Journal of Integrated Disaster Risk Management

Technical Summary

The Potential and Roles of Ethnic Minorities in Disaster Risk Reduction: IDRiM2022 Conference Session Report on Muslim Communities in Japan

Hitomu KOTANI[1,2*], Mari TAMURA[3], Yusuke KATSURA[4], and Mohammad MOINUDDIN[5]

Abstract Ethnic minority groups are considered vulnerable due to their cultural, linguistic, and religious differences, but some are resilient and may have the potential to work as critical stakeholders in disaster risk reduction (DRR). The special session "Minority communities in DRR" at the 2022 IDRiM conference focused on the potential and roles of ethnic minority groups, especially mosques in Japan that are mainly managed by foreign nationals. This technical summary aims to (1) summarize presentations and discussion from the session and (2) describe future research directions regarding ethnic minority communities in general and Muslims in Japan in particular. The session presented various activities undertaken by mosques, including functioning as coronavirus disease 2019 vaccination sites and evacuation shelters for foreign nationals, and relief suppliers (*e.g.*, sending donations and volunteers) in natural hazard-related disasters (*e.g.*, earthquake and flood). The presentations and discussion could lead to micro, meso, and macro perspectives in future studies where the related individuals (*e.g*., mosque managers and users), the mosque's networks, and the overall trend of mosques throughout the country are focused on, respectively. The findings of this session and future research will help us further comprehend their potential and roles, empower them, and contribute to building multi-stakeholder partnerships to realize a society where no one is left behind.

---

[1] Department of Natural Resources, Graduate School of Global Environmental Studies, Kyoto University, Japan

[2] Department of Urban Management, Graduate School of Engineering, Kyoto University, Japan
*Corresponding author email: kotani.hitomu.5c@kyoto-u.ac.jp

[3] Department of International Studies, the University of Tokyo, Japan

[4] Graduate School of Human Sciences, Osaka University, Japan

[5] Graduate School of Humanities, Osaka University, Japan

1. INTRODUCTION

As a slogan of Sustainable Development Goals (SDGs) (United Nations 2015) suggests, it is vital to leave no one behind in disaster risk reduction (DRR). Generally, the people left behind in disasters include minorities such as older people, children, physically/mentally disabled people, the poor, women (or sexual minorities), and ethnic minorities. The IDRiM society has already focused on some of them (BasuDas 2021; Chasanah and Sakakibara 2021; Hamidzada and Cruz 2019; Ohtsu and Hokugo 2022)[6]. However, it has insufficiently studied ethnic minorities (*i.e.*, linguistic and religious minority groups) despite their vulnerabilities resulting from cultural, linguistic, and religious differences (Bolin and Kurtz 2018; Gaillard 2012)

While ethnic minorities are stereotyped as being vulnerable, some of them are also known to be resilient (Kawasaki *et al*. 2018; Uekusa and Matthewman 2017) and may work as critical stakeholders in DRR. Their resources and networks may help both majority and minority communities. Therefore, it is crucial to collect case studies and reports on ethnic minorities to understand their potential and roles better.

The special session "Minority communities in DRR" at the IDRiM 2022 conference[7] focused on the potential and roles of ethnic minority groups, especially Muslim communities or mosques in Japan. The mosques are typically used and managed by foreign Muslims for regular daily prayers and educational and ceremonial purposes. There were approximately 100 mosques as of 2017 (Okai 2018), while an estimated 157,000 foreign Muslims lived in Japan as of 2018 (Tanada 2019). This number is overwhelmingly small compared to the entire population (including foreign nationals) of approximately 130 million. The session featured three presentations by the authors and highlighted a variety of functions and activities of mosques in Japan during disasters. The presentations included actual and scenario-based case studies/reports on several Japanese mosques in natural hazard-related disasters (*e.g*., earthquakes and floods) and the coronavirus disease 2019 (COVID-19) pandemic. As far as we are aware, this session was the first to report on various functions of the mosques in a Muslim-minority country[8] (at least in the IDRiM society).

The purpose of this technical summary is two-fold: (1) to provide an overview of each presentation—what was presented by each speaker and what was discussed, through question and answer (Q&A)—and (2) to describe future directions for research regarding ethnic minority communities in general, and Muslims in Japan in particular. The technical summary makes significant contributions in various aspects: first, reporting on the activities of the

---

[6] Other examples include a keynote speech of the IDRiM 2022, which focused on the low income countries (*i.e*., the poor), and Women in Disaster Risk Science Committee in the IDRiM Society, which discusses challenges and roles of women (IDRiM Committees 2022).

