective implies to take the view of those who have to live with vulnerability. It is also meant to consider the actors who cause vulnerabilities. An actororiented view on vulnerability will thus have to regard both the winners and the losers in the arenas of social vulnerability. Such an approach has to raise a number of specific research questions (Fig. 2):

Fig.2
Framing Social Vulnerability as Agency



Draft: H.-G. Bohle 9/2007

- 1. Actors: who are the most vulnerable groups and people? What makes them vulnerable? What are the mechanisms of marginalisation, deprivation, disempowerment, and disentitlement? What kinds of livelihoods are at risk? Who benefits from their vulnerability?
- 2. Activities: what are the dominant coping strategies of the vulnerable? What kinds of adaptations do they employ? In what way do struggles and negotiations work? What are the specific livelihood activities of the vulnerable?
- 3. Agendas: what are the strategic objectives of the vulnerable in search for securing their livelihoods? Do they have discursive means of struggling for security? How are empowerment and entitlement issues perceived by the vulnerable? In which way do they conceive issues of human rights and capabilities?

To analyse social vulnerability from an agency perspective implies to take the view of those who have to live with vulnerability.

Who are the most vulnerable groups and people? What makes them vulnerable?

[...]

What are the dominant coping strategies of the vulnerable?

How are the "geographies of vulnerability" constructed?

ſ...

These questions seem most relevant for an agency-based approach to social vulnerability.

4. Arenas: how are the "geographies of vulnerability" constructed? What are the characteristics of threatened environments? In which way is the social environment of the vulnerable politicised? What is the structure and dynamics of the specific social fields of power in which the vulnerable live?

These questions seem most relevant for an agency-based approach to social vulnerability. In the following two sections of this contribution, they will be exemplified empirically by means of two case studies: one case study on environmental degradation and social deprivation in Nepal, and another case study on politicised livelihoods and violent environments in Sri Lanka.

5. Case Study on Environmental Degradation and Social Deprivation: Nepal

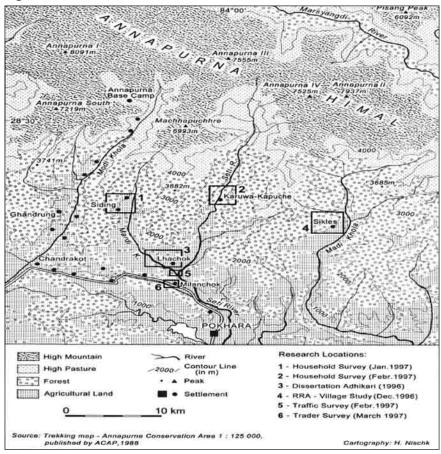
5.1 The Problem of Food Insecurity

Since the 1990s Nepal has changed from a net exporter to a net importer of food. Land productivity stagnated in spite of increasing use of fertilizers, which is a clear indication for land degradation and excessive utilisation of natural resources. 60% of Nepal's population have to spend more than two-thirds of their household budgets on food alone. More than 80% of the food supply consists of cereals. By means of village studies in the food-deficit Middle Mountains of Nepal, the following research questions were addressed (Bohle and Adhikari 1998):

- Which groups are most vulnerable?
- What are the main risk factors that threaten the food security and livelihoods of vulnerable groups?
- How do vulnerable groups in rural Nepal cope with unsustainable development?
- How do they try to adapt to changing internal and external impacts?
- How successful or unsuccessful are the coping and survival strategies of the vulnerable?

The results of two sample villages in the Kaski District, South of the Annapurna Himal, shall serve to provide answers to these questions, namely Siding and Karuwa-Kapuche villages, with a total of 256 households surveyed (Fig. 3).

