Disaster Recovery Annotated Bibliography - Coordination and Communication

This document was developed to provide information on the state of knowledge on disaster recovery. This document includes a list of articles collected in the Fall of 2018. To obtain relevant articles, a list of keywords was used to search Google Scholar and University Library Databases. These keywords were: “community disaster recovery”, disaster recovery”, “post recovery planning” “pre disaster planning”, and “national planning recovery”. An additional search of academic journals that are related to the planning field was then undertaken to ensure that articles from these journals were not overlooked. These journals included: Journal of the American Planning Association, Journal of Planning Education and Research, Applied Geography, Land Use Policy, Environment and Planning A, Planning Theory, Progress in Planning. After collecting articles, each article was then systematically reviewed to ensure relevance. The articles needed to address community level recovery (including issues related to housing, economic, infrastructure, planning, etc.) or note issues that affect recovery outcomes (e.g., differences in housing outcomes for rental versus owned housing). Next, we reviewed the reference list of identified articles to determine if any articles had been missed in the initial collection process. If there were additional articles that were missed, we collected the information and searched for the title of the article. After processing each article, the articles were than compiled into the Zotero software.

The Zotero bibliographic database is open to the public to view at: https://www.zotero.org/groups/2278263/recoveryguidancetamu/items

Coordination & Communication

Articles with discussion of issues of organizational coordination or communication during disaster recovery.


Objective: Nongovernmental organizations (NGOs) are important to a community during times of disaster and routine operations. However, their effectiveness is reduced without an operational framework that integrates response and recovery efforts. Without integration, coordination among NGOs is challenging and use of government resources is inefficient. We developed an operational model to specify NGO roles and responsibilities before, during, and after a disaster. Methods: We conducted an analysis of peer-reviewed literature, relevant policy, and federal guidance to characterize the capabilities of NGOs, contextual factors that determine their involvement in disaster operations, and key services they provide during disaster response and recovery. We also identified research questions that should be prioritized to improve coordination and communication between NGOs and government. Results: Our review showed that federal policy stresses the importance of partnerships between NGOs and government agencies and
among other NGOs. Such partnerships can build deep local networks and broad systems that reach from local communities to the federal government. Understanding what capacities NGOs need and what factors influence their ability to perform during a disaster informs an operational model that could optimize NGO performance. Conclusions: Although the operational model needs to be applied and tested in community planning and disaster response, it holds promise as a unifying framework across new national preparedness and recovery policy, and provides structure to community planning, resource allocation, and metrics on which to evaluate NGO disaster involvement.


Acknowledging that both ICT and mass media had played an influential role after the Great East Japan Earthquake, this study explores if they can also contribute to longer term post-disaster recovery. From the literature review, it is anticipated that the use of both media can positively effect social capital and civic participation, which are essential for an efficient recovery. However, as this can be questioned it is important to understand and demonstrate how media can affect people's perception and behaviour in post-disaster recovery, especially considering the current complex media environment. The two media in consideration are very different, but at the same time are highly intertwined. Currently, few previous studies on this question can be found because suitable case studies limited as nature disaster of such a scale rarely occur and the media environment is rapidly changing. This study proposes a two-model approach to examine the effects of ICT and mass media in post-disaster recovery from two different perspectives in media studies: the active and passive audience perspectives. Using data collected from the three prefectures that were directly hit by the disaster, the results of the two models demonstrate a consistent pattern that the use of both ICT and mass media can create positive effects in post-disaster recovery. They increase the level of social capital through building bonding trust, network bridging and civic participation, as well as increase a person's intention to participate in post-disaster related activities. Thus, it can now be argued that both ICT and mass media can have positively contributed to the recovery. These findings have important implications for NGOs as well as policy makers that are working on the recovery. The two models also serve as the foundation for future studies that would further explore the underlying mechanisms of the media's effect and role in post-disaster recovery.


Several emergency management researchers and practitioners have suggested that the use of social media can help build community disaster resilience. This article develops a strategic framework for the social aspects of disaster resilience-building based on the Australian National Strategy for Disaster Resilience. It then investigates the current and potential use of social media related to the strategic framework. The article concludes by discussing the possible implications for emergency managers of using social media within such a framework.
Community emergency planning had its roots in military analogies which viewed emergencies as extensions of “enemy attack” scenarios. Such thinking was embedded in early structural arrangements and was generalized as the appropriate normative model for all emergencies. This model viewed emergencies as conditions of social chaos which could be rectified by command and control. It is inadequate based on a knowledge of behavior in emergencies and the model is dysfunctional for planning. A more adequate model is presented, based on conditions of continuity, coordination and cooperation. This new model, which rejects military analogies, provides a more adequate set of assumptions as the basis for planning.


Haiti’s catastrophic earthquake of 2010 left approximately 200,000 people dead, 1.5 million homeless and most government buildings destroyed. Even pre-disaster, Haiti’s outcomes on the UN Human Development Index were among the lowest in the world, and since the quake the country has fallen into further decline. Today, most Haitians continue to lack basic services, struggle with daily survival, and confront daunting challenges in their change efforts. Many have called for reconstruction of society, and argue that local civil society organizations should lead the way in these efforts by valuing local knowledge, and building on small-scale community successes. This research investigates one community’s change efforts toward a new form of community development and potential pathway to transformation in Haiti. We aim to apply learning from this case to inform development practice and policy in Haiti and similar contexts. The case study community, Bellevue-La-Montagne, is applying an education-centered community development approach which has placed construction of a new school and education at the heart of collaborative rebuilding efforts by local residents and organizations, primarily Haiti Partners. Education and participatory practices are embedded in all aspects of the community development, including: social entrepreneurship, healthcare, environmental stewardship, community agriculture, planning and construction. These efforts involve participation of people and organizations (local and international) in dialogical negotiations that aim to share power and build capabilities of local people, and to create, change, or preserve structures and institutions consistent with the interests of local people. Participatory and phronesis research methodologies reveal nuanced understandings of the community development and its meaning for local people. In spite of substantial progress in development projects, findings reveal tension points that potentially threaten long-term sustainability, such as: the highly fragile nature of state-society relations, lack of a sense of agency of local people despite strong levels of participation, and differences between outcomes for the community as a whole and individual households. Moving from revealed community change in this case to a broader and deeper social transformation will require key ‘levers of transformation’, identified in this case as: 1) education; 2) place identity, networks, and research; 3) social entrepreneurship and social innovation; and 4) state-society trust and accountability. These levers can be activated through participatory and education-centered community development strategies that provide important roles for local people and civil society, and a nuanced role for international organizations which is sensitive to power dynamics. Such development strategies would give ‘voice’ to communities in their struggles for change. Strengthening, networking and
scaling community level innovation that shows promise of transformation, such as the case of Bellevue-La-Montagne, would contribute to Haiti’s attempts to forge a new narrative, and to evolving international development planning policy and practice.


Background: Assistance from non-professional disaster volunteers (hereinafter, volunteers) is essential for disaster victims to recover physically and rebuild their lives; however, disaster victims in some areas are reluctant to accept assistance from volunteers. This study explored factors that may influence collaborative activities between volunteers and victims of earthquake disasters. Methods: From July to September 2008, a self-reporting questionnaire survey was conducted with all 302 leaders of neighborhood associations in a city within Niigata Prefecture at the time of the Niigataken Chuetsu-oki Earthquake in 2007. Each factor was determined based on the Health Belief Model. Multiple regression analysis was conducted, using collaborative activities as the objective variable. Results: From 261 valid responses received (response rate 86.4%), 41.3% of leaders collaborated with volunteers, and 60.2% of associations had residents who collaborated with volunteers. Collaboration with volunteers was significantly and positively related to perceived severity of an earthquake disaster (standardized partial regression coefficient beta = 0.224, p<0.001) and neighborhood association activities during the earthquake disaster (beta = 0.539, p<0.001). A positive and marginally significant relation was found between such collaboration and sense of coherence within a community (beta = 0.137, p = 0.06), social capital (beta = 0.119, p = 0.08), and perceived benefits (beta = 0.116, p = 0.09). Conclusion: Collaboration between disaster victims and volunteers during the response to an earthquake may require the preemptive estimation of damage by residents during normal times and the enhancement of neighborhood association activities during a disaster. For residents to have such estimation abilities, public institutions should provide information related to anticipated disaster damage and appropriate disaster prevention training and education. In addition, residents should create a disaster prevention map with other residents. Lastly, promoting neighborhood association activities may require the participation of many residents in disaster drills and education as well as a preemptive discussion of neighborhood activities during a disaster.


This paper describes how the inhabitants of Llico, a small fishing town in Chile, organized to move from the coastline to avoid a tsunami that devastated their homes and livelihoods and then to manage immediate responses. It then describes how long it took for state support to arrive and how the inhabitants were marginalized from planning and implementing the reconstruction processes. As a result, this poorly served their needs and priorities and failed to utilize their knowledge and organizational capacities. Here and elsewhere in Chile, post-catastrophe reconstruction processes miss the opportunity to improve living conditions for the affected communities and to develop policies for disaster management that incorporate and use their social capital.