[7] It was held online on September 21–23, 2022.

[8] Examples of Muslim-majority societies are found in several previous studies (Cheema 2021; Cheema *et al*. 2014; Joakim and White 2015; Mughal 2015).

community can empower them and promote their community-based DRR activities. Second, a proper understanding of the minority groups' potential and roles can help build multi-stakeholder partnerships (*e.g.*, partnerships between minority groups and governmental sectors). Third, the case studies in Japan can be applied to minority groups in other regions and countries. Fourth, it can stimulate inter- and trans-disciplinary approaches (Tress *et al.* 2005) since the session crossed disciplinary[9] and scientific/academic boundaries[10]. Among the above, promoting community-based DRR and inter- and trans-disciplinarity is emphasized as a mission in IDRiM Society Strategic Plan 2030 (IDRiM Strategic Plan Committee 2022).

2. PRESENTATIONS AND DISCUSSION IN THE SESSION

2.1 Mosque as a COVID-19 Vaccination Site

The first presentation by Mari Tamura was on "Mosque as a COVID-19 vaccination site for ethnic minorities: A case study in Kanagawa, Japan" (Kotani *et al.* 2022a, 2022b). She focused on a case in Ebina, Kanagawa, Japan, where Ebina Mosque, a hub of foreign Muslims, was used as a vaccination site for foreign nationals, who likely faced linguistic and cultural barriers before the vaccination, from July 2021 for approximately three months. This case was the first and only one in Japan involving the local government. Based on a field survey (*i.e.*, field observation and interviews with stakeholders and vaccine recipients), she detailed (1) the linguistic and religious responses at the mosque and (2) the perceptions of vaccine recipients regarding linguistic and religious issues and considerations. She presented the various linguistic (*e.g.*, interpretation by mosque-related volunteers) and religious (*i.e.*, separating vaccination spaces based on gender) services provided at the mosque, which the vaccinees accepted appreciatively. Such measures likely promoted vaccinations by increasing the intention to vaccinate and closing the intention-behavior gap. The results demonstrate the mosques' significant potential in Muslim-minority societies (*e.g.,* Japan) to assist ethnic minorities during disasters, including pandemics.

During the Q&A, she received a question about medical services and halal: "Do medical services have to follow halal rules?" She answered that religious leaders (*i.e.*, imam) informed vaccinees that medical services (*e.g.*, alcohol sterilization) were not relevant to halal rules, and thus, there were no troubles related to this.

---

[9] The first author (Hitomu Kotani) specializes in disaster studies, the second author (Mari Tamura) in international studies, and the third and fourth authors (Yusuke Katsura and Mohammad Moinuddin) in religious and humanity studies.

[10] The speakers consisted of both researchers and stakeholders. Specifically, the first and second authors are academic researchers; the third and fourth authors are not only researchers but also non-academic participants, that is, Muslim stakeholders of Osaka Ibaraki Mosque, Japan, who use the mosque and help the administration.

2.2 Mosque as Evacuation Shelters

The second presentation by Hitomu Kotani was on a scenario-based case study titled "Potential of mosques to serve as evacuation shelters for foreign Muslims during disasters: A case study in Gunma, Japan" (Kotani *et al.* 2021). He proposed using mosques as voluntary shelters for foreign Muslims, as they tend to face dietary and linguistic issues in general public shelters. He further evaluated the mosques' potential to function as shelters. Mosques are expected to have large spaces, including a prayer space, and to store food familiar to daily attendees. The study targeted two mosques (*i.e.*, Isesaki Mosque and Sakaimachi Mosque) in Gunma, Japan, to investigate their equipment and building environment in relation to how they could function as shelters, the number of evacuees they could accommodate, the amount of food they could supply to evacuees, and the willingness of administrators and attendees to use the mosques as shelters. The interview with mosques' administrators revealed that both mosques were equipped with toilets and shower rooms and had enough space (*i.e.*, prayer space and multipurpose space) for approximately 30 to 40 evacuees[11]. They also had sufficient kitchen space and tableware to prepare meals for about 100 people and they could quickly receive food from nearby halal stores. The administrators were also willing to use the mosques as shelters. A questionnaire survey with Sakaimachi Mosque attendees showed that about half of them were willing to evacuate to the mosque. Thus, it was suggested that the mosques could serve as shelters accommodating and feeding many evacuees.