Fig. 3



All the households in the two sample villages were classified by Rapid Rural Appraisal (RRA) methods according to their degree of food selfsufficiency. Five classes of food self-sufficiency were distinguished. In the Kaski case study, 41% of all households were less than six months self-sufficient from their own food production, while 92% were selfsufficient less than 12 months. Only 8% had food surpluses. Food production in the villages surveyed came primarily from two agricultural subsystems: irrigated land (with 2-3 harvests per year, mainly maize or millet) and slash and burn agriculture on the hill slopes (with one harvest every three years, mainly millet). The higher the location of the villages, the more important the latter agricultural sub-system is for food production. When calculating the consumption level, the minimum food requirement has been assumed to be 180 kg of cereals per person/year (which is the WHO-Standard; in comparison to other estimates, this is an absolute minimum amount). This value corresponds to about 1,650 calories per day per capita. The National Planning Commission of Nepal, in defining the national poverty line, has assumed a higher amount of 2,250 calories per day per capita (NPC, 1993). In the Siding village the lowest FSS category produced was only 21% of this minimum requirement, and another 50% was purchased. The actual consumption level was only 71% of the above defined minimum requirement. In the second FSS-category the overall consumption level was 85%, in the third 76%, and in the fourth 97% of the minimum requirements. On average, only 86% of minimum food requirements were fulfilled in Siding village.

In the Kaski case study, 41% of all households were less than six months self-sufficient from their own food production, while 92% were self-sufficient less than 12 months. Only 8% had food surpluses.

5.2 Livelihood Activities

The study revealed that most of the food deficit is filled by purchasing food in the market. One source of income to facilitate this is wage employment in agriculture, in quarries, and, most importantly, in portering services. Alternatively, mountain produce such as timber, livestock, bamboo, and alcohol were taken to the market. These are all products for which remote mountain villages have comparative advantages. Extensive grazing grounds are available in the high pastures or mountain forests, allowing elaborate transhumance systems to evolve. Timber, which is illegally cut in the mountains, is sold in the market; this is done at night to evade ranger controls, who prosecute illegal access to the forests. Although illegal, alcohol production needs a lot of firewood for the distilling process. The production and marketing is mainly undertaken by non-Hindu women who sell the alcohol in lower lying villages, where, in return, they buy the millet required for the production of alcohol. Bamboo, which is collected in the forests, is another produce, which provides income through the sale of baskets and mats produced in the villages and marketed in Milanchok market or Pokhara town.

5.3 Determinants of Livelihood Security

The structure of vulnerability was found to be much more complex than being based on subsistence level alone. This becomes clear when the data are disaggregated to the level of the individual household. In the case of Karuwa-Kapuche village, there is a tendency for households with low food self-sufficiency to be highly deficient in total food consumption. However, in the upper categories of food self-sufficiency, deficit and surplus conditions occur without any significant correlation to the respective subsistence level. Therefore, the specific coping strategies of the individual household have to be examined. There are clear indications that success or failure of coping strategies is determined by the size of the household (the smaller, the more successful); there is also a clear tendency for the resource basis of the individual household to be determined by caste and ethnicity. It then becomes clear that it is not the exposure to risk alone (in terms of subsistence levels), but the coping strategies which combine in a complex manner for each and every household. It is thus the agency of the vulnerable that reflects their livelihood security or insecurity.

6. Case Study on Violent Environments and Politicised Livelihoods: Sri Lanka

6.1 The Civil War in Sri Lanka

Between 1983 and 2002 Sri Lanka was affected by a civil war that had been fought over the claims of the Tamil minority for an independent homeland ("Tamil Eelam") in the northeast part of the country. Politically dominated by the Singhalese majority, the Sri Lankan government sought to protect the integrity of the "Sinhala" nation-state. It

There is a clear tendency for the resource basis of the individual household to be determined by caste and ethnicity. It is not the exposure to risk alone but the coping strategies which combine in a complex manner for each and every household.

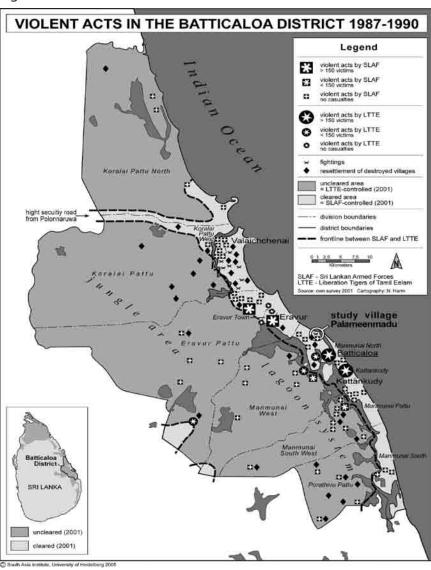
deployed large amount of troops to fight this claim against the Tamil separatist movement led by the Liberation Tigers of Tamil Eelam (LTTE) (Korf 2004: 67). Although the main arena of the war was in the north and northeast, the whole of Sri Lanka was affected by war-induced insecurity, including suicide attacks by LTTE cadres, bombing in Colombo, and numerous acts of terror. While most of the country always consisted of "cleared areas" (under control of the Sri Lankan Armed Forces, SLAF), the North and East of Sri Lanka became segregated into "cleared" and so-called "uncleared areas" (under LTTE control). Furthermore, "grey areas" (contested border areas) can be distinguished: the case studies on Eastern Sri Lanka will focus on such grey areas where cleared and uncleared areas have overlapped and where the frontlines between the two have shifted repeatedly. The violent conflict in Sri Lanka was brutal, dirty, and deadly. Human rights abuses were widespread, and suicide bombings and terror against civilians became integral parts of "living with violence and vulnerability" (Bohle 2007).