Problem, research strategy, and findings: The number of people displaced either temporarily or permanently from natural disasters has been increasing at an unprecedented rate. As a result, there is a growing need for a systematic framework of resettlement planning after disasters, to either rebuild in place (in situ) or to relocate, and whether to do so independently or collaboratively with their neighbors. To gain an in-depth understanding of how resettlement is advanced, I focus on a region in Chuetsu, Japan, supplemented with cases in New Orleans (LA) and Tohoku, Japan. Results suggest that resettlement decisions, processes, and outcomes reflect both larger socioeconomic trends and interactions between governments, communities, and households. Although the governments’ speed of resettlement planning and implementation initially set the pace, informal communication within communities most influenced decision making. In addition, inherent community dynamics, especially styles of communication, directly influenced resettlement decisions and outcomes. Takeaway for practice: Although every disaster is unique in its context, communities are the key players in determining resettlement outcomes. Key points of consideration include: a) resettlement decision processes vary based on the inherent characteristics of communities; b) government officials often emphasize speed, even though it undermines overall quality of rebuilding; c) reestablishing livelihoods of equal or greater satisfaction to that before the disaster is important; and d) local communities are often capable of identifying and acting for their needs, regardless of governmental intentions. Planners need to support the establishment of a system in which communities are empowered by governments to make the most suitable decisions for sustainable livelihood recovery.


Social capital and leadership are critical in mobilizing collective actions to promote community and individual recovery after a natural disaster. Transformation to a better situation post-disaster, not just returning to a previous state, reflects the growing emphasis on disaster as a catalyst for change. To facilitate transformative change, the development focus at the core of this approach emphasizes empowerment through local governments and domestic civil society organizations working in the “bottom up” participatory mode to enhance the resilience of vulnerable population groups. Poverty reduction and disaster risk reduction are interlinked. However, the research literature on disasters pays least attention to socially created vulnerabilities. They are ignored because of the difficulty in developing agreement on theory, and prioritizing issues quantifying them. This article investigates the impact of the cultural contexts in Myanmar and Taiwan on disaster recovery and reconstruction plans for specific disaster events in which vulnerable population groups respond to different risk governance frameworks and suggests a foundation for developing a cross-cultural, all-hazards approach to understanding the relationship between resilience and recovery in the context of large-scale Asian disasters.


Disasters impact communities and individuals and disrupt social-technical systems and community functions. Consequences of disasters can be minimized if communities and people reduce their
vulnerabilities and increase their resilience. Disaster response received significant attention from the researchers and practitioners alike. In a sense it is easy to study short term disaster response. Investment in immediate disaster response also makes sense for policy makers. Unfortunately research on disaster recovery is very limited and it is considered the ignored phase of emergency management and existing knowledge and applied research of this phase is seriously lagging behind compared to what is required today. Disaster recovery is usually perceived and understood as a slow phase that begins after critical decisions and needs are met after a disaster. There is also a perceived notion that the government agencies at all levels have committed resources more to disaster response and relief efforts and less to recovery (and mitigation) efforts. Thus it is important to pay heed to this crucial phase of managing disasters. Recovery is a long process that offers ample opportunity to rebuild and redevelop resilient and sustainable communities. The chapter highlights that a shared effort to redevelop, restore, and rebuild a community requires effective intergovernmental and cross-sector collaboration and cooperation. Recent recovery experiences in the US, especially post-Katrina, have shown a considerable lack of coordination between different government agencies as well as political conflicts in planning and executing recovery efforts. The complex nature of recovery planning and efforts requires pre-disaster and post-disaster collaboration between different stakeholders including private, public, nonprofit organizations and citizens. This chapter focuses on collaborative governance principles applied to disaster recovery using the recent National Disaster Recovery Framework (NDRF) in the U.S. as an example. The development of NDRF is also included briefly in the chapter. This chapter is important to gauge the usefulness of a national level recovery framework. This framework may assist in altering the general perception about the Federal government’s lack of effort and planning towards disaster recovery.


Recent studies have shown substantial variation within and between states in the levels of local planning for hazardous materials emergencies. To explain these variations, literature on strategic planning, disaster planning and team effectiveness was used to construct a model of Local Emergency Planning Committee (LEPC) effectiveness in developing emergency plans. Data from Michigan LEPCs showed that emergency planning outcomes (e.g., quality and degree of completion of critical planning tasks and submission of plans for approval) were correlated with internal factors such as member inputs, staffing and structure, and emergency planning resources. External factors such as community support and recent hazard experience also affect success, possibly by endowing emergency planning with importance for LEPC members either directly (e.g., recent evacuation experience) or indirectly (community support arising from the high priority given emergency plans by others). These results suggest that community planners should take such strategic actions as developing community support and redesigning the LEPCs structure to be more effective in preparing for hazardous materials emergencies.


