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Introduction

The Social Dimensions of Disasters

Ole Bruun and Olivier Rubin Special Focus Editors Roskilde University

This special issue is dedicated to shedding light on the social dimensions of natural disasters in Asia. It consists of six contributions addressing the social repercussions of diverse natural disasters and disaster management policies across Vietnam, Indonesia, Thailand and Nepal.

The Asian continent is particularly susceptible to natural disasters. The sheer scale of the population (4.5 billion), coupled with limited and unequal socio-economic development, increases the risk of natural hazards turning into full-fledged disasters. In the course of the last 20 years (1995-2014), approximately 1.5 million people succumbed to natural disasters worldwide, more than half of whom resided in Asia (EM-DAT, 2015). No matter how disasters are measured (in terms of injuries, homelessness or economic damage) Asia remains the most affected continent in the world in absolute terms. The specific regions most vulnerable to lethal disasters are Southeast Asia (primarily because of the impact of the 2004 tsunami on Indonesia and the 2008 cyclone Nargis in Myanmar) and South Asia (due to the earthquakes in Iran 2003 and in Pakistan 2005, and the 2004 tsunami in Sri Lanka). Interestingly, these infamous disasters did not have a noticeable impact on the total number of people affected by natural disasters on a yearly basis. In fact, the majority of the 185 million people in Asia who are adversely affected by natural hazards every year suffer primarily from minor, but recurrent hazards, most often in the form of typhoons and floods (EM-DAT, 2015). While academic attention is often devoted to the analysis of unique large-scale disasters, these figures highlight that it is equally crucial to understand the impact of small-scale, but recurrent natural hazards on the livelihoods of millions of people. These hazards, such as floods, typhoons and droughts, are often climate related and linked to complex and powerful regional weather systems that are bound to react to climate changes. The coastal areas of South and Southeast Asia are rated by some as the regions in the world that are most vulnerable to climate change (IPCC, 2014a). In this special issue, several contributions focus on the effects of recurrent flooding

in Vietnam and Indonesia, while others examine the implications of frequent landslides in Nepal and the impact of the 2004 tsunami in Indonesia and Thailand.

This special issue is certainly not the first to highlight Asia's susceptibility to natural disasters, or to stress the importance of addressing the social dimensions of disasters (see below). It is a well-established fact in disaster research that social dimensions are of cardinal importance when natural hazards turn into disasters (Wisner et al., 2004; Rodríquez et al., 2006; World Bank, 2010; Dahlberg et al., 2016). For this reason, a range of institutions have called for greater input from the social sciences in disaster and climate change research (Stern, 2007; Mearns and Norton, 2010; IPCC, 2014b). To date, much debate over these issues in the social sciences has focused on which social dimensions to include and how to go about studying them. And in terms of disasters, researchers have focused mainly on the immediate social implications of disasters and, to some extent, how to alleviate adverse outcomes through relief policies designed to increase community resilience and adaptation capacity.

While fully acknowledging the tremendous social ramifications of disasters, we wish to take a step further with this special issue. Humanitarian interventions are most often considered socially-neutral responses to the human and societal challenges posed by disasters. Yet, regardless of their declared good intentions, interventions (whether NGO- or state-driven) potentially alter power relations, undermine traditional livelihoods and entitlements, strengthen formal authority, marginalise informal institutions, and replace existing cultural practices. Hence, the point of departure for this special issue is that not only disaster impacts, but also external responses may become stressors for vulnerable groups. Based on studies in a wide range of settings, we argue that disaster-related interventions and associated political processes might have just as serious repercussions for vulnerable people as the impact of the disasters they seek to mitigate. This perspective is not just something we have dreamt up as social scientists eager to pursue new avenues in disaster research. A 2006 evaluation of 528 World Bank natural disaster assistance projects directs scathing criticism at conventional disaster interventions (World Bank's Independent Evaluation Group, 2006). These tend to rely on command-and-control systems that resemble military operations and exclude participation; they sideline local power structures and leave local people and institutions out of the community rebuilding process, making recovery more difficult; and they ignore local people's social and livelihood needs with the result that vulnerable groups may be left even more disadvantaged (Ibid.: 43). Hence, rather than seeing natural disasters as exogenous shocks to vulnerable people whose shattered livelihoods may subsequently be rebuilt through government disaster policies,

the contributions in this special issue will examine disasters and interventions within the same broad category. Disasters are regarded here not as one-off crises that gradually recede as recovery progresses, but as events that continue to influence communities and livelihoods for years. Seen from this perspective, the dynamics of disasters are shaped just as much by recovery processes and policies as by the disaster shocks themselves. The contributions in this special issue contain several examples of cases where government disaster policies have exacerbated inequality and progressively undermined social cohesion.

The Asian Journal of Social Science's focus on transdisciplinarity from a comparative perspective provides an excellent venue for this kind of research. The complex and compound nature of disasters defies mono-disciplinary approaches and invites innovative research that can embrace their multidimensional and multilevel dynamics. However, complexities inevitably increase when working at the lower and intermediate levels, where observed change processes are not only ascribable to natural hazards, but arguably also just as much to globalisation, marketisation, policy processes, general economic development and large-scale human interventions in the environment. Yet, we believe there is an urgent need for such multidimensional approaches as these can capture, for instance, the need to integrate ecological perspectives into disaster management policies, the need to evaluate the total impact of livelihood stressors from the perspective of the vulnerable, and the need for holistic disaster management policies that adequately address social justice. The contributions in this issue represent a wide array of disciplinary perspectives (anthropology, social capital scholarship, philosophy, political science and international development studies) but they share the understanding that disasters are entry points for broader social analysis and not just a field of analysis in their own right. Disaster scholars are sometimes accused of ignoring the more complex socio-economic dynamics due to their narrow focus on single events seen as discretely located in time and space. The articles in this special issue have all used disasters as a prism through which to carry out a broader analysis of societal dynamics.

Contextualising the Special Issue

In recent years, a number of social science journals have published special issues addressing disasters, risks and climate change impact in various contexts. Below, we present a selection of these contributions with a view to synthesising major trends in this field of study and providing relevant background for our special issue.

Journal special issues are increasingly focusing on global climate change, including the social aspects of climate change-driven hazards, such as typhoons and floods, and adaptations to them. In the face of those global challenges, much debate has understandably focused on avenues for groundbreaking theoretical and conceptual renewal arising from habitual everyday practices and institutional structures, as well as on the prospects for real policy change based on greater public awareness and individual cognitive change (e.g., Skillington, 2015). Of key interest to the present issue are two collections of papers that question the extent to which responses to climate hazards are socially and environmentally sustainable (Barnett and O'Neill, 2010; Eriksen and Brown, 2011). These authors point to an emerging body of evidence that suggests that disaster responses, both in the form of planned and autonomous interventions, run counter to established principles of sustainability, and that they adversely affect vulnerable people, creating inequity and undermining environmental integrity (Eriksen and Brown, 2011; Barnett and O'Neill, 2010). To be sure, "not every response to climate change is a good one" (Eriksen et al., 2011). The present volume presents detailed accounts of the multiple social outcomes of disaster-cum-intervention impacts.

Other special issues have paid just as much attention to the multiple, unintended effects of interventions as to the immediate disaster impacts themselves, in line with our own focus of inquiry in the present issue. Reflecting a steadily growing concern in the social sciences, a collection of papers under the editorial heading "Adding insult to injury" explores how climate interventions and their associated discourses are introducing new stressors into vulnerable communities, while pointing out that they have stratifying outcomes for vulnerable populations that are far less understood even than climate change itself (Marino and Ribot, 2012). Since bio-physical changes in earth systems impact on a stratified world, change is inevitable, and those living close to subsistence level are most at risk. That risk is amplified by the fact that many of the factors that render people defenceless in the face of disaster also reduce their ability to protect themselves from the effects of problematic interventions. By identifying the insults and injuries stemming from grounded climate actions and experiences of interventions, and understanding their causes and effects, the introduction to the above-mentioned special issue argues, much in line with us, that the social sciences can potentially play an important role in identifying sound responses (Marino and Ribot, 2012: 323). With special reference to adaptation in developing countries, another recent special issue argues that if poverty can be effectively reduced, the impact of climate change is likely to be less disastrous. Developing economies may well be able to adopt climate-smart solutions in time, given proper incentives and the ability to balance a series of

uncertainties (Carstensen, 2014). Another key theme for several recent special issues has been large-scale migration in the face of changing environments, with scholars again pointing to the crucial role of governance. One editorial points out that the causes of migration are complex and rarely attributable to shocks and disasters alone (Black et al., 2011). Another suggests that governance, by perpetuating a series of fundamental inequalities, may be a key factor in triggering migration, notably towards heavily populated, risk-prone areas (Geddes et al., 2012), a point that is of crucial relevance for the Asian context studied here, and that is highlighted in several of our papers.

