

Chapter 2

Sociology, Normative Pluralism, and Post-disaster Recovery: The Case of the Philippines

Abstract This chapter argued why the sociological normative pluralist perspective is appropriate for analyzing the unintended effects of enforcing post-disaster recovery projects in disaster-prone countries with multiple legal and social normative systems, rigid bureaucratic regulations, and high red-tape and corruption indices like the Philippines. Firstly, it traced broadly the development of disaster research in sociology and the substantive trends in theorizing hazards and disasters. Secondly, it clarified the distinction between legal pluralism and normative pluralism in socio-legal studies and explains the significance of the normative pluralist framework in evaluating the success and failure of post-disaster recovery projects. Thirdly, it highlighted the sociological significance of examining social structure in disaster events as well as the consequences of a multiplicity of actors and normative orders in post-disaster housing projects. It contended that developing countries with high legal and normative pluralism and complex social systems, such as the Philippines, are more likely to encounter significant deviations in implementing post-disaster housing projects.

Keywords Sociology of disasters • Normative pluralism • Legal pluralism • Social structure • Sociology of law • Philippines

2.1 Disaster Research in Sociology

The classical approach in disaster studies treats disasters as events that originate in the earth and atmospheric systems. It sees physical events as impinging on the built environment and on social systems with their relatively sudden onset and the casualties, damage, and disruption they cause (Tierney, 2007, p. 509). In contrast, the sociological approach treats disasters as social rather than physical events that must be defined and examined in exclusively social terms (Quarantelli, 1987, 1997). When disasters happen, sociologists rarely, if ever, view them as “natural” but rather as “the result of poorly managed interactions between environmental hazards and human society that have placed people in harm’s way without adequate

coping mechanisms). For sociologists, disasters are better seen as “a result of the complex interaction between a potentially damaging physical event (e.g., floods, droughts, fire, earthquakes, and storms) and the vulnerability of society, its infrastructure, economy, and environment, which are determined by human behavior” (Birkmann (ed.) 2006, p. 10). In this sense, disasters are “unnatural” phenomena (Cardona, 1993).

Sociologists generally distinguish disasters from hazards. A disaster is understood as an event in which a community undergoes severe losses to persons and/or property that the resources available within the community are severely taxed, while a hazard is a condition with the potential for harm to the community or environment (Drabek, 2004). For sociologists, the term “disaster” refers to specific events such as typhoons, hurricanes, floods, or earthquakes, whereas the term “hazard” constitutes a class of threats such as hurricanes, tornadoes, earthquakes, and so on. Hazards reflect the risk, vulnerability, or exposure confronting families, communities, or societies (Drabek, 2005, p. 4). This distinction has provided an important frame of reference for sociologists who want to use the perspectives, concepts, and methods that define the broad field of sociology (Drabek, 2005).

The sociology of disasters is said to have started to bloom with Prince’s (1920) dissertation and sociological work on a technological disaster that involved a collision of two ships in the Halifax harbor on December 6, 1917 (Drabek, 2005). This was followed by natural investigations and inquiry into the conditions of panic. In the late 1940s and early 1950s, sociological research consisted mainly of a rapid response to disasters by teams from the University of Chicago’s National Opinion Research Center (NORC) and the National Academy of Sciences (Fritz & Marks, 1954). The research funding during this period came mainly from the United States military organizations; thus, the research focus was on applied research that connected disaster investigations to situations in wartime and on the socio-psychological aspects of disasters.

In the 1960s and 1970s, sociological research expanded to include field studies of organizational functioning in disasters, but its focus was on the socio-psychological aspects connected with wartime and civil defense interests (Quarantelli, 1987). During this era, pioneering researchers saw disasters as contexts in which to explore organizational and collective behavior under high-stress conditions (Tierney, 2007, p. 504). The first important milestone of this approach came with the founding of the Disaster Research Center (DRC) at the Ohio State University in 1963. The DRC’s founders—E.L. Quarantelli, Russel Dynes, and J. Eugene Haas—developed a research focus that examined both the organizational and emergent social behavior during and immediately after disasters (Tierney, 2007, pp. 504–505). After gathering hundreds of factual reports on the tasks and structures of groups involved in disaster situations, Quarantelli (1966) and Dynes (1970) developed an analytical tool that bears a great impact in the sociology of disasters—the well-known typology of established (regular tasks, old structures),

expanding (regular tasks, new structures), extending (non-regular tasks, old structures), and emergent (non-regular tasks, new structures) organizations. This invention resulted in the shift of focus in the study of disasters from the socio-psychological to organizational aspects of disasters. The analytical device created by DRC researchers was partly responsible for the “boom years of sociological research” on disaster. Several scholars later used this important tool to generate additional hypotheses about organizational behavior in disasters (e.g., Stallings, 1978; Drabek & McEntire, 2003, p. 98).

In the 1980s and 1990s, the enormous contribution of sociology as well as social science scholars from the United States and Europe in disaster studies became significant. During this decade, the sociological perspective primarily examined the various dimensions of social and cultural difference—including race, ethnicity, age, and class—in the study of disasters (e.g., Bolin & Bolton, 1986; Perry & Mushkatel, 1986). The bulk of the sociological research during this time was directed toward topics such as disaster policy, emergency-management organizations, warning systems, and so forth and often relied on a model of system adjustment (Drabek, 1986; Quarantelli, 1996). Although more European scholars became interested in disaster research, the enormous contribution of American social-science scholars on this topic since the 1980s remained significant (van Niekerk, 2012).

One major issue confronting sociologists in studying disasters revolves around the perspectives they apply in their research. Although attempts have been made to indicate some substantive trends in the development of sociology, there is no coherent discussion in the field of sociological studies regarding the development of disaster research (Nasreen, 2004). Most sociologists do not elaborate on their theoretical perspectives that guide their field work, albeit elements of functionalism, structuralism, symbolic interactionism, and other sociological frameworks can be identified from their work. Some have pursued the insights of social constructionism and moved into research agenda that are usually ignored by those rooted within a collective-stress viewpoint. Other scholars in disaster studies are calling for a paradigm shift (Drabek, 2005, pp. 8–9).

Despite this theoretical development in disaster research, sociologists continue to neglect the normative framework in studying disasters. Also, disaster research remains underdeveloped and marginal in the field of sociology in general. Sociology of disasters remains resistant to changes in the broader sociological landscape (Tierney, 2007). And lastly, most of the disaster scholars are still American, thus limiting the research mostly to a single culture at an advanced stage of development (Laska, 1989).

2.2 Substantive Trends in Disaster Research

Understanding disasters as systemic events have always characterized sociological research on disasters from its origins during World War II to the present day, despite the fact that the current trend has clearly become multidisciplinary in more recent decades with strong intersections among the natural, social, and policy sciences (Kreps, 2001). Disaster scholars view disasters as a mix of “natural” and “human-made” or “technological” causes and as a historically conditioned process (Quarantelli, 2005). This trend can be seen in the social sciences. Over the last couple of decades, disaster sociologists, as well as scholars from psychology, political science, anthropology, geography, and disaster research centers, came to see disasters as multifaceted. Thus, current theorizing in sociology and the social sciences on disasters tend to be based on diverse orientations such as social constructionism, postmodernism, conflict-based, and political economy theories. Research on hazards and disasters during the past 30 years has been based on the notion that individuals and groups choose how to cope with or adjust to hazards in their natural and constructed environment. Consequently, public and private policies that have been developed based on this paradigm have a management strategy with the goal of decreasing hazard-related losses, organized conceptually around a four-stage cycle of preparedness, response, recovery, and mitigation (Peek & Mileti, 2002, p. 514). The existing research trend on disasters and hazards in sociology and the social sciences tends to focus on describing the conditions that can lead to disasters and achieving a prevent-and-empower disaster response. At present, three popular social concepts and perspectives, namely, social vulnerability, risk, and resilience, tend to dominate disaster research and literature in sociology as well as in the social sciences.

2.2.1 Risk

The first major concept and popular perspective in the current disaster research is risk. Risk research encompasses a broad range of topics on the probability of disaster events and their effects to communities. Risk scholarship flows from the work on technology; natural disasters; individual, group, and organizational decision-making; politics; stratification; environment; and social-impact assessment (Fredenburg, 1986; Dietz, Stern, & Rosa, 1993). The fields of risk assessment and risk analysis are aimed at identifying, measuring, characterizing, and evaluating the outcomes resulting from natural and technological hazards (Lowrance, 1976; Crouch & Wilson, 1982; Mitchell, 1990; National Research Council, 1993; 2006). “Disaster risk is socially distributed in ways that reflect preexisting inequalities, in that some groups are more prone to death, injury, economic loss, and psychological impairment in the wake of differing hazards (Wisner et al., 2004). Specifically, children, the elderly, women, racial minorities, the poor, persons with physical or

mental disabilities, and immigrants have been identified by both disaster researchers and policy makers as especially vulnerable to the harmful impacts of disaster (Cutter, Boruff, & Shirley, 2003)."

Disaster risk is generally viewed either in a constructivist or objectivist manner. Constructivist thinking views disaster as a social construct and examines the social representations and perceptions as well as the interaction between different social actors and phenomena. It views the conditions of risk, as well as the attitudes to risk, as being rooted in societies that can inevitably lead to disasters. Objectivist or realist thinking, which is popular in the natural and physical sciences, believes that risk can be quantified and objectively judged (van Niekerk, 2012, p. 4).

Other social-science perspectives have influenced the products and risk assessments in disaster study more than sociology (Dietz et al., 1993). In particular, the field of anthropology examines how culture and ideology shape societal definitions of risk. Douglas and Wildavsky (1982), for instance, argue that risk is not a reflection of objective reality but rather a cultural phenomenon that reflects societal and group values and that it must be interpreted in the light of their broader cultural functions. The fields of psychology and social psychology, which dominated risk research in the social sciences, focus on "how individuals perceive various risks, what factors enter into the estimation of risk, and how people make risk-related choices" (Tierney, 1999, p. 218).