Voice—understood as the ability to give an account of oneself and participate in social processes—is increasingly recognized as significant for humanitarian action and disaster recovery. Giving disaster-affected people the opportunity to make their voices heard has the potential to democratize humanitarianism and correct the power asymmetries on which it is based. Humanitarian agencies have
embraced interactive communication technologies as tools for voice and participation. Drawing on a yearlong ethnography with communities affected by super-Typhoon Haiyan in the Philippines, this article assesses the potential of new communication technologies for voice. Our findings highlight a disconnect between assumptions about technology present in humanitarian policies and the actual uses of technology by affected populations. The article traces the factors that facilitate, or hinder, participation and finds that communication technologies enable voice only if other parameters, such as a strong civil society, are present. Further, we observe that opportunities for voice are stratified, mapping onto existing social inequalities.


In this paper we propose to explore the complex node of post disaster reconstruction, knowledge and data necessary to support spatial planning, and new information technologies. The methodology that is illustrated assumes that post-event damage assessments are useful to verify to what extent hazard and risk assessments that were available to planners to make decisions before the disaster were correct and if they were actually used as a basis for locational and zoning choices. Our contribution is aimed at the creation and design of knowledge bases accounting for the dynamic evolution of disasters. New web based technologies provide the opportunity to collect and analyse dynamic territorial crisis data using crowdsourcing and crowdmapping platforms. The proposed methodology permits to sort and classify a very large set of different types of data generated through the web. Semantic conceptualization using ontologies is performed to identify and select the information produced during the emergency that can support spatial planning in the post disaster reconstruction. The city of Tacloban in the Philippines, affected by the Super Typhoon Haiyan in November 2013 constitutes the test case for applying the methodology that has been developed.


Coordination during disaster recovery is one of the most neglected areas of disaster risk management, as the majority of literature on coordination focuses on disaster response. The purpose of the study is to investigate the factors affecting coordination for long-term recovery. For this purpose, the study uses semi-structured interviews with different actors involved in the recovery process of the 2004 tsunami in Tamil Nadu, India. The study highlights five key factors that affect coordination in long-term recovery: (1) the need to coordinate; (2) the role of the government; (3) knowledge networking; (4) mandates and goals and (5) coordination at the donor level. Finally, the study indicates a potential for applying a governance perspective on disaster recovery coordination, which needs to be further researched.


This pilot study tested the efficacy of the My Disaster Recovery (MDR) website to decrease negative affect and increase coping self-efficacy. Fifty-six survivors of Hurricane Ike were recruited from a larger study being conducted at the University of Texas Medical Branch at the first anniversary of the storm. Restricted randomization was used to assign participants to the MDR website, an information-only
website, or a usual care condition. Group × time interactions indicated that MDR reduced participant worry more than the other conditions. A similar trend was also identified for depression. Both websites were accessed a small to moderate amount and participants reported mixed satisfaction for both websites. Although the effect sizes for worry and depression were in the moderate to large range, small sample size and timing of the intervention qualify the findings. These preliminary findings encourage further evaluation of MDR with a larger, demographically diverse sample and indicate that the MDR website might be helpful in reducing worry and depression.

http://citeseerx.ist.psu.edu/viewdoc/download;jsessionid=28B29E3490E97DB3C771992ED44A8354?doi=10.1.1.611.301&rep=rep1&type=pdf

This is a study of how two small neighbourhoods, Mano and Mikura, recovered from the 1995 Kobe (Japan) earthquake, with a particular focus on the relationship between community vulnerability and capacity. Few studies have examined these interactions, even though vulnerability reduction is recognized to be a vital component of community recovery. Drawing from literature on disaster recovery, community development, vulnerability analysis, community capacity building and the Kobe earthquake, a community vulnerability and capacity model is elaborated from Blaikie et al.’s Pressure and Release Model (1994) to analyze the interactions. The Mano and Mikura cases are analyzed by applying this model and relating outcomes to the community’s improved safety and quality of community lives. Based on the experience of Mano, appropriate long-term community development practices as well as community capacity building efforts in the past can contribute to the reduction of overall community vulnerability in the post-disaster period, while it is recovering. On the other hand, the Mikura case suggests that even though the community experiences high physical and social vulnerability in the pre-disaster period, if the community is able to foster certain conditions, including active CBOs, adequate availability and accessibility to resources, and a collaborative working relationship with governments, the community can make progress on recovery. Although both Mano and Mikura communities achieved vulnerability reduction as well as capacity building, the long-term sustainability of the two communities remains uncertain, as issues and challenges, such as residual and newly emerging physical vulnerability, negative or slow population growth and aging, remained to create vulnerability to future disasters. The case studies reveal the interactions of community vulnerability and capacity to be highly complex and contingent on many contextual considerations.