Several special issues also present evidence that government policies in highly developed environments can render susceptible groups even more vulnerable. For instance, with reference to Japan's 2011 Fukushima nuclear power plant accident that occurred in the aftermath of an earthquake and a tsunami, one special issue asks if Japan's huge civil engineering projects actually alleviate or magnify the impact of disasters, and whether the government can be trusted to convey the dangers of such projects to the public (McNeill and Jobin, 2014). Another special issue addresses the multiple challenges of adaptation in a European context, revealing that even in a high-income region governance is mostly characterised by path-dependency and "work in progress" (Dewulf et al., 2015). Another special issue argues that disasters are associated with failures to develop communities in a sustainable manner (Cova and Miles, 2011); and yet another points out that making cities more resilient to disasters also ideally provides opportunities to improve local governance and participation and foster a culture of sustainable urbanisation (Valdés, 2013).

This wide range of topics notwithstanding, an overall theme emerges from recent special issues in the field of risk and disaster. This theme is a persistent call from the social sciences for relevant actors to appreciate the multiple social dimensions in disaster risks and interventions, and to resist topdown technocratic environmental governance and disaster risk management. Social science scholars emphasise that we need greater sensitivity to delicate social structures and weak population sectors that are permanently poised on the brink of disaster, as well as to the adverse consequences of many wellintended interventions. Editorials increasingly present condensed summaries of arguments put forward by concerned academics relating to themes such as maladaptation, hazard-prone development, risk-inducing policies, unintended social consequences, progressive inequity and unsustainability. This special issue contributes to this literature by raising some critical issues relating to households, communities and local institutional interactions with governments and relief agencies across various disaster contexts in Southeast Asia. Nature, weather and climate-induced disasters rarely affect all equally, and do

not even necessarily upset general income growth. However, some households are clearly better positioned than others to tap into relief funding and interventions and to make use of emerging social, economic and political opportunities. Thus, upheaval and the intensified social dynamics that follow in the wake of disasters may increase differentiation and inequality, cause reallocation of land and property, and place stress on traditional institutions. In terms of the implications for local government relief and disaster management efforts, it is pertinent to ask how different vulnerable groups manoeuvre in the new sociopolitical contexts that emerge after natural disasters, as well as under what circumstances state relief may actually exacerbate vicious cycles of social inertia.

The six contributions in this special issue seek to provide some answers to these questions. Taken together, they cover basic social coexistence, including social capital, social structures, non-state institutions and gender relations; life sustenance, including income and entitlement distributions, livelihood opportunities and poverty reduction measures; political systems and their local ramifications, including formal authority structures, the exercise of power and access to influence and participation; and people's material circumstances, including housing and shelter conditions, basic facilities and infrastructure. When disasters strike, many of the conditions that underpin the complexity of social life are torn apart, but only a few can be immediately repaired. The contributors to this volume share a commitment to exploring the holistic outcomes of disasters on people, livelihoods and communities in specific contexts, including indirect outcomes on the social and political processes that frame their existence.

Our Take on the Social Dimensions of Disasters

The six contributions all address how state responses to disasters can end up constituting additional stressors for vulnerable groups, yet they differ in terms of their analytical scope. The first three contributions work with a broad analytical frame that addresses the root causes of disaster vulnerability and risk more generally. Here, government policies are seen as but one factor (albeit an important one) out of several that can undermine livelihoods and increase disaster vulnerability for certain social groups. The last three contributions focus more specifically on the relationship between government policies and social vulnerability. The focus is not so much on what drives disaster vulnerability, but more specifically on how flawed government institutions and policies can exacerbate such vulnerability.

The opening article, "The Best of Intentions? Managing Disasters and Constructions of Risk and Vulnerability in Asia", by Jonathan Rigg and Katie Oven, addresses the root causes of disaster vulnerability. Drawing on research on landslide risk reduction in Nepal and the impact of the Indian Ocean tsunami of 2004 in southern Thailand, the article explores local perceptions and interpretations of these hazards, and examines how risk and vulnerability vary across different communities. The article underscores the need to devote analytical attention to small-scale recurrent hazards. Households in Nepal, for example, primarily adopted risk avoidance strategies to cope with the everyday risks they faced, rather than the comparatively infrequent geophysical hazards. Landslides were considered part of a broader set of social and economic factors that influenced both their immediate and future livelihood security. The article also critically addresses the role of formal and informal governance arrangements in managing risk and vulnerability. The article argues that the scienceand engineering-led approaches that currently dominate disaster management marginalise other ways of defining the problem, limiting the scope of knowledge considered relevant and discounting the possibility that the solution might be just as much socio-political as technical.