Despite its popularity, not all scholars rely on the factor of risk in assessing hazards and disasters. This concept is not without criticism from sociologists. Zinn (2009), for instance, argued that it is obviously unreasonable to "over-rely" on risk because it is too narrow a concept to any sociological research. It is particularly harmful to the sociological approach, subscribing to the technical and "rationalist" understanding of risk or the economic approach grounded in instrumental rationality and a conventional model of rationality. Although some sociological work is based on rational actor approaches (Coleman, 1990; Gambetta, 1988), most sociologists find this approach unsatisfactory in dealing with situations in which others are involved. Although research using risk framework recognizes that risks are shaped by structural and institutional contexts, it has no integrating theory. The distinctive contribution of this perspective is its emphasis on the role of shared ideas and normative frameworks, as understood in terms of the contribution of cultural and social factors, to the understanding and prioritizing of risks and responses to them among all those involved (Zinn & Taylor-Gooby, 2006).

2.2.2 Social Vulnerability

Another popular concept and theorizing in the sociology of disasters is social vulnerability. The social-vulnerability perspective in viewing disaster has grown in prominence in the sociology of disaster literature during the past decade. Although this concept is often cited by disciplines of applied research, there is really no common working definition for the term (Birkmann & Wisner, 2006). The various

definitions of vulnerability in the literature depend on the conceptual models and frameworks of authors (Adger, 1999; Downing, Olsthoorn, & Toi, 1999; Cutter, 1996; See & Porio, 2015). “Vulnerability is a term used in the field of risk, hazard, and disaster management as well as in the areas of global change and environment and development studies” (Weichselgartner, 2001). The UNISDR (2004, p. 16) defines it as “the conditions determined by physical, social, economic and environmental factors or processes which increase the susceptibility of a community to the impacts of hazards” (Palliyaguru et al., 2014). It can also refer to “the susceptibility of groups to the impacts of hazards, as well as their resiliency, or ability to adequately recover from them” (Cutter & Emrich, 2006, p. 103). The concept of social vulnerability “highlights differences in the human capacity to prepare for, respond to, and recover from disasters. It varies over space and time, and among and between social groups, largely due to differences in socioeconomic and demographic characteristics” (Hummel, Cutter, & Emrich, 2016). Scholars who employ this concept believe that vulnerability is partially the product of social inequalities, i.e., those social factors that influence or shape the susceptibility of various groups to harm and that also govern their ability to respond (Cutter, Boruff, & Shirley, 2003, p. 243). Disasters, such as volcanic eruption, flood, or typhoon, are only a triggering agent. What determines vulnerability is the quality of the existing infrastructure or degree of resilience of the affected community to the triggering agent. To them, the vulnerability can never be isolated from the social, cultural, economic, and political realms that influence decisions regarding settlement patterns and methods for building (McEntire, 2001). It is a product of decisions that are structured by the normative systems, be they legal or cultural. These decisions create the vulnerable environment. Thus, vulnerability is ultimately a product of an interplay of various normative systems of individuals and groups in society that created a disaster-prone situation.

The concept of vulnerability in research derives from a specific set of historical circumstances relating to abuses in biomedical research. One major criticism of this approach is that scholars who use this concept have labeled so many people and groups as vulnerable that the concept has lost much of its force. The vulnerability paradigm in disaster research has limitations. The concept of vulnerability is an extraordinarily elastic concept, capable of being stretched to cover almost any person, group, or situation, and then of being snapped back to describe a narrow range of characteristics such as age or incarceration. The concept gathers people with widely varying characteristics and capacities under one large umbrella without analyzing whether or not they all fit. It is both too broad because it includes too many categories and too narrow because it fails to include others at risk for different reasons other than their cognitive or dependent status (Levine, 2004, p. 398). In disaster research, participants should not be automatically considered vulnerable unless they are legally designated as such.

2.2.3 *Resilience*

Resilience is another popular perspective in disaster research. The term “resilience” has its roots in the sciences of physics and mathematics. It was originally used to describe the capacity of a material or system to return to equilibrium after a displacement (Bodin & Wiman, 2004; Gordon, 1978). When applied to people and their environments, “resilience” is fundamentally a metaphor that implies strength, capacity, elasticity, and evolution (Alexander, 2013a). Although this concept began to be employed as the inverse of human vulnerability in the disaster risk–management community in the late 1970s with increased use in recent years (Birkmann, 2006; Gaillard, 2010; Torry, 1979), some scholars believe that resilience is not to be seen as the opposite of vulnerability. They accede that both concepts may overlap, but they assert that it can best be understood as discrete concepts because perceiving these as “two sides of the same coin” leads to unproductive circular reasoning (so that no new policy options arise despite the linguistic turn) (Klein, Nicholls, & Thomalla, 2003; Matyas & Pelling, 2015).

The term “resilience” has different names. “Ecologists call it an adaptation, economists call it coping capacity, anthropologists call it bounce back better, and in engineering, it is best known as the capacity of a structure to withstand shock while retaining function” (Dahlberg et al., 2015, p. 44). The original notion of the term comes from a Latin word that means “jump back” or “bounce back” (Manyena et al., 2011). In the disaster context, resilience can be understood as the ability of people to recover within the shortest possible time with minimal or no assistance (Malalgoda, Amaratunga, & Haigh, 2014). Although many interpretations of the term abound in the disasters community, this understanding of resilience has proved to be persistent.” Thus, the United Nations Strategy for Disaster Reduction (2009) defines resilience as:

the ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions.

The rapid increase of the concept of resilience in the disaster risk–management (DRM) policy landscape started with the Hyogo Framework for Action 2005–2015 (HFA), whose subtitle, “Building the Resilience of Nations and Communities to Disasters,” places the concept at the core of DRM aspirations (Matyas & Pelling, 2015a, b). “The intimate connections between disaster recovery and the resilience of affected communities have become common features of disaster risk reduction programs since the adoption of the HFA. Thus many disaster research is now giving more attention to the capacity of disaster-affected communities to ‘bounce back’ or to recover with little or no external assistance following a disaster. This highlights the need for a change in the disaster risk reduction work culture, with the stronger emphasis being put on resilience rather than just need or vulnerability” (Manyena, 2006).

Resilience as a concept and perspective to view disasters has the potential to offer a more systemic and cross-cutting approach to disaster-risk reduction, climate-change adaptation, and the humanitarian sector. Resilience is an important goal for two reasons. First, because the vulnerability of technological and social systems cannot be predicted completely, resilience—the ability to accommodate change gracefully and without catastrophic failure—is critical in times of disaster (Foster, 1997). If people know exactly when, where, and how disasters would occur in the future, they could engineer their systems to resist them. Because hazard planners must cope with uncertainty, it is necessary to design cities that can cope effectively with contingencies.

The concept of resilience has since been applied to describe the adaptive capacities of individuals (e.g., Bonanno, 2004), human communities (e.g., Brown & Kulig, 1996/97; Sonn & Fisher, 1998), and larger societies (e.g., Adger, 2000). Because references to resilience have continued to increase, so too have criticisms that the concept may be inappropriate, imprecise, or “glittery” (Norris et al., 2007). Some skeptics argue that the pursuit of resilience, particularly community resilience, is laudable but impractical. Using a conceptual framework based on theoretical models of mitigation, recovery, and structural–cognitive interaction, Tobin (1999), for instance, examined data from the state of Florida to assess the possibility of developing sustainable, resilient communities. Analyzing the state as a whole rather than individual cities, he concluded that major changes in political awareness and motivation would be necessary to overcome obstacles to resiliency and sustainability from Florida’s existing demographic traits, spatial patterns, and hazard conditions (Godschalk, 2003). Resilience, like social vulnerability, and risk as concepts and perspectives in disaster research may characterize some social aspects of disasters but not their entire structural components. The key to a holistic understanding of the nature of hazards and disasters requires a sociological examination of the stable pattern of social relationships existing in a particular group society or group where the disaster event took place or what sociologists call “the social structure.”

2.3 Sociology of Disasters and the Social Structure

The study of the social structure and social system of disaster situations has apparently been sidelined in disaster research. Yet, disasters do not only alter the geophysical components of society but also its social structure. After a disaster event, the existing social structure of society is disrupted. Its stability is shaken, and the prevailing social system is replaced by a new emergent structure that tends to be incoherent, polycentric, and pluralist in the normative system. Sociologists do not just study the natural or human-made “disaster agents,” such as hurricanes, flood waters, or hazard spills, but also the disruption of everyday social activities

resulting from the potential or actual impact of these agents (Fischer, 2003, p. 93). Some sociologists argue that disasters may expose the key values and structures that define communities and the societies they comprise (Drabek, 2005, p. 3). In this case, they discover that the study of structural change occurring during and after the precipitous event is crucial in the study of disasters. Thus, they examine the altered social structure in the aftermath of the impact of a disaster agent when it causes widespread destruction and distress. In short, disaster sociologists study the change in social structure under specific circumstances (Fischer, 2003, p. 94).

The focus of the sociological research must be the status quo (i.e., the structure before the disaster) and the disruption (or big mess) thereafter leading to the adjusted social structure during the post-disaster recovery phase. The greater the degree of disruption (in terms of scale, scope, and time), the more the social structure is affected, thus leading to the emergence of new norms and roles replacing the routine with the “more appropriate” behavior, e.g., search and rescue, feeding survivors (Fischer, 2003, p. 97). In this case, disaster-governance regimes become polycentric, multi-scale, and weak in integration as well as nested within and influenced by overarching societal-governance systems (Tierney, 2012). Therefore, coordination between state and the various post-disaster actors and organizations—each with their own normative systems, especially in cases of large-scale disasters—becomes problematic. The greater the impact of the disaster, the greater is the number of actors and organizations that are involved in the recovery process, thus making the normative order become more heterogeneous and intricate. Then the implementation of post-disaster recovery (PDR) projects becomes prone to more negative unintended consequences. The enforcement of the intended PDR goals becomes amorphous and polycentric which can be detrimental to the rehabilitation of disaster victims.

2.4 The Social System and the Normative System

Studying the altered social structure during the post-disaster situation requires examining the normative orders. The social system is a system of action, and its structural aspects are the relatively stable interactions of individuals around common norms. It is made up of the interactions of individuals governed by norms. The regularity or patterning of interaction becomes possible through the existence of norms, which control the behavior of the actors. Because individuals share the same “definition of the situation” in terms of such norms, their behavior can be intermeshed to produce a “social structure.” Indeed, a stabilized social system is one in which behavior is regulated in this way and, as such, is a major point of reference for the sociological analysis of the dynamics of social systems (Lockwood, 1956, p. 135). The actual disaster event can initially trigger solidarity among victims and rescuers, but a post-disaster setting can evoke pluralist and discordant responses from various actors and groups during the reconstruction process. The regularity of the social system is gradually replaced by a novel one, made of a loose

amalgamation of normative orders with a weak overall monitoring and law-enforcement system to guide post-disaster recovery.

With the plurality of actors during and after disasters, perceptions can vary on how to deal with the disaster event. “Although there has been rising global awareness and lesson sharing on the human catastrophes associated with the proliferation of natural disasters, there remains many misunderstandings on appropriate approaches to recovery, given the specific socio-cultural, political and economic contexts of the affected zones” (Brazzard & Raffin, 2011, p. 417). Bankoff and Hilhorst (2009) aptly describe the diversity of views or ways of “seeing” disasters by different actors and organizations:

Different actors ‘see’ disasters as different types of events and, because they perceive them as such, they prepare for, manage and record them in very different ways. State and state agencies ‘see’ disasters in one way; the people directly affected ‘see’ them in another (not least according to the nature and extent of their vulnerabilities); non-governmental organizations (NGOs) involved in providing needed services to communities ‘see’ them in still other ways (depending on their ideological complexion); whereas scientists, technocrats and experts have their own variants of ‘seeing’. The media, too, if it does not exactly ‘see’ risk in a particular way certainly helps to shape public discourse about it (Benthall, 1993; Stallings, 1990, p. 82). These differing ‘seeings’ not only shape how actors and stakeholders perceive disasters but also largely influence what actions are taken before, during and after an event. Actors and stakeholders do not respond directly to situations: rather, the purpose and nature of their actions are determined through mediating orientations that dispose them to act in certain ways (p. 687).

Varying worldviews and perceptions imply different actions in responding to the post-disaster process. In any social structure, the actions of actors are shaped by their normative orientation. In a post-disaster setting, the constellation of legal and social normative orders tends to overlap and expand depending on the number of actors joining in the rehabilitation and reconstruction process. “Sources of governance in disaster management which are traditionally associated with one set of actors (private governance with private actors or international law with international institutions, for example) are increasingly co-produced through the involvement of a range of actors in their formulation and implementation for reasons of capacity, resources, or reach” (Newell, Pattberg, & Schoeder, 2012, p. 366). With the rise of megacities, this growing multiplicity of actors and sources of governance in disaster management requires that disaster sociologists examine the plurality of normative systems and their influence on the implementation of projects in the post-disaster recovery process.

2.5 The Normative Pluralist Approach

The substantial increase in disasters around the world has led to an increase of international, national, and local laws and norms on disaster management. Despite the emergence of international norms, comparatively little scholarly attention has been given to compliance of disaster efforts with these normative frameworks as well as on how international laws and norms interact with national and local norms.

There is apparently an absence of scholarly attention on the legal and normative frameworks that underpin disaster situations (McDermott, 2013, p. 1). Although there is a growing body of research on disaster governance, examining the intertwining legal and non-legal normative systems after large-scale disasters and how they affect post-disaster projects, such housing and resettlement, is generally missing in disaster research and particularly in sociology of disasters.

Sociology has explored some societal aspects of disasters. However, it has not scrutinized closely the legal and social normative orders that shape the PDR in disaster-prone countries with rigid regulatory systems and collectivist cultures. Sociology has examined the behavioral, organizational, and institutional aspects of natural disasters but not the normative systems that influence disaster management, particularly during the PDR period. Consequently, the sociological stance of the subfield of the sociology of law, which specifically examines the dynamics of law and the social order, continues to be ignored by disaster scholars. If the sociological perspective sees disasters as social phenomena, then sociologists must analyze the normative structures that frame, interpret, and actualize disaster response and recovery. Together with other legal scholars, it is incumbent upon sociologists to undertake an intensive effort to examine and reform the interlocking structures of governance and regulation that pertain to disasters (Farber, 2012, p. 20).

Seeing disasters as systems rather than arenas of normative conflicts has sidelined the socio-legal approach in sociological research. The mainstream sociological research, which is guided either implicitly or explicitly by systems concepts, views disasters as enhancing social solidarity and suppressing conflict (Tierney, 2007, p. 506). The pioneering work of sociologists Quarantelli, Dynes, and White has established the parameters of mainstream disaster research that views disaster situations toward atomism rather than pluralism; thus, it unwittingly disregards the normative pluralism aspects of disaster situations (Iversen & Armstrong, 2008). The fields of social-legal studies, including criminal justice and the sociology of law, which primarily examine the normative orders, have been relatively absent or, at least, have not been explored well in the sociology of disasters (Deflem, 2012, p. ix). This neglect seems to be ironic because disaster response is complex and governed by a multiplicity of actors and normative systems. A post-disaster situation can consist of multiple competing formal and informal normative forces instead of a unified and interrelated system that suppresses conflict. The emergent character of a post-disaster recovery situation requires an ad hoc multi-organizational set-up, which can lead to discordant and conflicting responses from the various disaster agencies acting according to their normative and regulatory frameworks and political orientations.

The normative pluralist approach views quantity and harmony of different formal and informal regulations that underpin disaster management as crucial in effecting successful post-disaster recovery projects. The more actors and normative systems surrounding a PDR project, the more difficult it is to achieve the intended goals. In this case, the success or failure of regulatory compliance of the PDR project will depend to a large extent on the readiness of actors to accept responsibility to implement it at every level (Roosli & O'Keefe, 2011). PDR projects

require a concerted effort that will support the foundations of community sustainability and capacity building, which will eventually decrease risks and vulnerabilities to future disasters (Burton & Kates, 1993). Cooperation from all levels in the disaster mechanism and the public is the ultimate goal to deliver a national disaster program (Roosli & O’Keefe, 2011).

Large-scale post-disaster recovery project is essentially multiple and pluralist in terms of normative and regulatory orders. The government, which often leads the entire process, is assisted by a variety of stakeholders and organizations, both public and private as well as local and international. These stakeholders involved in PDR projects, such as housing and resettlement projects, possess their own set of formal and informal norms of “doing things” that determine their “repertoire of disaster-recovery actions.” Their norms tend to clash or conflict with one another. In post-disaster housing projects, it is a near-impossible balancing act to satisfy all parties involved (Daly & Brassard & Raffin 2011). Thus, coordinating the needs and aspirations of beneficiaries with the means and systems of donors and implementers can be complex, highly context specific, and rarely seamless (Fallahi, 2007; Tas, Cosgun, & Tas, 2007; Saunders, 2004; Daly & Brassard, 2011). “Cooperation from all levels in the disaster mechanism and the public is the ultimate goal in order to deliver a national disaster program” (Roosli & O’Keefe, 2011). However, there is usually a lack of unified and coherent legal framework and law enforcement system that can monitor, coordinate, and harmonize the various normative orders of actors and organization to successfully complete the PDR projects. As a result, the accountability of PDR actors becomes difficult to ascertain, and corruption of various forms can thus penetrate the different phases of the project’s implementation. With the lack of a stable law-enforcement system that effectively regulates people’s action in large-scale calamities, disaster behavior that implements post-disaster projects can easily be justified by actors in a variety of grounds—legal, political, economic, social or cultural—other than what the official rules dictate.

Different types of organizations engaged in PDRs are expected to share tasks and resources. But there is usually no clear-cut responsibility or familiarity due to the crossing of jurisdictional boundaries and the absence of standardization during emergency situations (Auf der Heide, 1989). With the usual absence of a clear standard of measuring accountability during a post-disaster situation, actors and organizations in the PDR system can engage in a power struggle to influence the outcome of the different aspects of the PDR projects. In one disaster-recovery project, for instance, actors and groups can become “insiders” and “outsiders,” each extending their disaster response according to their goals and normative frameworks. A study by Espia and Fernanadez (2015) on government and NGO response to the Guimaras oil spill in the Philippines in 2014, for instance, revealed that in the absence of formal rules, the NGOs tended to counteract and compete with the local government’s designed response framework, thus reaffirming their outsider status in the rehabilitation process. The so-called entrepreneurial brokers can also emerge in a post-disaster setting and play a major role in governance networks of the PDR projects. These brokers can play as “middlemen” or intermediaries of the various network ties to mobilize the coordination system during post-disaster recovery

(Saban, 2015). The “corrupt” and illegal practices by some international and local disaster groups that were allowed or were contracted by the government in housing and resettlement projects in the spirit of what Klein (2008) calls “disaster capitalism” indicate that PDR is an arena of contestations and consisting of conflicting normative forces.

2.6 Legal Pluralism and the Social Normative System

“Scholarly assumptions about the state as a unitary actor and as a homogeneous, monolithic unit and about state centrality as the foundation of international politics have gradually crumbled in favor of more multicentric views of the world” (Newell, Pattberg, & Schoeder, 2012, pp. 368–369). The monist approach to the state’s legal system has been debunked by legal pluralism. The idea of “legal pluralism” emerged in the early 1970s as a counterbalance to the the-dominant notion of “legal centralism,” according to which law is and should be the law of the state, uniform for all persons, exclusive of all other law, and administered by a single set of state institutions. In lieu of such state-centric and monolithic conceptions of law, advocates of legal pluralism claimed that law is not a single system necessarily linked to the state as a unified entity, but rather a complex of overlapping systems or normative orders” (Sartori & Shahar, 2012, p. 638). The state’s legal system determines whether governance is multiple and does not operate in a unified manner.

The normative pluralist approach does not only see a pluralism of laws but also of informal norms in the social order. It sees legal pluralism as one of the species of the greater normative pluralism in society. It views the social structure as one system of interacting, conflicting, and intertwining legal and social normative systems. The social realm consists of a plurality of interacting, overlapping, active regulatory systems of every kind from religious systems, to corporations, to sports leagues, to the family. The normative-system relationships between the official legal system and the social normative system are “various and complex, sometimes conflicting, sometimes complementary, sometimes benign, sometimes cautious engagement, sometimes ships passing in the night. People can invoke these coexisting systems in various ways for various instrumental and normative reasons, regularly and deliberately pitting one system against another. The official legal realm affects and is affected by the multiple regulatory orders in the social realm; the regulatory orders in the social realm affect and are affected by the official legal realm” (Tamanaha, 2008, p. 90).