During the Q&A, the speaker was asked "Why do some people not want to evacuate to the mosques?" He was unsure about the reason since he did not ask about it in the survey. Meanwhile, he explained that some people were willing to evacuate to the mosques probably because they were familiar with the mosques and knew each other. For another question "Do Muslims have priorities to follow in emergencies? (*e.g.*, do they have lexicographic preferences?)," the third and fourth authors of this paper as Muslims confirmed that they do not. They also stated that the interpretation of Islamic teachings varies according to cultural and individual circumstances and that the embeddedness and internalization of the teachings depend on the person. However, we may be able to identify a general tendency, but this is an issue for future research.

2.3 Mosques as Disaster Relief and Response Suppliers

The last presentation by Yusuke Katsura and Mohammad Moinuddin was on "Disaster response of two mosques in Osaka, Japan." They reported on various relief and response activities implemented by two mosques: Osaka Ibaraki Mosque (OIM) and Osaka Islamic Center (OIC). For example, after the 2011 Tohoku earthquake and tsunami that caused

---

[11] The numbers differed from those reported by Kotani *et al*. (2021) (*i.e*., 60–80 evacuees to be accommodated). This difference was because he updated the numbers because of the COVID-19 pandemic, where shelters required twice as much space as before the pandemic to prevent the spread of infection (*i.e.*, 6 m^2 per person during the pandemic versus 3 m^2 per person before the pandemic, according to Yokomatsu *et al*. (2022))

Fukushima Daiichi nuclear disaster, OIM along with the nearby community center accepted evacuated people from affected eastern Japan and stocked the mosque shelter with halal foods, a cooking place, a prayer place, beds, and more. In the 2018 Japan floods which hit western Japan, the members of OIM launched a donation campaign, sending approximately 237 thousand JPY to the affected areas via the Japanese Red Cross Society. OIC also dispatched volunteers to remove mud and debris. In response to the COVID-19 pandemic, OIM distributed raw food packets to those who lost their source of income. Moreover, to fight loneliness, depression, and other psychological issues, OIM attempted to reach out to people through short religious talks online. A five-minute message with Japanese subtitles was uploaded daily on the Mosque's YouTube channel. In addition, OIC collaborated with a private clinic and became a COVID-19 vaccination site for foreign nationals and Japanese neighborhoods in August 2021, which facilitated the vaccination of those who had not been able to get vaccines due to linguistic barriers (Tamura *et al*. 2022). The speakers suggested that mosques are not only places for Muslims to gather for religious activities, but also centers for volunteer and emergency activities. Based on the Islamic teaching, mosques are central to mutual aid activities under normal circumstances, but during the time of disaster, the mosques are used beyond the normal scope of usage for the community. They concluded that these activities promote collaboration within the Muslim community while creating opportunities for exchange and cooperation with Japanese residents, which in turn contributes to building a convivial multi-cultural society.

During the Q&A, they were asked: "How did OIM announce that it was accepting evacuees?" The last author answered that it was done by making use of the sources provided by the nearby community center.

3. FUTURE DIRECTIONS

The session primarily focused on each mosque as a unit of analysis, while research with more micro, meso, and macro perspectives would be required to further comprehend the potential of mosques in the future.

3.1 Micro Perspective

Based on the discussion (especially in Section 2.2), we need to study related individuals in greater detail. For example, it would be interesting to investigate how managers and users of mosques make decisions in relation to Islamic rules (*i.e*., religious rules) and personal circumstances (*i.e*., non-religious environment) in DRR and how diverse the decisions are. Such attempts will deepen our understanding of how mosques would work during disasters. The detailed analysis on each individual will also be meaningful in the contemporary diverse society (*i.e*., the society with super-diversity) where there is an interplay of various factors (*e.g*., country of origin, migration channel, educational background, and employment) in addition to ethnicity (Grzymala-Kazlowska and Phillimore 2018; Vertovec 2007).

Another exciting topic would be examining the consequences of mosques' activities on individuals. While the session showcased mosques' relief and response activities, we need to better understand how aid providers and recipients (including foreign minorities and Japanese citizens) were influenced. Questionnaires or interviews can be used to understand the short- and long-term effectiveness of mosques' activities. It will also help to understand the emergence of the convivial society, as Section 2.3 suggested.

3.2 Meso and Macro Perspectives

Another vital perspective is a meso perspective on mosques' networks or social capital (Aldrich 2012). Some mosques in affected areas received relief goods and volunteers from other mosques (Asai 2018; Florian 2020; Nejima and Danismaz 2015). Thus, the following topics on understanding the bridging form of their social capital could be explored: whether the networks were pre-existing or emergent (Florian 2020); if emergent, whether they continued even after a disaster; and how they functioned following disasters. In addition to connections between mosques, their connections with other stakeholders (*i.e.*, linking social capital) would also be essential to explore, as implied in Sections 2.1 (*i.e.*, link with a governmental sector) and 2.3 (*i.e.*, links with social and private sectors). For example, the reasons that mosque managers and city office workers do or do not work together are worth exploring.