6.2 The Setting: Geographies of Vulnerability and Livelihoods

In the early 1990s the northeast of Sri Lanka became an area of intense and brutal fighting. Occasional ground battles were supplemented by air attacks by the Sri Lankan Air Force on Tamil settlements. The LTTE controlled vast areas on the east coast, part of their proclaimed Tamil homeland, especially the inaccessible jungle regions of the interior countryside, while the regular Sri Lankan troops desperately sought to control the most fertile (paddy, coconut, vegetables), densely populated and urbanised coastal strips with its access to open sea fishing. Accordingly, Batticaloa District was divided into "cleared" (SLAF land) and "uncleared" (LTTE land) areas (Fig. 4). Both areas were buffered by the extensive system of inland lagoons with their abundant prawn resources, which separated the (cleared) coastal zone from the (un-cleared) hinterland (Bohle and Fünfgeld 2007). The SLAF established a high-security road from Pollunaruwa to Batticaloa town-over nearly 100 kilometres led straight through un-cleared land. By means of innumerable check-points, roadblocks, bunker systems, and minefields both groups sought to control this strategic access route into the coastal zone of Batticaloa. A system of bunkers and army security posts was also established along the frontline of the district, which essentially ran along the lagoon system (Fig. 4). As the map indicates, it was this frontline that became the arena of most intense fighting and violence. As a "grey area," where neither of the two sides had clear control, this was an area where the lines of control frequently shifted back and forth, with the civilian population caught in the middle. The lagoons also became the arenas of the most intense violence because of their strategic position as principal infiltration routes into Batticaloa for the LTTE. A case study of the village of Palameenmadu, located in the "grey areas" north of Batticaloa, will exemplify how a fisherman community, caught in between two violent regimes, sought to live with vulnerability in such a violent environment.

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Fig. 4



6.3 The Livelihood Arena: Living with Vulnerability in a Violent Environment

Palameenmadu had had a war history outside a single security regime. As a fishing village inhabited exclusively by Tamils, its control had been contested between SLAF and LTTE, not to mention the different paramilitary groups throughout the war. During the "times of terror" in the 1990s, Palameenmadu was nearly completely destroyed by SLAF troops. The villagers spent months either at welfare camps at the University of Batticaloa or with relatives in adjacent villages. Due to its location in a "grey area," the families in Palameenmadu were always suspected by the security forces of being LLTE supporters. The villagers experienced numerous army round-ups, their houses were burnt down, fishing boats and gear were destroyed or confiscated, and villagers were killed or disappeared, especially young men. Four of the fishermen were killed in 1990, another four were deported to the concentration camp of Bussa by Special Task Forces, where they were detained for months and brutally tortured.

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12 fishermen were arrested by Singhalese security forces, five of them were severely injured when they were beaten up whilst in police custody. Out of the 35 families interviewed in detail in the village, 22 experienced some form of physical violence. During the time of the survey (2000 to 2003), a high number of female-headed households and war widows were recorded.

6.4 The Actors: Socially Differential Vulnerabilities

Looking more closely at the fishermen's community in Palameenmadu, it is evident that they were highly stratified. Only 43 out of 112 fishermen households owned boats (two trawlers and 22 mechanised boats: 19 unmechanised traditional catamarans), while 45 were merely fish labourers (fish coolis) without any fishing gear. While all vulnerability categories of the fishermen's community that were identified by participatory rural appraisal (PRA) exercises were equally exposed to violence, at first glance, the well-to-do fishermen were actually less affected. It was mainly their asset structure, their participation in social networks, and their access to political power holders that made the boat owners economically less vulnerable, and equally so in terms of recovery after violent impacts. It was the boat owners who got more credit for the reconstruction of their houses, who received new boats and nets from NGOs through the Fishermen's Cooperative Society, and who could afford to send family members to relatives in secure areas. They were treated by good doctors when injured, and they employed lawyers to get family members and friends released from police custody or detention camps. Their abilities to respond actively to risks and uncertainties were higher than that of fish coolis or petty fish traders.

