

## PREFACE

Rising global humanitarian needs call for learning and creativity – new field knowledge must be synthesized and innovative solutions tested to break ground in science and the practice of humanitarian operation. This special issue, entitled “*Toward Resilient Humanitarian Relief and Logistics Coordination*,” builds on a special session held at the 5th conference of the International Society for Integrated Disaster Risk Management (IDRiM 2014) in London, Ontario, Canada, Oct. 30 – Nov. 1, 2014, where interdisciplinary scholars shared their latest findings on a variety of topics related to “*Building Disaster Resilient Communities*.”

Humanitarian operation faces a number of complex challenges. For the ultimate success of their operation, a wide range of governmental, private sector and civil society actors must work together, making improved collaboration, coordination and streamlining crucial. Understanding stakeholder dynamics, organizational incentives, and behavioral tendencies are therefore some of the important first steps in designing effective humanitarian relief systems. This issue of *Journal of Natural Disaster Science* focuses on these aspects and showcases five studies on pre-and post-disaster humanitarian relief operation including:

- Evaluating the potential for horizontal cooperation among humanitarian organizations using an agent-based model (**Mochizuki, Toyasaki, and Sigala**).
- Investigating a minimum set of relief goods necessary for survival, focused on human rights of survivors (**Ito, Wisetjindawat, and Yokomatsu**).
- Examining the food and water shortages experienced after typhoon Haiyan in the Philippines, focused on the impacts of community resiliency and social bonds (**Takeshita and Aratame**).
- Proposing a novel inter-ward, risk-diversified spatial allocation model for relief goods storage, with a case study application in Japan (**Kajihara, Yokomatsu, Ito, and Wisetjindawat**).
- Comparing disaster volunteer group networking between Japan and the US from the perspective of knowledge sharing (**Matsuda**).

We sincerely hope that the issue will be of interest to broad professional readers and will stimulate further discussions and collaborations on these topics.

Junko Mochizuki<sup>a</sup>, and Muneta Yokomatsu<sup>b</sup>

<sup>a</sup> The International Institute for Applied Systems Analysis (IIASA)

<sup>b</sup> Disaster Prevention Research Institute (DPRI), Kyoto University

\* Due to editing needs, two papers, **Kajihara, Yokomatsu, Ito, and Wisetjindawat**, and **Matsuda** will appear later on this website in January and February respectively.