When applied to disaster management, normative pluralism views disaster behavior of various actors and groups in response to a massive disaster as emanating from different normative or regulatory regimes, some of which may be formed after the disaster (Schneider, 1992). Thus, significant incoherence and incongruity of interpretation and action in implementing PDR projects can lead to more negative unintended consequences and deviations that can ultimately affect

the success and failure of PDR projects. Outside the official legal system is the social realm of intercourse and regulation. This domain consists of socially created and coordinated regulatory systems produced by individuals acting on shared ideas and beliefs with particular projects in specific contexts. They have effects, consequences, and implications of all kinds for official state legal systems as well as for the social arena generally. In disaster settings, a multiplicity of actors and governance regimes operate in diverse and overlapping spheres of authority and normative systems (Newell, Pattberg, & Schoeder, 2012, pp. 368–369).

As society becomes more urbanized, disaster effects become more large scale. With the growing magnitude of disaster effects, disaster response becomes more complex, which requires a large-scale infrastructure beyond the capacities of victims to mobilize themselves or within the community. Consequently, disaster response, which used to be simple and limited to small territories, has become massive and complicated due to environmental destruction caused by intensifying urbanization and industrialization, particularly in Asia (Douglass, 2013). The network of actors and organizations involved in rehabilitation becomes complex and includes (1) public actors such government and civil society organizations, (2) international and regional environmental-governance arrangements, (3) public–private partnerships such as alliances between the government and NGOs, transgovernmental and transnational networks, and partnerships, and (4) private actors (Newell, Pattberg, & Schoeder, 2012). Each kind of actors can have its own set of social networks and normative orientations set in a multi-level arrangement.

A disaster response within a more cohesive legal order can more likely achieve its intended goals compared with a disaster situation where the legal orders are complex or full of gaps with the absence of a strong and centralized post-disaster law-enforcement system. In the latter case, the social normative orders, with their informal regulation and enforcement systems, are more likely to create negative unintended consequences that can shape the final response of PDR projects. Public and private organizations—as well as informal groups, power cliques, foreign and local donors, NGOs, POs, and other groups—tend to have their own established formal and informal rules of engagement within their own PDR domains. When they participate in common PDR projects, their normative orientations often clash with each other. This conflict can also be seen among public organizations. Different government agencies must operate at cross-purposes to achieve the overall PDR goals; conflict and inconsistencies within and between relevant agencies can occur, which eventually hamper law enforcement.

2.7 Regulation in High-Context Cultures and PDR Housing

The regulatory normative system, more specifically the non-legal cultural regulatory system, can be crucial to the success of PDR projects in high-context cultures. Sociologists and anthropologists have started to examine the latent and informal

communication and other cultural dimensions of contracting. Edward T. Hall distinguishes low-context from high-context cultures. In high-context cultures, many things are left unsaid and require cultural context to illuminate the meaning. North America and Western Europe are regarded as low-context cultures, which value logic, facts, and directness, whereas high context cultures in Asia, Middle East, Africa, and South America are relational, collectivist, intuitive, and contemplative emphasizing interpersonal relationships (Hall, 1976). Hooker (2003) divides cultures into rule-based and relationship-based and assumes a continuum between different cultures that results from multiple combinations of features of both types of cultures (Hooker in Nystén-Haarala, Bogdanova, Kondakov, & Makarova, 2015, pp. 113–114). The Global North, with its low-context cultures, follows predominantly a rule-based normative order, thus putting more emphasis on legal and formal regulation in pursuing PDR projects. But the Global South, with its high-context cultures, primarily implements a relational and personalistic approach to contractual relations in PDR projects.

The existence of multiple relationship-based normative orders vis-à-vis the state's legal system in high-context cultures, such those in Southeast Asian countries, poses serious problems in regulating and implementing PDR housing projects. Regulation determines access and use of resources for PDR projects. This can be formal or informal as well as legal or social. The formal and legal regulations are provided by the state and its bureaucratic apparatuses. However, the informal and nonlegal regulations that intertwine with legal regulation can be determined by the social and cultural normative standards of social groups in society. The official legal realm affects and is affected by the multiple regulatory orders in the social realm; the regulatory orders in the social realm affect and are affected by the official legal realm (Tamanaha, 2008). The official legal system interacts with the social realm of intercourse and regulation. And this social realm is full of a plurality of interacting, overlapping, active regulatory systems of every kind from religious systems, to corporations, to sports leagues, to the family. "Like the official legal system, these are socially created and coordinated regulatory systems produced by individuals acting upon shared ideas and beliefs, with particular projects in specific contexts. They have effects and consequences and implications of all kinds for official state legal systems, as well as for the social arena generally" (Tamanaha, 2008). When formal regulatory mechanisms are weak or ineffective, communities seek other informal regulations to translate their preferences into reality. When formal regulation leaves a considerable gap between the actual performance and what people locally prefer, the informal normative orders, or what some scholars call "practical norms," take the stage, so to speak, to informally regulate areas that are not legally regulated. This influence of social-regulatory systems can breed many negative unintended effects when implementing PDR projects.

In an ineffective formal regulation regarding the access of disaster victims to government housing, informal regulations of various agencies involved in the housing project can control such access. This informal regulation that governs access to a public housing project for disaster victims is determined by heterogeneous informal normative orders. Therefore, the regulation that governs the

availability of post-disaster housing to beneficiaries is an interplay of formal and informal regulations that are highly unfavorable to the most vulnerable group of disaster victims.

2.8 Red Tape, Corruption, and PDR in Southeast Asia

Aside from the informal and social normative systems, red tape and rigid bureaucratic regulation can also be crucial for the success or failure of PDR projects in disaster-prone countries of Southeast Asia. Some countries with high juridical legal pluralism in Southeast Asian countries are also countries with high red-tape and corruption indices. Indonesia and the Philippines, for instance, are frequently ranked high in corruption index by Transparency International (TI) and listed low by the yearly surveys of the World Bank on the ease of the doing-business due to bureaucratic burdens and rigid business regulation. Interestingly, these countries are disaster-prone and have serious problems in post-disaster recovery programs, especially concerning the construction of resettlement and emergency-shelter projects. Cultural and “practical” relational norms tend to sidestep the rule-based ideals of government-initiated PDR housing projects.

The normative landscape in the Global South, particularly in the collectivist cultures of countries under Association of Southeast Asian Nations (ASEAN) countries, tend to be more personalistic, informal, in-group oriented, and pluralist in normative systems compared with the individualist and rights-based orientation of contracting in the Global North. This pluralist legal and cultural normative system can breed red tape and corruption, which can deviate PDR goals in large-scale reconstruction projects. The term “red tape” refers to “the rules, regulations, and procedures that entail a compliance burden but do not achieve the functional objectives of the organization” (Bozeman, 1993). To minimize red tape in an environment of legal pluralism, there must be a high degree of trust between rule-producers and subjects of the rule. In some cases, those producing new and extensive rules and regulations are in a dynamic relationship with those complying with the rules and regulations, such that the compliance level may depend on particular specifications of the rules and more on the degree of trust and the recent history between producers of rules and those affected by them (Dirks & Ferrin, 2001). In many cases of post-disaster recovery projects in developing countries such as the Philippines, the rules and regulations for low-cost housing and relocation are already in place, but they do not necessary address the PDR concerns of disaster victims. Thus, the disaster victims must comply with numerous pre-existing and unnecessary legal and bureaucratic requirements that delay their recovery and resettlement. In this case, these obligations and procedures constitute red tape and additional burdens to disaster victims. To avoid red tape and create short-cuts in these tedious legal and bureaucratic procedures and to expedite the PDR resettlement process, corruption occurs. In a high-context and collective culture where legal pluralism and red tape dominate government regulatory system, the informal and cultural norms can create procedural short-cuts colonize the rule-based PDR process of the post-disaster housing projects of the state.

2.9 The Philippine Case

It has been observed that the dominant response and action on disaster management in Southeast Asia had been on post-disaster activities and particularly on emergency response” (Bildan, 2003; Jegillos, 2003). Of the 10 countries in the world most imperiled by climate change (in terms of the number of people likely to be affected), 4 are in Southeast Asia: Vietnam, Indonesia, Thailand, and the Philippines (Elliot, 2012, p. 40). The Philippines is one of the most disaster-prone Southeast Asian countries. Approximately 70% of its disasters are due to hydro-meteorological phenomena such as typhoons and flooding. Typhoon Ketsana, which hit the Philippines in 2009, showed differential vulnerabilities of the population. The most vulnerable regions and communities in the country are those that are highly exposed to the changes expected in the climate and have limited adaptive capacity. The Philippines has limited economic resources, low levels of technology, poor information and skills, poor infrastructure, unstable or weak institutions, and inequitable empowerment and access to resources have little capacity to adapt and thus is highly vulnerable to disasters (IPCC, 2001) (Penalba, Elazegui, Pulhin, & Cruz, 2012, p. 310). Disaster victims in the Philippines are usually the urban poor who are totally dependent on social services. These people are usually less able to respond effectively to disasters (Cutter, Boruff, & Shirley, 2003; Morrow, 1999; See & Porio, 2015). The socially and economically marginalized population are mostly ignored during disaster recovery.

Aside from being vulnerable to climate change and disasters, the Philippines is also known for legal pluralism and bureaucratic burdens in real-estate business. Establishing a post-disaster housing and relocation program for disaster victims, such the flood victims of Typhoon Ketsana, requires compliance with the multiple legal and bureaucratic requirements. The rigid regulatory requirements attending housing and land development contribute significantly to greater costs and increased inaccessibility of low-cost housing. Due to the different permits, clearances, licenses, and procedures that must be obtained from various agencies other than that of housing, completion of these requirements often takes 2.5–3 years (Valte, 2002). Red tape and corruption often dominate the low-cost housing system that assists homeless disaster victims in the country. To circumvent the tedious process of securing permits and registrations, real-estate developers and contractors often provide bribe money to some unscrupulous government bureaucrats to speed up real-estate transactions. This “hidden cost” of corruption is ultimately passed on to end-users in the form of high-priced and/or sub-standard housing products” (Valte, 2002). To government-accredited contractors and developers, post-disaster housing, just like any other low-cost housing in the government, is a huge business enterprise. The extra costs they incur in securing the necessary permits, licenses, and other bureaucratic requirements due to corruption are passed on to the government financing institutions, which are obliged under a joint venture agreement to purchase their housing units. Ultimately, the homeless typhoon victims will

eventually become recipients of the developer's poorly constructed houses in the government's disaster-prone relocation sites.