6.5 Livelihood Agendas: The Crucial Role of Social Capital

The overall agenda for the fishermen of Palameenmadu was the search for security – in personal, material, and social terms – and the attempt to prevent violent impacts or at least to recover from them as soon as possible. It was mainly social and political resources that provided the means for coping with violence and searching for security. In Palameenmadu violence was less about social breakdown than the creation of new forms of social, political, and economic relations and networks. Social networks constituting "social capital" have indeed played a major role in the livelihood agendas of war-affected communities. In Palameenmadu 13 such networks were identified that constituted the building blocks of the search for livelihood security under violence (Bohle 2007). Four of these networks can be categorised as "bonding" social capital, another four as "bridging," and five as "linking" social capital. While "bonding" social capital addresses links to people with emotional ties, "bridging" social capital consists of horizontal networks emerging from rational objectives of its members, and "linking" social capital consists of vertical social linkages to superiors.

Without further explaining the social capital concept (for details see Bohle 2006), the trust of the fishermen in the social networks identiIt was mainly their asset structure, their participation in social networks, and their access to political power holders that made the boat owners economically less vulnerable.

[...]

Social networks constituting "social capital" have indeed played a major role in the livelihood agendas of war-affected communities. fied by the survey was undoubtedly highest for their families, relatives, and friends, but also for church and temple, and, surprisingly, for urban-based fish traders. The latter had proved to be reliable alliances for the fishermen in terms of fair prices, reliable services, and generous loans. Expectedly, trust in linking social capital was by far the lowest, especially regarding political power holders such as the members of parliament. When changes in the level of trust in particular social networks before and after the war were addressed, bonding social capital had strongly increased, while linking social capital had become markedly untrustworthy. Violence had effected at least two contradictory trends in the development of social capital: on the one hand, the fishermen of Palameenmadu had fallen back on traditional sources of social capital, on family ties, and group-based networks, with a remarkable rejuvenation of the roles of temples and churches (around half of the fishermen are Hindus, half of them Christians). On the other hand, violence had also been a trigger for rapid social change, including dramatically altered gender roles, internal reorganisations of households, changed generational hierarchies, and a nearly complete loss of trust in political power holders and security institutions.

6.6 Livelihood Actions: Livelihood Portfolios Reconfigured

In his analysis of livelihood and vulnerability in four villages of Trincomalee District, Korf (2004) identified three "pillars" of household strategies under violence: managing personal risks and securities; adjusting household economies for survival; and accessing external support. These three types of strategies were also employed in waraffected Palameenmadu. However, these strategies were not followed separately, because they were closely interconnected. For example, changes in mobility patterns served all three purposes. When women, especially the elderly, took over traditional male roles and entered public spaces, they contributed to manage the personal risks of young men (by, e.g., crossing check-points), they promoted household economies of survival (by, e.g., marketing fish in Batticaloa town) and they accessed external support (by, e.g., contacting local power holders, security personnel, or urban lawyers).

Another strategy, which served the objectives of the survival economy, was a general retreat into subsistence. Many fishermen recorded they restricted their activities and opted to consume their fish in the household instead of marketing it. Contrary to the general search for security, some fishermen also undertook risky or even illegal livelihood activities such as fishing outside the zone of restriction or catching fish at night – thus balancing increased personal risk against support to household survival economies. As a general feature livelihood portfolios were constantly and strategically adjusted to provide as much security and survival opportunities as possible.

Korf (2004) identified three "pillars" of house-hold strategies under violence: managing personal risks and securities; adjusting household economies for survival; and accessing external support.

7. Learning to Live with Vulnerability

The case studies have shown living with vulnerability can be a long and painful process of learning how to secure livelihoods in risky environments. Coping with vulnerability is frequently a process of failure and success; likewise, adapting to vulnerability can be a long process of trial and error, with uncertain outcomes. Therefore, research in all fields of social vulnerability will have to analyse the options open to the vulnerable for coping and adaptation, and the mechanisms and structures that promote or prevent successful livelihood activities. In risky environments it is necessary to know the existing capacities for sustaining livelihood security, before any political measures can strengthen or support them.

