

**Involvement of immigrants in community planning for disaster resilience:
a prospect and paradigm**

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背景と補足説明

日本人は長い間、移民とはこちらから移住するものであると理解していた。しかしながら高齢化が進み労働力が減少するに従い、徐々にではあるが様々な国々から移民を受け入れつつある。職業や仕事の種類も、当初の自動車工場、看護師、農業従事などの若者が好まない職種から、最近では日本の高等教育を経てより高度な職種を目指すなど、選択の幅が広くなりつつある。

このような全体の流れにも拘らず、災害が多いわが国で、災害時における情報伝達は日本人のみを対象とするケースが多いのはどうしてであろうか。

この記事は、移民・難民に対するコミュニティへの受け入れ方法の見直しを提案してはいるが、その前提となる異なる文化や習慣を理解し、日常から積極的にコミュニティの一員として受け入れるべきであると述べている。ここから、我々の求める革新的で回復力に富む社会実現のための多様性と柔軟性は、異質の人々を排除することからは生まれないとの筆者らの強い信念を感じる。

For a long time, Japanese understood that immigrants would immigrate from Japan to overseas countries. However according to the aging progresses and labor force declines, we are gradually accepting immigrants from various countries. Professions and/or Jobs are also becoming wider in choice from unfavorable ones for Japanese younger generation, such as car factories, nurses and farmers, to skilled ones after finishing higher educations. In this context, it is regrettable that there are many cases where disaster information is targeted to transfer only to Japanese in spite of frequent disasters in Japan.

Although this article suggests improvement of the way to accept immigrants and refugees, it could not be realized unless understanding different cultures and customs as a background of their way of life. Consequently, we feel that it is authors' strong belief that Japanese society could not get the seeking diversity and resilience for the innovative and safe society without involving heterogeneous people in community planning.

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Involvement of immigrants in community planning for disaster resilience: a prospect and paradigm

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Abstract

This paper, focusing on the increasing number of immigrants in Japanese communities, proposes that a new paradigm is needed in the current Japanese community planning system to enhance capability and resilience to respond to the risk of disasters. The recent Tohoku region earthquake and tsunami in 2011 and Kumamoto earthquake in 2016 revealed that the current system has not considered the fact that those immigrants significantly lack knowledge and experience of disasters. This is making immigrants in Japanese communities vulnerable to disasters and is more of a critical issue than ever along with the increased size of the immigrant population. Japan is one of the most prepared nations in the world for disasters. However, immigrants and their vulnerabilities are overlooked in the current disaster mitigation scheme. This paper reviews the increasing risk of disasters, which is a global issue, and looks into the trend of immigrants residing in Japanese community. The paper concludes with discussion of a conceptual model that involves immigrants in community planning. We suggest that this approach would lead to the co-production of new knowledge and social capital that are important factors to enhance resilience.

Keywords: *Immigrants, Disaster resilience, Community planning, Paradigm shift, Co-production*

1. Introduction

The World Risk Index ranked Japan as having a highest urban risk with natural hazards¹⁾. Its coping capacities and adaptive capacities are regarded as one of the highest in the index. Historically, Japan has experienced a number of various natural disasters, such as earthquakes, tsunami, flooding, and typhoons to name a few. Japanese people have developed extensive knowledge to cope with those disasters. This knowledge has been transferred to generation after generation, which has enabled the Japanese community to enhance its resilience. However the knowledge is only available to Japanese people in most communities. The Japanese community has experienced dynamic change in its socio demographic characteristics since World War II. One of the remarkable changes is the increase in immigrants. As of June 2016, the number of immigrants in Japanese society was at its highest in Japanese history - 2.3 million foreign people were recorded as residents, according to the Ministry of Justice, Japan.

This provides significant implications for a Japanese society that had diversified its population, especially in coping with natural disasters. There are many foreign residents whose home countries don't have as many as disasters as Japan, so they are not used to disasters and have little knowledge about how they should respond at the time of disasters. This paper aims to address this issue by proposing a paradigm of community planning for disaster resilience, which involves immigrants and co-production of knowledge by residents from different backgrounds. The following section will discuss the critical threat of disasters that our society is facing, immigrant policy in Japan and the involvement of immigrants in community planning. In section three, we will propose a conceptual model of community planning and disaster management involving immigrants. The paper

concludes with key advantages of the model and implications for research.