Lastly, since Japan has approximately 100 mosques, a macro perspective on mosques throughout the country is significant. We should understand where they are located[12] (*e.g.*, whether they are located in high-risk areas such as tsunami inundation zones) and how they are physically vulnerable; for example, by using a geographical information system. We may also find it useful to categorize the mosques according to their locations, capacities, and facilities. Such a macroscopic view will reveal variances in their potentials and might help to plan national or regional level DRR strategies.

The perspectives outlined above will require further inter- and trans-disciplinary research. Such research may strengthen the reported findings here and further help to comprehend the potential and roles of mosques and possibly other ethnic minority groups and their buildings not only in Japan but also in other countries and regions. The findings may empower minority communities[13] and help build multi-stakeholder partnerships to realize a society where no one is left behind.

---

[12] While a list of 80 mosques existing in 2014 was prepared (Tanada 2015), the number of mosques has increased since then, and the list should be updated.

[13] In fact, OIC voluntarily planned to use its building as a vaccination site after learning of the use of Ebina Mosque as a vaccination site (Tamura *et al*. 2022). Therefore, the potential use and roles of such sites (*e.g.*, mosques serving as shelters, vaccination sites, and relief suppliers, as shown here) can provide good lessons and examples for communities that have not realized them.

ACKNOWLEDGMENT

REFERENCES

Aldrich, D. P. (2012). *Building Resilience: Social Capital in Post-Disaster Recovery*. University of Chicago Press.

Asai, N. (2018). Function of social capital embedded in religious communities at times of disaster: cases of disaster relief activity by a Muslim community and a Soka Gakkai community in Japan. *Journal of Disaster Research*, *13*(7): 1323–1332. https://doi.org/10.20965/jdr.2018.p1323

BasuDas, D. (2021). The role of theatre with eco-feminist approach in combating COVID pandemic. *IDRiM Journal*, *11*(2): 1–27. https://doi.org/10.5595/001c.31089

Bolin, B., and Kurtz, L. C. (2018). Race, Class, Ethnicity, and Disaster Vulnerability. In *Handbook of Disaster Research* (pp. 181–203) Springer. https://doi.org/10.1007/978-3-319-63254-4_10

Chasanah, F., and Sakakibara, H. (2021). Assessment of social vulnerability in the evacuation process from Mount Merapi: Focusing on people's behavior and mutual assistance. *IDRiM Journal*, *10*(2): 15–34. https://doi.org/10.5595/001c.21409

Cheema, A. R. (2021). *The Role of Mosque in Building Resilient Communities: Widening Development Agendas* (1st ed.). Springer.

Cheema, A. R., Scheyvens, R., Glavovic, B., and Imran, M. (2014). Unnoticed but important: revealing the hidden contribution of community-based religious institution of the mosque in disasters. *Natural Hazards*, *71*(3): 2207–2229. https://doi.org/10.1007/s11069-013-1008-0

Florian, A. (2020). From victim to agency? How social capital can enable foreign residents to engage in support activities in times of disaster: an analysis of the Kumamoto earthquake. *Journal of Sociological Society of West Japan*, *18*: 53–71. https://doi.org/10.32197/sswj.18.0_53

Gaillard, J. C. (2012). Caste, ethnicity, religious affiliation and disaster. *The Routledge Handbook of Hazards and Disaster Risk Reduction*. Routledge, London/New York, 459–469.

Grzymala-Kazlowska, A., and Phillimore, J. (2018). Introduction: rethinking integration. New perspectives on adaptation and settlement in the era of super-diversity. *Journal of Ethnic and Migration Studies*, *44*(2): 179–196. https://doi.org/10.1080/1369183X.2017.1341706

Hamidzada, M., and Cruz, A. M. (2019). Learning from voices in the field: The role of disaster education in reducing vulnerability in urban and rural Afghanistan. *IDRiM Journal*, *9*(2): 49–69. https://doi.org/10.5595/idrim.2019.0353

IDRiM Committees (2022). *IDRiM Society Annual Report* 2021/2022. https://idrim.org/?page_id=18

IDRiM Strategic Plan Committee (2022). *IDRiM Society Strategic Plan 2030*. https://idrim.org/wp-content/uploads/2022/10/IDRiM_Society_Strategy_2030.pdf

Joakim, E. P., and White, R. S. (2015). Exploring the impact of religious beliefs, leadership, and networks on response and recovery of disaster-affected populations: a case study from Indonesia. *Journal of Contemporary Religion*, *30*(2): 193–212. https://doi.org/10.1080/13537903.2015.1025538

Kawasaki, A., Henry, M., and Meguro, K. (2018). Media preference, information needs, and the language proficiency of foreigners in Japan after the 2011 Great East Japan Earthquake. *International Journal of Disaster Risk Science*, *9*(1): 1–15. https://doi.org/10.1007/s13753-018-0159-8

Kotani, H., Okai, H., and Tamura, M. (2022a). Mosque as a vaccination site for ethnic minority in Kanagawa, Japan: leaving no one behind amid the COVID-19 pandemic. *Disaster Medicine and Public Health Preparedness*, 1–3. https://doi.org/10.1017/dmp.2022.78

Kotani, H., Okai, H., and Tamura, M. (2022b). COVID-19 vaccination at a mosque with multilingual and religious considerations for ethnic minorities: A case study in Kanagawa, Japan. *International Journal of Disaster Risk Reduction*, 103378. https://doi.org/10.1016/j.ijdrr.2022.103378

Kotani, H., Tamura, M., Li, J., and Yamaji, E. (2021). Potential of mosques to serve as evacuation shelters for foreign Muslims during disasters: a case study in Gunma, Japan. *Natural Hazards*, *109*(2): 1407–1423. https://doi.org/10.1007/s11069-021-04883-7

Mughal, M. A. Z. (2015). An anthropological perspective on the mosque in Pakistan. *Asian Anthropology*, *14* (2): 166–181. https://doi.org/10.1080/1683478X.2015.1055543

Nejima, S., and Danismaz, I. (2015). Muslim NGOs and volunteers in Tohoku, Japan. In S. Nejima (Ed.), *NGOs in the Muslim World: Faith and Social Services* (pp. 116–123) Routledge.

Ohtsu, N., and Hokugo, A. (2022). Evacuating vulnerable people during a tsunami disaster in Japan: A simulation using wheelchairs. *IDRiM Journal*, *11*(2): 78–89. https://doi.org/10.5595/001c.34095

Okai, H. (2018). Muslim Communities and Local Communities: Reconsidering "Multicultural Conviviality" through the Activities of Islamic Organizations [Musurimu komyunityi to chiiki shakai-Isuramu dantai no katsudou kara "tabunka kyousei" wo saikou suru]. In N. Takahashi, T. Shirahase, & S. Hoshino (Eds.), *Religion and Multicultural Conviviality in Contemporary Japan: Exploring the Relationship between Immigrants and Local Communities* [Gendai nihon no shukyo to tabunka kyousei-imin to chiiki shakai no kankeisei wo saguru] (in Japanese). (pp. 181–203) Akashi Shoten.

Tamura, M., Kotani, H., Katsura, Y., and Okai, H. (2022). Mosque as a COVID-19 vaccination site in collaboration with a private clinic: A short report from Osaka, Japan. *Progress in Disaster Science*, *16*: 100263. https://doi.org/10.1016/j.pdisas.2022.100263

Tanada, H. (2015). *Mosques in Japan* [Nippon no mosuku] (in Japanese). Yamakawa Shuppansha.

Tanada, H. (2019). Estimate of Muslim population in the world and Japan, 2018. *Waseda Journal of Human Sciences*, *32*(2): 253–262. (in Japanese) http://hdl.handle.net/2065/00063404

Tress, G., Tress, B., and Fry, G. (2005). Clarifying integrative research concepts in landscape ecology. *Landscape Ecology*, *20*(4): 479–493. https://doi.org/10.1007/s10980-004-3290-4

Uekusa, S., and Matthewman, S. (2017). Vulnerable and resilient? Immigrants and refugees in the 2010–2011 Canterbury and Tohoku disasters. *International Journal of Disaster Risk Reduction*, 22: 355–361. https://doi.org/10.1016/j.ijdrr.2017.02.006

United Nations (2015). *Transforming our world: the 2030 Agenda for Sustainable Development*. https://sdgs.un.org/2030agenda

Vertovec, S. (2007). Super-diversity and its implications. *Ethnic and Racial Studies*, *30*(6): 1024–1054. https://doi.org/10.1080/01419870701599465

Yokomatsu, M., Park, H., Kotani, H., and Ito, H. (2022). Designing the building space of a shopping street to use as a disaster evacuation shelter during the COVID-19 pandemic: A case study in Kobe, Japan. *International Journal of Disaster Risk Reduction, 67*: 102680. https://doi.org/10.1016/j.ijdrr.2021.102680