In the next article, "The Complexities of Water Disaster Adaptation— Evidence from the Quang Binh Province, Vietnam", Mogens Buch-Hansen, Luu Bich Ngoc, Tran Ngoc Anh and Man Quang Huy integrate social and hydrological vulnerability frameworks into an in-depth study of disaster vulnerability in two Vietnamese communities in the Quang Binh Province. The analysis identifies different sources of vulnerability and highlights adaptation strategies that are quite similar in both communities (migration and remittances) and strategies that differ (deforestation and aquaculture). One of the article's most interesting contributions both theoretically and empirically is the investigation of the nexus between the adaptation capacity of individual households and the preventive action and social protection offered by the state. The article finds that the government's main mitigation policies (resistant crops and improved infrastructure) are regressive in the sense that higher asset households tend to benefit more. Thus, households with high physical exposure to flooding hazards are trapped in a vicious cycle of chronic vulnerability by government policies that provide limited relief after floods (emergency packs of rice and noodles) but that do not provide the means to fundamentally mitigate their vulnerability.

The third article is Marjaana Jauhola's ethnographic study "Scraps of Home: Banda Acehnese Life Narratives Contesting the Reconstruction Discourse of a Post-Tsunami City that is 'Built Back Better'". The study re-examines the much praised reconstruction efforts in Banda Aceh following the 2004 Indian Ocean

tsunami by challenging linear notions of transformation for the "better" and the return to normalcy. The analytical perspective extends beyond a narrow focus on state-society relations by offering seven accounts of lived and embodied experiences of home and belonging in the post-disaster city of Banda. It provides unique insights into power relations and structures of violence: layered exiles and displacement, struggles over gendered expectations, and the stratifying political economy of post-conflict and tsunami reconstruction. The study also shows that disaster reconstruction efforts are never "just" technical. Rather, disaster-affected individuals navigate through reconstruction interventions experiencing social inequalities, as well as economic and political injustices. Disaster policies cannot, therefore, be separated from the victims' everyday experiences.

The fourth article, "The burden of excessive 'linking social capital' evidence from four Vietnamese provinces", by Olivier Rubin, investigates the relationship between vulnerable households and the local government during disasters. The article employs the concept of linking social capital in the analysis of state-society relations during floods across four provinces in central Vietnam. It shows how linking social capital embedded in strong state relations devoid of pluralistic accountability mechanisms turns out to be a liability for many vulnerable households during flooding. Vulnerable households are left exposed: They are dependent on links with local authorities for survival but they have little institutional clout with which to influence those links. In Vietnam, state-led mass organisations have a near monopoly on rural organisation, and any voluntarism is channelled through these organisations. Local fora for interaction, therefore, were primarily used by the local government as venues for information dissemination, and not as catalysts of bottom-up communitydriven initiatives. The policies appear to have weakened social cohesion in the communities studied, and increased reliance on state support during and in the immediate aftermath of flooding.

The fifth article in the special issue, by Roanne Van Voorst and Jörgen Hellman, entitled "One risk replaces another: Floods, evictions and policies on Jakarta's riverbanks", addresses how the government's flood management interventions in Jakarta actually exacerbated risk for the most vulnerable households (maladaptation). The article builds on fieldwork carried out in two adjacent neighbourhoods along the River Ciliwung in central Jakarta. In general, flood policies appear to focus on structural measures, while the socioeconomic and political factors that underlie the flooding, such as mismanagement of the city, inequality and lack of housing for the poor, remain unaddressed. Instead of asking what structural factors induce people to behave in a destructive way, the policies focus on the attitudes of the victims themselves.

Under the banner of flood management, riverbank settlers are continuously threatened with eviction but are not offered sufficient relocation options. The policies therefore end up benefiting Jakarta's elite, while failing to mitigate risk for the city's poorest populations. The authors therefore argue that flood control measures in Jakarta are an example of maladaptation to climate change.

Ole Bruun and Mette Fog Olwig's article "Is Local Community the Answer? The Role of 'Local Knowledge' and 'Community' for Disaster Prevention and Climate Adaptation in Central Vietnam" feeds into the debate on local capacity for climate and disaster mitigation. It contends that the common categories of "community" and "local knowledge" that are widely used in the international literature and serve as reference points for multiple interventions, are in fact illsuited to capture the dynamics of rural villages in Central Vietnam. Here, the state still sits heavily on all organising and effectively excludes alternative and civil society actors, while both farming household strategies and state financing opportunities reflect an outward and urban orientation. For instance, the Vietnamese government's economic growth-oriented policies also inform disaster risk reduction interventions, which are conditional upon large household cofunding for relocation schemes or infrastructure works and which may actually drive poor families into large, risky investments, such as aquaculture. Although aquaculture has proved highly profitable for many farmers in coastal areas, it increases overall levels of disaster vulnerability for others and adds new stressors, notably insurmountable debt.

Conclusions and Venues for Future Research

The social and political implications of disaster risk, relief and mitigation are increasingly being recognised and studied. However, as demonstrated in the following pages, the social sciences still face a tremendous task in terms of generating valuable new knowledge, interacting with government institutions, civil society organisations and technical disciplines; and feeding into policy processes.

When disaster impacts overwhelm local capacity, local communities obviously need external support in their recovery and adaptation efforts. It should be stressed that despite our critical stance in this special issue, we do not intend to suggest that disaster policies and relief efforts are inherently counterproductive. Rather, we wish to locate disasters within a broader socio-spatial landscape and within a longer time frame of risk production, eruption and repercussions. Taken together, the contributions close in on the continuous production of risk, the social outcomes of interventions, the interacting forms

of knowledge and the various constellations of vulnerability, rights and political structures at play, as well as pointing to key areas for future research.

Disaster policies and interventions serve interests that are not always aligned with available knowledge, best practices and truly humanitarian relief. Multiple challenges may distract them from the very outset, notably urban over rural priorities, elite interests, national consensual discourses and the subordination of disaster policies to national economic growth targets. But challenges also abound in relation to other actors, for instance, faith-based organisations trading relief for conversion, politicians favouring their supporters and using relief to buy votes, entrepreneurs finding ways to profit from people's suffering, international or national non-governmental organisations challenging state power, and foreign relief fostering dependency. A crucial point is that interventions are experienced differently by the different strata, groups and individuals affected, which begs examination of their inherent inequities and stratifying outcomes. Notably, in the wake of natural disasters interactions with central and external institutions often pose additional strains and new risks for vulnerable groups.

More frequent natural hazards place local inhabitants in a squeeze between the forces of nature and intensified government disaster mitigation efforts. New powerful state organs may favour centralised planning and large-scale interventions, while at the same time subjecting local communities and inhabitants to new forms of disaster-related policy that potentially overshadow what may previously have been key concerns, such as poverty alleviation, good governance and sustainability.

There is a broad consensus that risks from natural hazards are continuously produced during periods of social and economic transformation, which are inevitably speeding up in the present era of global integration, environmental interventions and changing livelihoods. To this must be added adverse policies, policy omissions and the fact that risks and emergencies may be used to legitimise extraordinary political measures. There is a constant risk that new vulnerabilities will arise as a result of interventions intended to mitigate others, such as when large-scale infrastructure works for urban disaster mitigation, or Green City development, expose marginal groups to increased flooding or forced evictions. Thus, several contributors call for the integration of social policy and social insurance systems in any risk mitigation effort.

Several papers show how disaster impacts and subsequent interventions for recovery intensify the intersection of diverse forms of knowledge, while calling for the bridging of, or mediation between, those different forms of knowledge, be they expert vs. practical knowledge, social vs. natural science approaches, technocratic vs. humanitarian perspectives, or government fact-freezing as opposed to local dynamic experiences. Many ways of knowing often transcend

the common narratives of disaster and post-disaster reconstruction, and personal experiences and life trajectories constantly add new dimensions as a new normal unfolds. Recognising situated knowledge further implies inclusion and participation, and not least the imperative to give voice to the most vulnerable population segments.

Some contributions propose that poverty, and therefore to some extent also vulnerability, is essentially ascribable to a lack of rights and entitlements, which is why the uprooting of social and economic life associated with disaster above all requires effective social policies and the will to assure social justice. One basic prerequisite for sound local governance in disaster management and risk reduction is, of course, an efficient national government that can devolve the necessary power down through the system and allocate adequate funding. But in practice, adaptive capacity depends heavily on local dynamics, in which political structures determine avenues for participation, local mobilisation and political voice. A crucial overall parameter for success is the extent to which government policy making can promote a synergistic relationship between local government institutions, multiple stakeholders, and the vulnerable groups themselves. Differing constellations of actors and policies may be essential at different stages of natural disaster impacts, from early warning systems and training as crucial elements in enhancing livelihood resilience, to access to credit and insurance as vital for long-term recovery. However, the adaptive capacity of the affected communities will be at its most robust when policy and finance are accurately targeted, efficiently and accountably applied, and premised on an ethos of inclusion. Just as disasters are never just "natural", nor are disaster policies ever just "technical".

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