2. Background

2.1 Increasing disaster risk and importance of community in building resilience

Both the scale and the number of natural disasters has increased globally in recent years^{2,3)}. The Aceh Tsunami in 2004, Hurricane Katrina in 2005 and the East Japan earthquake and tsunami in 2011 shed light on the importance of building resilience of communities to enhance preparedness for disasters^{4, 5)}. Yet in 2013 alone, 22 million people were displaced by flood, hurricanes and other natural hazards⁶⁾.

Disaster resilience is regarded as a complex problem⁷⁾. It is inter-disciplinary and hierarchical in many cases involving governance, management, leadership and politics etc. Community seismic resilience is described as "*the ability of social units to cope with hazards and to carry out recovery activities in ways that minimize social disruption*"⁸⁾. Examining the case of the disastrous 1923 Great Kanto earthquake that killed more than 100,000 people, Aldrich⁹⁾ argued that social capital is more significantly associated with the speed of recovery than other factors such as damage levels, physical, human, or economic capital. This was verified in more recent Japanese society after the Kobe earthquake in 1995. Nakagawa and Shaw¹⁰⁾ found that the role of social capital is important in driving rehabilitation and reconstruction programs of communities for speedy recovery, verifying that this can be applied in a different culture and nation. Recognition of community social capital has been

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extended to the concept of co-production, which is the synergistic relationship between community members and government agencies for effective recovery¹¹⁾. To prepare for natural disasters, act appropriately in the survival phase and recover as soon as possible, community is an important unit, and all members of community including immigrants need to work and respond together to minimise the impact of disasters.

2.2 Immigrants In Japanese society

Community planning involving immigrants will become more important to enhance disaster resilience because of the increase of immigrants in Japanese society. In 2016, the number of immigrants in Japanese society was at its highest in Japanese history. More than 2.3 million immigrants lived in Japan in 2016 (June). Not only the number but also the backgrounds of immigrants have become more diversified. The immigrants are from Asia, North America, South America, Africa and Europe¹²⁾ (Figure 1).

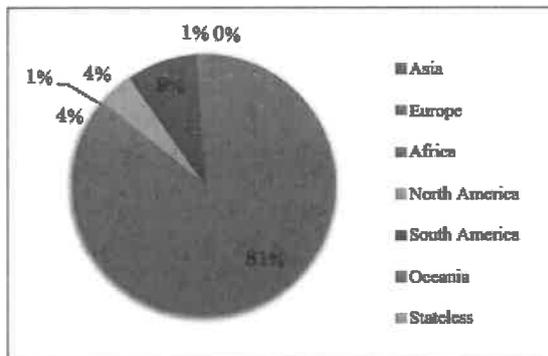


Figure 1. Origin of Immigrants to Japan, created by the authors based on the Foreign population census, Ministry of Justice, Japan, 2016.

Those immigrants were formerly understood to be tourists whose numbers were increased by the Abe government's Tourism Policy. However, they are now associated with the Labour Immigrants Policy. In 2016, the Japanese government started to encourage foreigners with higher skills and those who would like to work in Japan to consider migrating to Japan. The Japanese government implemented an online system to process the applications for and renewals of permanent residency visas¹³⁾ to make the process more efficient. However that new online system is targeting the limited number of foreigners who have advanced skills. In terms of foreigners with no advanced skills, three companies that run homemaker services have been appointed to assist immigrants to work as their staff in National Strategic Special Zones¹⁴⁾. The Ministry of Health, Labour and Welfare has announced that they will start a home care service by certified immigrant care workers in 2017¹⁵⁾. In the agriculture sector, they are considering employing immigrant workers in

National Strategic Special Zones¹⁶⁾.

