

Disaster Resilience and Demographic Risk

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Abstract (300 word limit)

In March 2015, the Sendai Framework for Disaster Risk Reduction mentioned “build back better” as one of the four priorities for action in the Third UN World Conference on Disaster Risk Reduction (UNISDR 2015). Disaster recovery has been of great concern in the disaster risk reduction field (Quarantelli, E.L. 1989; Tierney and Nigg 1993). However, disaster recovery theories have not attracted much attention from researchers to date (Etkin 2015). In addition, disaster risk due to demographic changes, especially a declining population and aging society, also has not been well recognized. This paper explains how disaster recovery theories and demographic risks are significant in the examination of the recovery from a disaster in order to build a resilient society. The two disaster recovery theories are used, along with several case studies, to investigate disaster recovery processes with declining populations and aging societies. One is Haas et al. (E.J., R.W., and M.J. 1977) and Bates et al. (Bates 1982; Bates and Peacock 1989, 2008), who argue “the recovery process follows or facilitates the trend which the affected communities originally had before the disasters.” The other is Hirose (1982), who indicates that “the disaster recovery process depends on three major ingredients, the physical scale of the hazard, aid from outside, and community strength (Hirose 1982).” After the examining these viewpoints, the paper investigates disaster recovery processes of municipalities with declining populations and aging societies severely affected by the 1993 Southwest-off Hokkaido Earthquake and the 2011 Great East Japan Earthquake and Tsunami disaster. Through analyzing the disaster recovery process, this paper attempts to answer the following questions: Could it be said that disaster recovery reflects pre-disaster situations and how do we use this thought for the disaster management? What is a better way to consider disaster resiliency, especially, ‘build back better’, for our sustainable future?

Image

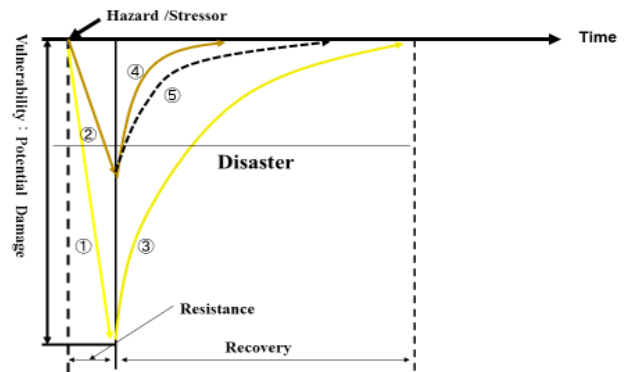


Figure 1: An Image of Disaster Resilience

Modified from (Bogardi, 2006)

Recent Publications (minimum 5)

1. Hitomi Murakami, Tadashi NAKASU et al. (2015) Collection and Analysis on Overseas Disaster Evacuation Related Papers and Documents, Journal of JAEE, Vol.15(5), pp76-96 (in Japanese).
2. Toshio OKAZUMI, Tadashi NAKASU (2015) Lessons Learned From Two Unprecedented Disasters in 2011-Great East Japan Earthquake and Tsunami in Japan and Chao Phraya River flood in Thailand, International Journal of Disaster Risk Reduction, ELSEVIER.
3. Rabindra Osti, Tadashi Nakasu (2014) Lessons learned from southern and eastern Asian urban floods: from a local perspective, Journal of Flood Risk Management, Wiley.
4. Tadashi Nakasu and Munetaka Kurahara (2014) Disaster Research and Great East Japan Earthquake and Tsunami Disaster, Advances in Social Research, 10, Yuhikaku, pp64-69 (in Japanese).
5. Tadashi Nakasu, Toshio Okazumi, Yoshikazu Shimizu (2013) Establishment of Industrial Areas and New Risk Management: Chain Reactions of Economic Damage caused by 2011 Thailand Chao Phraya River Flood Disasters and Local Societies, The Journal of Urban Social Studies No.5 (in Japanese).
6. Tadashi Nakasu, Toshio Okazumi, Yoshikazu Shimizu (2012) Development of Flood Disaster Preparedness Indices in Thailand: Focus on the Cases of Ubon Rachathani and Hat Yai, The Journal of Thai Studies No.12. Japanese Society for Thai Studies, pp65-81 (in Japanese).
7. Tadashi Nakasu, Toshio Okazumi, Yoshikazu Shimizu (2012) Report of the Project on Establishment of Flood Disaster Preparedness Indices (FDPI), Typhoon Committee (WMO-UN/ESCAP).



Biography (150 word limit)

Dr. Nakasu is an Academic researcher/Lecturer at College of Population Studies, Chulalongkorn University in Thailand. He had been working at NIED (National Research Institute for Earth Science and Disaster Prevention) as a principal research fellow and ICHARM (International Centre for Water Hazard and Risk Management), PWRI (Public Works Research Institute) as a research specialist in Japan for a decade. He has conducted many disaster field surveys such as Indian Ocean Tsunami (2004), Hurricane Katrina (2005), Typhoon Ondoy and Pepeng (2009), Great East Japan Earthquake and Tsunami (2011), and Chao Phraya River Flood (2011). He also conducted abundant disaster management research around the globe. He had been a project leader of the Working Group of Hydrology, the Typhoon Committee (WMO and UN/ESCAP) for nearly 3 years. He was also a visiting researcher at JICA (Japan International Cooperation Agency) and an adjunct instructor at several universities in Japan.

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Notes/Comments: