Multidisciplinary disaster prevention approach from gigantic natural disasters

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Abstract

In 2023 UN warned "the era of global warming has ended" and "the era of global boiling has arrived." I conduct research on how to optimize sustaina-ble disaster mitigation approaches that are in harmony with nature. I am also addressing issues such as getting disaster relief forces to the disaster site as soon as possible, and communicating field surveys to society and, ultimately, incorporating them into disaster prevention policies. I contribute for humanity must prepare to save as many lives and protect assets as much as possible from intensifying natural disasters. Also, when disasters do occur, evacuees should be able to live a safe and healthy life in evacuation shelters, and protect their assets, while I advise for companies should be able to continue to operate through BCP.

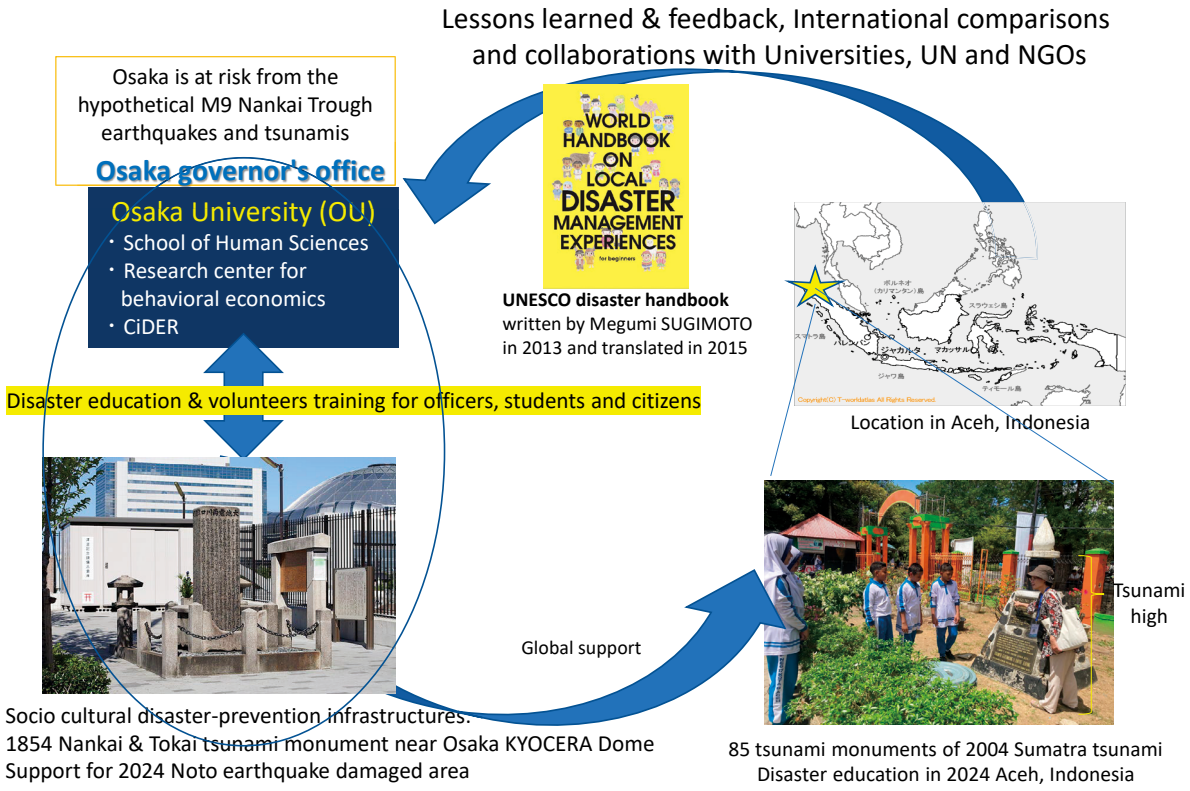
I have contributed to multidisciplinary research on teams that scientists in infrasound, dentists and DMAT teams. I also am working together with experts from the UN and other organizations to develop disaster prevention methods consistent with SDGs.

Background & Results

I received the best poster award from the 2nd UNESCO-IOC Global Tsunami Symposium in Nov. 2024. There was no tsunami early warning system in Indonesia and the tsunami killed approximately 170,000 people in Indonesia and a total of 230,000 persons in the entire Indian Ocean region in 2004. Our efforts at community based disaster management include installation of 85 disaster monuments and other educational efforts in Aceh Indonesia, to remind people how far inland the 2004 tsunami penetrated in Aceh Indonesia, most affected by the 2004 Indian Ocean tsunami.

I wrote and a published UNESCO disaster handbook on disasters lessons from not only Indonesia but all over the world, to assist in disaster prevention education for children throughout the world. I am continuing to work on sharing disaster prevention knowledge between Japan and Indonesia for mutual development.

Report of Tsunami Disaster Risk Reduction Lab. in 2024



Patent

Treatise

Sugimoto, Megumi. Geoethics and risk-communication issues in Japan's disaster management system revealed by the 2011 Tohoku earthquake and Tsunami. *Geoethics: Ethical Challenges and Case Studies in Earth Sciences*. 2014, 323-334. doi: 10.1016/B978-0-12-799935-7.00026-5
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Keyword climate change, tsunami, BCP, mitigation, community-based disaster management, DE&I