Finally, access of the economically disenfranchised disaster victims to housing projects usually requires political patronage or sponsorship of politicians. The rigid formal regulation that needs multiple requirements for housing applications implies more suffering for disaster victims. It requires sponsorship from politicians and government officials from different public agencies who can facilitate the approval of their housing applications. The informal regulation based on cultural norms further increases the difficulty of the disaster victims to own their own houses in relocation areas. In this case, the popular informal normative systems, which are based on some dominant Filipino values —also known in Philippine politics such as *palakasan* (patronage), *utang-na-loob* (debt-of-gratitude), *pakikisama* (comradeship), and the *Padrino* (patronage) system. These cultural values tend to dominate the official normative system to overcome red tape, rigidity in housing regulation, and bureaucratic corruption. This dominance of informal cultural norms can eventually lead to negative unintended effects to resettlement and housing projects and sidelining of the government's rule-based PDR goals as articulated in the country's primary disaster-management legislation, i.e., the Philippine Disaster Risk Reduction Management Act of 2010 (PDRRMA).

2.9.1 *Super Typhoons and Damaged Houses in the Philippines*

Owing to a greater demand in the market, the backlog for Philippine housing currently stands at 5.5 million. Industry players said that this might even increase through 2030 if the demand for socialized houses or mass houses is not addressed by the government and private sector. Socialized housing under the Urban Development and Housing Act of 1992 (UDHA) involves houses and lots or home lots only developed by the government or private sector for underprivileged and homeless citizens.¹

One of the major cause of this backlog is the partial and total destruction of houses, especially those of the urban poor, by destructive typhoons and other forms of disasters that usually hit the country every year. The Philippines is the third most disaster-prone country in the world with 50.3% of its total 300,000 km² area (across 7107 islands) susceptible to disasters. Approximately 81% of the population is vulnerable to hazards and disaster risks ranging from landslides, storms (and typhoons), floods, storm surges, earthquakes, tsunamis, droughts, and volcano eruptions. During the last decade, the country has been hit by major disasters that rendered thousands of families homeless (Environmental Science for Social Change, 2014, p. 6). In all of these super typhoons, the poor were usually the most

¹“Philippine housing backlog is 5.5 M SHDA targets to build a million units by 2016”. Retrieved from <http://www.philstar.com/cebu-business/2015/07/13/1476445/philippine-housing-backlog-5.5m-shda-targets-build-million-units>.

affected group and rendered homeless by the disaster event. In urban areas, the poor who concentrate in informal settlements at high-risk areas, such as floodplains, were the most vulnerable to flooding and home damage. Similarly, in rural areas, it is the poorest who end up living in dangerous areas, such as river embankments, that received most of the effects of these super typhoons (World Bank, 2009).

Typhoon Ketsana is the first super typhoon in recent memory that strongly hit the Philippines and destroyed thousands of houses (185,004). Tropical Storm Ketsana, a category I storm, (locally known as Typhoon Ondoy) hit the Philippines on September 26, 2009. It brought an unusually high volume of rain, which inundated the central part of Luzon. During the 12-hour period of the storm on September 26, the rainfall was recorded as approximately 450 mm, considered an extremely rare occurrence. Thus, it caused extensive flooding in the Metro Manila area and the neighboring Rizal province including the cities of Antipolo, Makati, Malabon, Marikina, Muntinlupa, Pasig, Quezon, San Juan, Taguig, and Valenzuela (World Bank, 2009, p. ix). The National Disaster Risk Reduction Management Council (NDRRMC), the government's national-disaster agency, estimated the total damage of Ketsana at PHP 10.9 billion. Most of the homeless victims were assigned to different government resettlement areas.

Ketsana was not the only super typhoon that hit the Philippines and damaged thousands of homes in the current decade. As listed in Table 2.1, six more super typhoons followed Ketsana after September 2009: Parma (Pepeng), Megi (Juan) Nesat (Pedring), Washi (Sendong), Bopha (Pablo), and Haiyan (Yolanda). Tropical Storm Ketsana was quickly followed by another super typhoon named Tropical Storm Parma (locally known as Pepeng), a category III storm that affected the Philippines during October 3–9, 2009, following an irregular path that crossed over Central and Northern Luzon three times. It initially brought powerful winds with gusts of 230 km/h in an extended period of heavy rains with cumulative rainfall amounts exceeding 1000 mm in some areas (World Bank, 2009). As listed in Table 2.1, super typhoon Parma resulted in an estimated total damage of PHP 27.2 billion and 61, 869 destroyed homes.

Super Typhoon Megi followed Ketsana and struck the Philippines from October 16–18, 2010. Megi (locally known as Juan) made landfall in the northern provinces, namely, Cagayan, Isabela, Kalinga, Mt. Province, and Ifugao. As Megi continued to pummel on these provinces with strong winds and rain, roads and bridges were damaged and left impassable. Families were relocated to safer grounds for fear of landslides and flooding. Megi carried maximum sustained winds of 225 kph.² The NDRRMC estimated the total damage of Megi at PHP 12.0 billion, which is a lower figure compared with Ketsana and Parma. However, the number of damaged homes was 148,222, which is a much greater figure than that for Parma (61,869) and a little lower compared with that for Ketsana (185,004).

²“Typhoon Megi hits northern Philippines: Assessment in Cagayan and Isabela underway.” Retrieved <http://www.worldvision.org.ph/news/typhoon-megi-hits-northern-philippines-assessment-cagayan-and-isabela-underway>.

Table 2.1 Super typhoons from 2009 to 2016 and their estimated total number of partially and completely damaged houses

Name	Date	Total loss	Damaged houses		
			Totally	Partially	Total number
Ketsana (Ondoy)	September 26, 2009	PHP 10.9 Billion	30,082	154,922	185,004 ^a
Parma (Pepeng)	October 3–9, 2009	PHP 27.2 Billion	6807	55,062	61,869 ^b
Megi (Juan)	October 16–18, 2010	PHP 12.0 Billion	30,048	118,174	148,222 ^c
Nesat (Pedring)	September 17, 2011	PHP 15.4 Billion	6852	42,638	49,490 ^d
Washi (Sendong)	December 15, 2011	PHP2.0 Billion	13,585	37,559	51,144 ^e
Bopha (Pablo)	December 4, 2012	PHP 43. 2 Billion	89,666	127,151	216,817 ^f
Haiyan (Yolanda)	November 7–9, 2013	PHP 93.0 Billion	518,878	493,912	1,012,790 ^g
Haima (Lawin)	October 19, 2016	PHP 3.7 Billion	13,964	76,071	90,035 ^h

^aNDRRC Update 24–27 September 2009. Retrieved from http://www.ndrrmc.gov.ph/attachments/article/1543/Update_Final_Report_TS_Ondoy_and_Pepeng_24-27SEP2009and30SEP-20OCT2009.pdf

^bNDRRC Update 24–27 September 2009. Retrieved from http://www.ndrrmc.gov.ph/attachments/article/1543/Update_Final_Report_TS_Ondoy_and_Pepeng_24-27SEP2009and30SEP-20OCT2009.pdf

^cNDRRC Update 30 October 2010. Retrieved from http://www.ndrrmc.gov.ph/attachments/article/1554/SitRep_No_28_Typhoon_Juan_Issued_On_30OCT2010.pdf

^dNDRRC Update. Retrieved from <http://reliefweb.int/sites/reliefweb.int/files/resources/NDRRC%20Update%20SitRep%20No%2021%20re%20Effects%20of%20TY%20PEDRING%205%20Oct%202011%206%20AM.pdf>

^eNDRRC Update 25 October 2016. Retrieved from [http://www.ndrrmc.gov.ph/attachments/article/1347/Final_Report_on_the_Effects_and_Emergency_Management_re_Tropical_Storm_SENDONG_\(WASHI\)_Status_of_Early_Recovery_Programs_in_Region_X_issued_10FEB2014.pdf](http://www.ndrrmc.gov.ph/attachments/article/1347/Final_Report_on_the_Effects_and_Emergency_Management_re_Tropical_Storm_SENDONG_(WASHI)_Status_of_Early_Recovery_Programs_in_Region_X_issued_10FEB2014.pdf)

^fNDRRC Update 25 December 2012. Retrieved from [http://www.ndrrmc.gov.ph/attachments/article/1344/Effects_of_Typhoon_PABLO_\(Bopha\)_Situational_Report_No_38_as_of_25DEC2012_0600H.pdf](http://www.ndrrmc.gov.ph/attachments/article/1344/Effects_of_Typhoon_PABLO_(Bopha)_Situational_Report_No_38_as_of_25DEC2012_0600H.pdf)

^gComputed from Rappler's estimate on totally and partially damaged houses. "In Numbers: 2 Years after Yolanda". Retrieved from <http://www.rappler.com/newsbreak/iq/111828-in-numbers-years-after-typhoon-yolanda>

^hNDRRC Update 25 October 2016. Retrieved from [http://ndrrmc.gov.ph/attachments/article/2946/Sitrep_No_09_re_Preparedness_Measures_and_Effects_of_Super_Typhoon_LAWIN_\(HAIMA\)_as_of_25OCT2016_0800H.pdf](http://ndrrmc.gov.ph/attachments/article/2946/Sitrep_No_09_re_Preparedness_Measures_and_Effects_of_Super_Typhoon_LAWIN_(HAIMA)_as_of_25OCT2016_0800H.pdf)

Almost a year after, another super typhoon, Tropical Storm Nesat (locally called Pedring) hit the Philippines with a total damage of PHP 15.4 billion in infrastructure, property, and agriculture and a total number of 49,490 damaged houses: 6852 were totally damaged, and 42,638 were partially destroyed (Cf. Table 2.1). Nesat displaced 204,376 individuals due to the massive floods caused by the torrential rain, particularly in Northern and Central Luzon. A total of 13,629 families/64,431 persons (from 11,322 families/53,747 persons) were affected in 153 barangays, 25 municipalities and 10 cities in the 9 provinces of Regions I, II, III, IV-A, and V, and NCR.³

In a span of just 3 months, Super Typhoon Nesat was followed by Tropical Storm Washi (locally known as Sendong). Although Washi had the lowest estimated total damage, PHP 2 billion, compared with other super typhoons from 2009 to 2016 (see Table 2.1), it is nonetheless considered the deadliest super typhoon to hit the Philippines in 2011. The storm, which struck Northern Mindanao, the Visayas, and Palawan, killed at least 957 people. National Disaster Risk Reduction and Management Council (NDRRC) Director Benito Ramos said they had lost

³Official Gazette (2011) "Briefer on Typhoon Pedring, September 27, 2011. Retrieved from <http://www.gov.ph/2011/09/27/briefer-on-typhoon-pedring-september-27-2011/>.

count of the number of people who have gone missing after the flashfloods spawned by the storm.⁴ The total number of damaged houses was 51,144: 13,585 were totally damaged, and 37,559 were partially destroyed.

After a year, the deadly Super Typhoon Bopha (locally known as Pablo) struck the Southern part of the Philippines. Bopha made landfall in Mindanao on December 4, 2012, and is considered one of the worst typhoons to hit the island. It caused massive flooding and landslides and killed many people living in the provinces of Davao Oriental and Compostela Valley. Judging from its total damage and destruction, Bopha could have been the strongest super typhoon to hit the country recently until Super Typhoon Haiyan (Yolanda) came in 2016.⁵ Except for Haiyan, Table 2.1 shows that Bopha surpassed other super typhoons from 2009 to 2013 in terms of total damage and number of homes destroyed. The NDRRMC reported that Bopha caused PHP 43.2 billion in total damage of agriculture, infrastructure, and property in Mindanao and damaged 216,817 homes.

Finally, Table 2.1 showed that the recent Typhoon Haiyan (Yolanda), which passed through the islands of Leyte and Samar on November 8, 2013, is thus far the strongest typhoon that hit the Philippines in the recent decade. It destroyed an estimated total of 1,012,790 homes: 550,928 houses were completely destroyed, and 589,404 additional homes were partially destroyed (Environmental Science for Social Change, 2014, p. 6). This category 5 typhoon made its first landfall over Guiuan, Eastern Samar, in the early morning of November 8, 2013, and wreaked havoc, primarily on the Visayas region, until its exit from the Philippine area of responsibility the next day. It had wind speeds exceeding 185 kph when it made landfall. Its strong winds ripped roofs off of thousands of homes and knocked down shanties, trees, power and telephone lines, and cell towers. Storm surge waves reached as high as 6–9 meters (equivalent in height to a two-storey building), claimed thousands of lives, and destroyed millions worth of properties (Commission on Audit, 2014, p. 4). The scale of the destruction of homes by Haiyan forced housing to the forefront of the national agenda and forced the government as well as private local and international disaster organizations to rethink their post-disaster recovery programs, particularly those on post-disaster housing.

2.9.2 *Post-disaster Housing in the Philippines*

It is established within the disaster-management literature that post-disaster housing is a complicated process and requires a near-impossible balancing act to satisfy all parties involved (Daly & Brassard, 2011). Large-scale disasters usually involve multiple organizations and agencies having the capacity to coordinate their efforts to manage disasters (Drabek, 1986; Drabek & McEntire, 2003; Quarantelli, 2000) with

⁴Malig, J. (20 Dec 2011). Sendong' world's deadliest storm for 2011. Retrieved from <http://news.abs-cbn.com/nation/12/19/11/sendong-worlds-deadliest-storm-2011>.

⁵Santos, R. (4 Dec 2013). "TIMELINE: Looking back at 2012's Typhoon Pablo (Bopha)." Retrieved from <http://www.rappler.com/rich-media/45191-timeline-typhoon-pablo-bopha-2012>.

each organization or agency having its own mandate, pre-existing social networks, and discretionary powers as to when and how it coordinates with another agency. Creating a coherent and comprehensive approach to post-disaster recovery and reconstruction after a major large-scale disaster has always been a challenge to disaster managers.

Although some international conventions and laws exist on how countries deal with post-disaster recovery, gaps in international and local legislation and law enforcement do exist, thus allowing the normative orders of those who participated in the planning and implementation of PDR programs to intervene and reshape the outcome of the intended reconstruction goals. In the international arena, there is a growing lack of legislation that governs international relief operation and donation for reconstruction. With the growing number of disasters worldwide occurring every year due to climate change, the unprecedented increase in humanitarian aid for reconstruction, particularly for post-disaster housing, is expected to increase tremendously. Because donor countries do not usually channel their donations to affected country bilaterally, it is expected that non-governmental organizations (NGOs) would receive the bulk of aid for reconstruction purposes. The volunteer organization or NGO normally disburses the funds in accordance with the organization's goals and the donor's intention. In the Philippines, some NGOs often participate in post-disaster in housing projects of the government but primarily operate within the normative mandate of their donors and organizations.

The Philippines has no comprehensive and coherent system concerning post-disaster housing and relocation for disaster victims of major natural calamities. "Although the country experienced a major disaster after another in the last decade, the strategies on post-disaster housing response continues on a disaster-event basis. In the absence of a comprehensive law on post-disaster management, "the national government and local government units have yet to standardize a clear strategy that lays down basic coordination and clear definition of roles among the national government agencies involved in post-disaster housing responses, for an efficient and integrated response..." (Environmental Science for Social Change, 2014, p. 5). "Post-disaster housing reconstruction is presently undertaken through the resettlement program led by the National Housing Authority (NHA), the core/modified shelter assistance program (C/MSAP) of the Department of Social Welfare and Development (DSWD), and the community mortgage program (CMP) of the Social Housing and Finance Corporation (SHFC)" (Miclat & Annawi, 2014). International and local as well as public and private donors also participate in a variety of ways in providing temporary and permanent shelters to disaster victims. With the absence of a comprehensive PDR legislation and one-stop post-disaster management agency that takes care of the housing needs of disaster victims, numerous deviations and negative consequences can be expected in Philippine PDR housing and resettlement.

2.10 Summary

This chapter showed that despite the advancement in theorizing and methodology in the study of disaster, the sociological perspective remains marginalized in disaster research as well as in sociology of disasters and the social sciences. It also showed

that the focus of the mainstream sociology of disasters of seeing disaster events as systems, rather than an arena of conflict, has sidelined examination of the social structure and normative pluralism in disaster situations, specifically in evaluating the unintended effects of multiple legal and social normative systems surrounding the implementation of PDR projects. Thus, the normative pluralist approach of socio-legal studies and the sociology of law in evaluating the success or failure of PDR projects is apparently missing in the sociology of disasters. Yet, most disaster-prone countries in the world are found in some urbanizing countries of Southeast Asia with high-context cultures, rigid business regulation, high red-tape and corruption indices, and complex legal and social normative systems that lead to more negative unintended effects in the enforcement of PDR projects such as post-disaster housing. The Philippines—being a disaster-prone Southeast Asian country with a high level of legal and normative pluralism, red tape, corruption, rigidity in bureaucratic regulation, and personalism in contractual relations—presents a unique case in assessing the success and failure of PDR housing. The normative pluralist approach in the study of PDR process, which is rarely used in the sociology of disasters, can present as an attractive analytical tool to assess the many failures and negative unintended consequences of PDR housing projects in the Philippines.

References

- Adger, W. N. (1999). Social vulnerability to climate change and extremes in coastal Vietnam. *World Development*, 27(2), 249–269.
- Adger, W. N. (2000). Social and Ecological Resilience: Are They Related?. *Progress in Human Geography*, 24(3), 347–364. doi:[10.1191/030913200701540465](https://doi.org/10.1191/030913200701540465)
- Alexander, D. E. (2013a). Resilience and disaster risk reduction: An etymological journey. *Natural Hazards and Earth System Science*, 13, 2707–2716.
- Alexander, D. E. (2013b) Resilience and disaster risk reduction: an etymological journey. *Natural Hazards and Earth System Sciences*, 1, 1257–1284.
- Auf de Heide, E. (1989). *Disaster response: Principles and preparation and coordination*. St. Louis, MO: The CV Mosby Company.
- Bankoff, G., & Hilhorst, D. (2009). The politics of risk in the Philippines: comparing state and NGO perceptions of disaster management. *Disasters*, 33, 686–704. doi:[10.1111/j.1467-7717.2009.01104.x](https://doi.org/10.1111/j.1467-7717.2009.01104.x)
- Bildan, L. (2003). *Disaster management in southeast Asia: an overview*. Pathumthani, Thailand: Asian Disaster Preparedness Center.
- Birkman, J. (ed.). (2006). *Measuring Vulnerability to Natural Hazards: Towards Disaster Resilient Societies*. New York: United Nations University Press. xxvi + 524 pp. ISBN 9280811355.
- Birkmann, J., & Ben W. (2006). Measuring the unmeasurable. UNU-EHS SOURCE, 5. Retrieved February 23, 2014 (<http://www.ihdp.unu.edu/file/get/3962.pdf>)
- Bodin, P. & Wiman, B. (2004). Resilience and Other Stability Concepts in Ecology: Notes on their Origin, Validity, and Usefulness. *The ESS Bulletin*, 2(2).
- Bolin, R. & Bolton, P. (1986). *Race, Religion, and Ethnicity in Disaster Recovery*, Monograph #42, Program on Development and Behavior. Boulder: Institute of Behavioral Science. University of Colorado.
- Bonnano, G. A. (2004). Loss, trauma, and human resilience: Have we underestimated the human capacity to thrive after extremely aversive events?. *American Psychologist*, 59(1), 20–28.

- Bowen, J. R. (2005). Normative pluralism in Indonesia: Regions, religions, and ethnicities. In W. Kymlicka & B. He (Eds.), *Multiculturalism in Asia* (pp. 152–169). Oxford University Press.
- Bozeman, B. (1993). A theory of government “red tape”. *Journal of Public Administration Research and Theory*, 3(3), 273–304.
- Brassard, C., & Raffin, A. (2011). Resilience in post-disaster societies: From crisis to development. *Asian Journal of Social Science*, 39(4), 417–424. Retrieved from <http://www.jstor.org/stable/43498806>
- Burton, I., & Kates, R. W. (Eds.). (1993). *The environment as hazard*. New York: Guildford.
- Cardona, O. D. (1993). ‘Natural disasters, global change and sustainable: a strategy for reducing effects’, III Meeting of the Scientific Advisory Council for the International Geosphere-Biosphere Programme, Forum on Earth System Research, ICSU, Ensenada, Baja, California, Mexico.
- Coleman, J. (1990). *Foundations of Social Theory*, Belknap Press, Cambridge, MA.
- Commission on Audit (2004). Overall Report on the Sectoral Performance Audit of the Housing program of the Government. Commission on Audit Report No. 2004–02. <https://coa.gov.ph/index.php/sectoral-performanceaudit/category/244-housing-program-of-the-government?download=700:overall-report-ms-report-no-2004-02>
- Da Costa, K., & Pospieszna, P. (2015). The Relationship between human rights and disaster risk reduction revisited: Bringing the legal perspective into the discussion. *Journal of International Humanitarian Legal Studies*, 6(1), 64–86.
- Crouch, E., & Wilson, R. (1982). *Risk/benefit analysis*. Cambridge: Ballinger.
- Cutter, S. L., Boruff, B. J., & Shirley, W. L. (2003). Social vulnerability to environmental hazards. *Social Science Quarterly*, 84, 242–261.
- Cutter, S. (1996). Societal Responses to environment hazards. *International Social Science Journal*, 48(150).
- Dahlberg, R. et al. (2015). Resilience in disaster research: three versions. *Civil Engineering and Environmental Systems*, 32(1–2), 44–54.
- Daly, P., & Barassard, C. (2011). Aid accountability and participatory approaches in post-disaster housing reconstruction. *Asian Journal of Social Science*, 39(2011), 508–533.
- Deflem, M. (2012). Introduction: Disasters and hazards in socio-legal studies. In Deflem, M. (ed). *Disasters, Hazards, and Law*. Bingley, UK: Emerald Group Publishing.
- Dietz, T. M., Stern, P., & Rosa, E. (1993). Risk, technology, and society. In R. E. Dunlop & W. Michelson (Eds.), *Handbook of environmental sociology*. Westport, CT: Greenwood Press.
- Dirks, K. T., & Ferrin, D. L. (2001). The role of trust in organizational settings. *Organization Science*, 12, 450–467.
- Douglass, M. (2013). The urban transition of environmental disasters in Asia. ARI Working Paper 2010. October 2013. Retrieved from https://ari.nus.edu.sg/Assets/Uploads/docs/wps/wps13_210.pdf
- Douglas, M. & Wildavsky, A. (1982). *Risk and Culture*. Berkeley, CA: University of California Press.
- Downing, T. E., Olsthoorn, A. A., & Richard, S. J. T. (1999). *Climate, change, and risk*. London: Routledge.
- Drabek, T. E. (1986). *Human Responses to Disaster: An Inventory of Sociological Findings*. New York: Springer-Verlag.
- Drabek, T. E. (2004). *Social Dimensions of Disaster*, 2nd ed. Emmitsburg, Maryland: Emergency Management Institute, Federal Emergency Management Agency.
- Drabek, T. E. (2005). *Sociology, disasters and emergency management: History, contributions, and future agenda*. Retrieved from <https://training.fema.gov/emiweb/downloads/drabeksociologydisastersandem.pdf>
- Drabek, T., & McEntire, D. (2003). Emergent phenomena and the sociology of disaster: Lessons, trends, and opportunities from the research literature. *Disaster Prevention and Management*, 12 (2), 97–112. doi:10.1108/09653560310474214
- Dynes, R. R. (1970). *Organized Behavior in Disaster*. Lexington, Mass.: D.C. Heath.
- Elliot, L. (2012). ASEAN and environmental governance: Strategies of regionalism in southeast Asia: Global environment. *Politics*, 12(3), 38–57.

- Environmental Science for Social Change (2014). Rapid Assessment of the Performance of Post-Disaster Housing Reconstruction Approaches: Submitted to the World Bank-Philippines Office. 30 June 2014. http://essc.org.ph/content/wp-content/uploads/2014/10/ESSC-final-report_30June-2014.pdf
- Espia, J. P., & Fernandez, P. (2015). Insiders and outsiders: Local government and NGO engagement in disaster response in Guimaras, Philippines. *Disasters*, 39(1), 51–68. doi:10.1111/disa.12086
- Fallahi, A. (2007). Lessons learned from the housing reconstruction following the Bam earthquake in Iran. *The Australian Journal of Emergency Management*, 22(1), 26–35.
- Farber, D. D. (2012). Introduction: Legal scholarship, the disaster cycle, and the Fukushima accident. *DUKE ENVTL. L. & POL'Y F*, 23(1). Retrieved from <http://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=1237&context=delpf>
- Fischer, H. W. (2003). The sociology of disaster: Definitions, research questions, & measurements continuation of the discussion in a post-September 11 environment. *International Journal of Mass Emergencies and Disasters*, 21(1), 91–107. Retrieved from <http://www.ijmed.org/articles/82/download/>
- Foster, J. (1997). Successful Coping, Adaptation and Resilience in the Elderly: An Interpretation of Epidemiologic Data. *Psychiatric Quarterly*, 68(3), 189–219.
- Freudenburg, W. R. (1986). Social impact assessment. *Annual Review Sociology*, 12, 451–478.
- Fritz, C.E. & Marks, E. (1954). “The NORC Studies of Human Behavior in Disasters”. *Journal of Social Issues*, 10, 26–41.
- Gaillard, J. C. (2010). Vulnerability, capacity and resilience: Perspectives for climate and development policy. *Journal of International Development*, 22(2), 218–232.
- Gambetta, D. (1988). ‘Can We Trust Trust?’, in D. Gambetta (ed.) *Trust. Making and Breaking Cooperative Relations*, pp. 213–37. New York: Basil Blackwell.
- Godschalk, D. R. (2003). Urban Hazard Mitigation: Creating Resilient Cities. *Natural Hazards Review*, 4(3).
- Gordon, J. (1978). *Structures*. Penguin Books, Harmondsworth, UK.
- Guba, E. G. (Ed.). (1990). *The paradigm dialog*. Newbury Park, CA: Sage.
- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105–117). Thousand Oaks, CA: Sage.
- Hall, E. T. (1976). *Beyond culture*. Garden City, NY: Doubleday.
- Hall, D., Hirsch, P., & Li, T. M. (2011). *Powers of exclusion: Land dilemmas in southeast Asia*. Singapore: National University Singapore Press.
- Hooker, J. (2003). *Working across cultures*. Stanford University Press.
- Hooks, J., & Miller, T. (2006). The continuing storm: How disaster recovery excludes those most in need. *California Western Law Review*, 23(1). Article 4.
- Hummell, B. M. de L., S. L. Cutter, & C. T. Emrich, (2016). “Social vulnerability to natural hazards in Brazil”. *International Journal of Disaster Risk Science*, 7, 111–122.
- Hussain, J. (2011). More than one law for all: Legal pluralism in southeast Asia. *Democracy and Society*, 7(4), 374–389 (Legal Pluralism and Shari’a Law). <http://dx.doi.org/10.1080/17419166.2011.617621>
- Inglehart, R., & Welzel C. (2005). *Modernization, cultural change and democracy: The human development sequence*. Cambridge, UK: Cambridge University Press.
- Iversen, R. R., & Armstrong, A. (2008). *Hurricane Katrina and New Orleans: What might a sociological embeddedness perspective offer disaster research and planning?*. Retrieved from http://repository.upenn.edu/spp_papers/137
- Jegillos, S. R. (2003). *Fundamentals of disaster risk management: How are southeast Asian countries addressing these?*. Makati: International Institute of Disaster Risk Management.
- Klein, R. J. T., Nicholls, R. J., & Thomalla, F. (2003). Resilience to natural hazards: How useful is this concept? *Environmental Hazards*, 5(1–2), 35–45. doi:10.1016/j.hazards.2004.02.001
- Klein, N. (2008). *The Shock Doctrine: The Rise of Disaster Capitalism*. New York: Picador.

- Kreps, G. A. (2001). Sociology of disasters. In N. Smelser, & Baltes, P. (Eds-in-chief) *Encyclopedia of the social and behavioral sciences* (pp. 3718–3721). UK: Elsevier Ltd.
- Kuhn, T. (1962). *The structure of scientific revolutions*. Chicago: University of Chicago Press.
- Laska, S. (1989). *Review of the book sociology of disasters: Contributions of sociology to disaster research*. In R. R. Dynes, et al. (Eds.), *Social forces* (Vol. 68, pp. 338–339). September 1, 1989.
- Levine C. (2004) The concept of vulnerability in disaster research. *Journal of Traumatic Stress* [serial online], 17(5), 395–402. Available from: Psychology and Behavioral Sciences Collection, Ipswich, MA. Accessed February 17, 2017.
- Lindsey, T., & Steiner, K. (2012). Islam, law and the state in southeast Asia: Malaysia and Brunei: Volume 3. Islam, law and the state in southeast Asia: Malaysia and Brunei: Volume 3, I. B. Tauris, 2012. Available at SSRN: <https://ssrn.com/abstract=2342509>
- Lockwood, D. (1956). Some remarks on “The Social System”. *The British Journal of Sociology*, 7 (2), 134–146.
- Lowrance, W. (1976). *Of acceptable risk; Science and the determination of safety*. Los Altos: William Kaufman.
- Lyons, M. (2009). Building back better: The large-scale impact of small-scale approaches to reconstruction. *World Development*, 37(2), 385–398.
- Malalagod, C., Amaratunga, D., & Haigh, R. (2014). Challenges in creating a disaster resilient built environment. *Procedia Economics and Finance*, 18, 736–744. In 4th International Conference on Building Resilience, Building Resilience 2014, September 8–10, 2014, Salford Quays, United kingdom. Available online at www.sciencedirect.com
- Manyena, S. B. (2006). The concept of resilience revisited. *Disasters*, 30, 434–450. doi:10.1111/j.0361-3666.2006.00331.x
- Manyena, S. B., O’Brien, G., O’Keefe, P., & Rose, J. (2011). Disaster resilience: A bounce back or bounce forward ability? *Local Environment*, 16(5), 417–424.
- Manyena, S. B. (2006). The concept of resilience revisited. *Disasters*, 30(4): 433–450. *Disasters Journal*. Overseas Development Institute: London.
- Matyas, D., & Pelling, M. (2014). Positioning resilience for 2015: The role of resistance, incremental adjustment and transformation in disaster risk management policy. *Disasters*, 39 (SI), S1–S18.
- Matyas, D. & Pelling, M. (2015a). Adaptation and transformation. *Climatic Change*, 133(1), 113–127.
- Matyas, D., & Pelling, M. (2015b). Positioning resilience for 2015: The role of resistance, incremental adjustment, and transformation in disaster risk management policy. *Disasters*, 39, s1–s18. doi:10.1111/disa.12107
- McDermott, R. (2013). Compliance with normative frameworks in disaster management: a comparative study of Indonesia and Ireland. Centre for Humanitarian Action, University of College Dublin, Ireland. Retrieved November 6, 2014 from http://www.humanitarianstudiesconference.org/fileadmin/user_upload/fe_users/ronanrua/wchs_paper315.pdf
- McEntire, D. (2001). Triggering agents, vulnerabilities and disaster reduction: towards a holistic paradigm. *Disaster Prevention and Management*, 10(3), 189–196.
- Mercer, J., Kelman, I., Suchet-Pearson, S., & Lloyd, K. (2009). Integrating indigenous and scientific knowledge bases for disaster risk reduction in Papua New Guinea. *Geografiska Annaler. Series B, Human Geography*, 91(2), 157–183. Retrieved from <http://www.jstor.org/stable/40205074>
- Miclat, S. & Annawi, D. (2014). A rapid review of post-disaster housing reconstruction approaches. ESSC. <http://essc.org.ph/content/a-rapid-review-of-post-disaster-housing-reconstruction-approaches/>
- Mitchel, J. K. (1990). Human dimensions of environmental hazards: Complexity, disparity, and the search for guidance. In A. Kirby (Ed.), *Nothing to fear: Risks and hazards in American Society* (pp. 131–175). Tucson: University of Arizona Press.