Numerous empirical studies have shown it is frequently not the material conditions that determine the way the vulnerable cope with risk. It is rather access to common property resources that shapes the livelihood options of the vulnerable. It is human capital in terms of good health, skills, and education, which determines the success of adaptation activities. Social capital comprising of social networks, family ties, self-help groups, friendship nets, neighbourhood communities, and saving clubs are frequently the most important "insurance" mechanisms of the most vulnerable.

Looked at more closely, human security is not just about securing income, food, shelter, or other basic needs. The capacities of the vulnerable to successfully live with risk are often much more dependent on their position in social fields of recognition and power within villages or urban places. The capabilities of the poor to participate in decision-making processes and the rights available to claim options for coping and adaptation are the prerequisites for attaining livelihood security. From this perspective social vulnerability and human security are not just physical, material, and financial support, but rather a life in self-determination, freedom, and dignity.

Academic occupation with social vulnerability aims at providing the basic knowledge to support political approaches to reduce vulnerability and achieve livelihood security, especially for the most vulnerable populations in particularly risky environments. There are no easy solutions, because social vulnerability is highly context-dependent, dynamic, and differential. It is therefore necessary to acquire more knowledge on the determinants and mechanisms of how to live successfully with vulnerability, in order to support the vulnerable in their struggles to achieve at least a minimum degree of livelihood and human security.

Numerous empirical studies have shown it is frequently not the material conditions that determine the way the vulnerable cope with risk. It is rather access to common property resources that shapes the livelihood options of the vulnerable.

Abbreviations

DFID Department for International Development

FSS Food Self-Sufficiency

GECHS Global Environmental Change and Human Security Programme

HDR Human Development Report

IDS Institute of Development Studies

IHDP International Human Dimensions of Global Environmental Change Programme

LTTE Liberation Tigers of Tamil Eelam

NGO Non Governmental Organisation

PRA Participatory Rural Appraisal

RRA Rapid Rural Appraisal

SLAF Sri Lankan Armed Forces

SLF Sustainable Livelihoods Framework

UNDP United Nations Development Programme

WCED World Commission on Environment and Development

WHO World Health Organization

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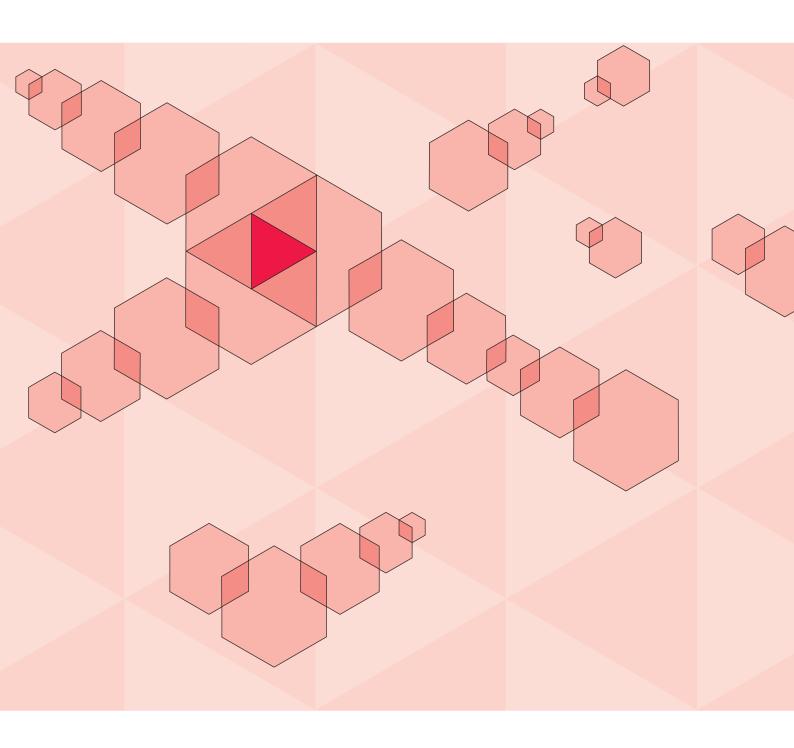
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