- Nasreen, M. (2004). Disaster research: Exploring sociological approach to disaster in Bangladesh. *Bangladesh e-Journal of Sociology*, 1(2).
- National Research Council. (1993). *Issues in risk assessment*. Washington, DC: National Academy Press.
- National Research Council (2006). 9 The present and future hazards and disaster research workforce. In *Facing hazards and disasters*. Washington D.C.: The National Academies Press.
- Newell, P., Pattberg, P., & Schroeder, H. (2012). Multiactor Governance and the Environment. *Annual Review of Environment and Resources*, 37, 365–387.
- Norris, F. H., et al. (2007). Community resilience as a metaphor, theory, set of capacities, and strategy for disaster readiness. *American Journal of Community Psychology*, 2008(41), 127–150. doi: [10.1007/s10464-007-9156-6](https://doi.org/10.1007/s10464-007-9156-6)
- Nystén-Haarala, S., Bogdanova, E., Kondakov, A., & Makarova, O. (2015). The interplay of flexibility and rigidity in Russian business contracting: The formal and informal framework in contracting. *Lapland Law Review*, 2, 110–142 (special issue: Flexibility in contracting) (Rovaniemi, Finland).
- Palliyaguru, R., Amaratunga, D., & Baldry, D. (2014). Constructing a holistic approach to disaster risk reduction: The significance of focusing on vulnerability reduction. *Disasters*, 38(1), 45–61. doi:[10.1111/disa.12031](https://doi.org/10.1111/disa.12031)
- Peek, L. A., & Mileti, D. S. (2002). The history and future of disaster research. In R. B. Bechtel & A. Churchman (Eds.), *Handbook of environmental psychology* (pp. 511–524). New York: Wiley.
- Perry, R. W., & Mushkatel, A. H. (1986). *Minority citizens in disasters*. Athens: University of Georgia Press.
- Peñalba, L. M., Elazegui, D. D., Pulhin, J. M., & Cruz, R. V. O. (2012). Social and institutional dimensions of climate change adaptation. *International Journal of Climate Change Strategies and Management*, 4(3), 308–322. doi:[10.1108/17568691211248748](https://doi.org/10.1108/17568691211248748)
- Prince, S. H. (1920). Catastrophe and social change, based upon a sociological study of the Halifax disaster. Ph.D. Thesis. New York: Columbia University Department of Political Science.
- Quarantelli, E. L. (1966). Organization under stress. In Robert Britson (Ed.) *Symposium on emergency operations* (pp. 3–19). Santa Monica, California: System Development Corporation.
- Quarantelli, E. L. (1987). Disaster studies: An analysis of the social historical factors affecting the development of research in the area. *International Journal of Mass Emergencies and Disasters*, 5(3), 285–310.
- Quarantelli, E. L. (1996) Emergent behaviors and groups in the crisis time of disasters. In Kian M. Kwan (Ed.) *Individuality and social control: Essays in honor of Tamotsu Shibutani* (pp. 47–68). Greenwich, CT: JAI Press.
- Quarantelli, E. L. (1997). Ten criteria for evaluating the management of community disasters. *Disasters: The Journal of Disaster Studies, Policy and Management*, 21, 39–56.
- Quarantelli, E. L. (2000). Disaster planning, emergency management, and civil protection: The historical of organized efforts to plan for and to respond to disasters. Preliminary Paper #1. University of Delaware, Disaster Research Center. <http://dspace.udel.edu/bitstream/handle/19716/673/PP301.pdf?sequence=1>
- Quarantelli, E. L. (2005). Catastrophes are different from disasters: Understanding Katrina. At <http://understandingkatrina.ssrc.org/quarantelli>
- Roosli, R., & O’Keefe, P. (2011). An evaluation of barriers to implementing disaster planning and the housing program in Malaysia. *Risk Management*, 13(4), 209–227. Retrieved from <http://www.jstor.org/stable/41407074>
- Saban, L. I. (2015). Entrepreneurial brokers in disaster response network in Typhoon Haiyan in the Philippines. *Public Management Review*, 17(10), 1496–1517. doi:[10.1080/14719037.2014.943271](https://doi.org/10.1080/14719037.2014.943271)
- Sartori, P., & Shahar, I. (2012). Legal pluralism in Muslim-majority colonies: Mapping the terrain. *Journal of the Economic and Social History of the Orient*, 55(4/5), 637–663. doi:[10.1163/15685209-12341274](https://doi.org/10.1163/15685209-12341274)

- Saunders, G. (2004). Dilemmas and challenges for the shelter sector: Lessons learned from the sphere revision process. *Disasters*, 28(2), 160–175.
- Schneider, S. (1992). Governmental response to disasters: The conflict between bureaucratic procedures and emergent norms. *Public Administration Review*, 52, 135–145.
- See, J., & Porio, E. (2015). Assessing social vulnerability to flooding in metro Manila using principal component analysis. *Philippine Sociological Review*, 63, 53–80. Retrieved from <http://www.jstor.org/stable/24717187>
- Sonn, C., & Fisher, A. (1998). Sense of community: Community resilient responses to oppression and change. *Journal of Community Psychology*, 26, 457–472.
- Stallings, R. A. (1978). The structural patterns of four types of organizations in disaster. In E. L. Quarantelli (Ed.) *Disasters: Theory and Research* (pp. 87–103). Beverly Hills, California: Sage.
- Tamanaha, B. (2008). A holistic vision of the socio-legal terrain. *Law and Contemporary Problems*, 71(2), 89–97. Retrieved from <http://www.jstor.org/stable/27592239>
- Tas, N., Cosgun, N., & Tas, M. (2007). A qualitative evaluation of the after earthquake permanent housings in Turkey in terms of user satisfaction—Kocaeli, Gundogdu Permanent Housing Model. *Building and Environment*, 42(9), 3418–3431.
- Tierney, K. (2007). From the margins to the mainstream? Disaster research at the crossroads. *Annual Review of Sociology*, 33, 503–525. Retrieved from <http://www.jstor.org/stable/29737773>
- Tierney, K. (2012). Disaster governance: Social, political, and economic dimensions. *Annual Review of Environment and Resources*, 37, 341–363. doi:10.1146/annurev-environ-020911-095618
- Tierney, K. J. (1999). Toward a critical sociology of risk. *Sociological Forum*, 14(2), 215–242.
- Tobin, G. A. (1999). ‘Sustainability and community resilience: The Holy Grail of hazards planning?’ *Global Environmental Change Part B: Environmental Hazards*, 1(1), 13–25.
- Torrey, W. I. (1979). Anthropological studies in hazardous environments: past trends and new horizons. *Current Anthropology*, 20(3), 517–540 (2014), The concept of resilience to disasters, In Jonas Joerin, Rajib Shaw, Ramasamy R. Krishnamurthy (Ed.) *Building Resilient Urban Communities (Community, Environment and Disaster Risk Management, Vol. 15)* Emerald Group Publishing Limited, pp. 35–48.
- UNISDR. (2004). *Living with risk: A global review of disaster reduction initiatives*. Inter-Agency Secretariat of the United Nations International Strategy for Disaster Reduction, Geneva.
- Valte, M. (2002). Chapter 6: A house for every Filipino: A pipedream in the land of promises? In *Book: Philippine Governance Report: Case studies in the management of power*. Quezon City: United Nations Development Programme, Ateneo School of Government, and Ateneo Center for Social Policy and Public Affairs. Retrieved from <http://www.ombudsman.gov.ph/UNDP4/wp-content/uploads/2013/01/Chap6.pdf>
- Van Niekerk, D. (2012). *Transdisciplinarity: The binding paradigm for disaster risk reduction*. Retrieved from https://dspace.nwu.ac.za/bitstream/handle/10394/8572/Van_Niekerk_D.pdf?sequence=1
- Weichselgartner, J. (2001). Disaster mitigation: The concept of vulnerability revisited. *Disaster Prevention and Management*, 10(2), 85–94.
- Wisner, B., Blaikie, P., Cannon, T., & Davis, I. (2004). *At risk: Natural hazards, people's vulnerability, and disasters* (2nd ed.). New York: Routledge.
- World Bank. (2009). *Philippines—Typhoons Ondoy and Pepeng: Post-disaster needs assessment, Main report*. <http://siteresources.worldbank.org/INTPHILIPPINES/Resources/PDNAVol1MainReport.pdf>
- Zinn, J. O. (2009). The sociology of risk and uncertainty: A response to Judith Green's ‘Is it time for the sociology of health to abandon “risk”?’ *Health, Risk & Society*, 11(6), 509–526. doi:10.1080/13698570903329490
- Zinn, J. O. & Taylor-Gooby, (2006). Risk as an interdisciplinary research area. In: Taylor-Gooby, Peter und Jens O. Zinn (Ed.) *Risk in Social Science* (pp. 20–53). Oxford: Oxford University Press.

Law, Normative Pluralism, and Post-Disaster Recovery
Evaluating the Post-Disaster Relocation and Housing
Project of Typhoon Ketsana Victims in the Philippines
Ballano, V.O.

2017, XI, 173 p. 26 illus., 25 illus. in color., Hardcover
ISBN: 978-981-10-5073-2