Those initiatives show that immigrant workers are going to play a key role in the Japanese labour market. This might cause a further increase of immigrants in the Japanese community. In fact, it was announced that immigrant workers have increased by 19% from the previous year, and are recorded at more than 1 million, as of January 2017^{17,18)}. The minister for Dynamic Engagement of All Citizens commented "We do not have enough workers, which is the economic bottleneck." at the interview at the Japan National Press Club on November 27th, 2015. He further commented on the immigrant policy, responding to questions from international investors, as "We understand that we need to have human resources. We welcome international investors who would like to start business in Japan. We need to make such an environment where foreigners including those with advanced skills immigrate and play an important role in the Japanese labour market."¹⁹⁾ This comment gave the impression that the government was not positive about accepting immigrants. However they started to permit foreign workers to be employed in the agriculture and homemaker sectors in 2016, as mentioned above. Although this seems politically inconsistent, understanding two important points helps us to understand what the government is proposing. The first point is the "human resources" mentioned in the interview with the minister. The other point is the "globalisation of economics" and its relationship with immigrant workers. What the minister's phrase "human resources" implies is that foreign workers are not recognised as "residents" who will reside in Japanese community in the future. Instead they are regarded as "resources" (or a labour force) who assist in enhancing Japan's economic productiveness and competitiveness. Immigrants as "resources" means that those people are disposable and are not considered as members of Japanese society. And if we compare the policy around the immigrant labour force with that of other countries, Japan's position is similar to those of developed countries such as the USA and Singapore. Singapore is becoming an Asian economic hub by boosting its global competitiveness. In Singapore, workers from Southeast Asia, China and India are supporting sectors such as homemaker services and construction while Singaporeans work in other sectors. The Singaporean government places various restrictions on those workers and make almost impossible for them to become citizens²⁰⁾. In Japan the sectors open for foreign workers since 2016 are caregiving, nursing and agriculture, which are regarded as so-called Dirty, Dangerous and Demeaning (3D). Those sectors lack workers and foreigners are used as a disposable labour force. Utilising migrant labour workers in 3D sectors is a notable labour migration pattern at a global scale. As with Singapore immigration policies, these imported labour migrants are not expected to be citizens of Japan, as was clearly articulated in Minister Kato's speech. The Japanese

government will not develop "migration" policies (which consider migrants as future citizens or residents) but will utilise foreign human "resources" to enhance Japanese global economic competitiveness.

If the Japanese government imports and utilises foreign human resources, regardless of their status (whether they are recognised as citizens or not), the number of non-Japanese residents will increase - as it already had by 2016. The significance of incorporating these non-Japanese residents into Japanese local communities and into disaster prevention scheme will also inevitably increase, for two reasons. Firstly, non-citizen migrant workers will be subjected to natural disasters just as Japanese citizens will be, regardless of their residential status. Secondly, as they are imported not as human beings but as "resources", they are likely to have less connection with the host society, as seen elsewhere, such as in Singapore, a pioneering nation-state for utilising labour migration. The current rapid intake of foreign "resources" suggests that these migrant workers risk becoming vulnerable people who require assistance during a disaster, due to their lack of available information from local Japanese communities, in addition to their lack of knowledge about Japanese natural disasters and experience of disaster prevention.

2.3 Involvement of Immigrant and community planning for disaster resilience

The immigrants in Japan are considerably disadvantaged in coping with disasters in three main respects. First, their Japanese language skills may not be enough to understand the information about disasters. This is a critical factor that affects their response at the time of disaster. Not all immigrants were born in an environment where earthquake, tsunami and typhoon are likely to happen. Compared with Japanese people, they significantly lack knowledge of natural disasters and how to prepare for them. Second, even if they are from countries where natural disasters frequently happen, they do need to know the dedicated evacuation centre in their area and the way to evacuate. However this is not sufficiently informed to immigrants in many Japanese communities. Third, related to the issues of language, they lack relationships with other members of the community. To reduce the risk of disasters at a community level, it is critical to support immigrants who have those disadvantages. This will lead to a reduction in casualties and impact on communities at the time of disaster. There is a need for a framework of disaster risk reduction that addresses this issue by a comprehensive and collaborative approach. The framework will not only reduce the disadvantages of immigrants in responding to disasters, but also provide them with a sense of safety and confidence which is a basic factor of quality of life. In other developed countries, it is becoming inevitable not to have many immigrants (including the issue

of refugees). However involving them in community can provide opportunities for them to share experience and knowledge with local people. This will help all community members to further understand the risks and to enhance capacity for disaster management²¹⁾. However, the current Japanese community does not involve immigrants in disaster prevention scheme in an inclusive manner. As discussed by Flanagan et al., 2011²²⁾, communication in various languages is the biggest challenge, especially when the community is in survival mode. This is recognised in Japan, especially from the experience of the Kobe earthquake in 1995. Many immigrants required assistance to evacuate away from buildings to safe havens. Since then, it has been recommended that community members interact well with immigrants and work together in a disaster prevention scheme²³⁾. Some organisations started to develop a system that helps to overcome the issues of language. For example, a terminology database has been developed by Nagoya University and a disaster prevention handbook written in plain Japanese has been made by Hirosaki University.

In Wakayama prefecture, the Wakayama International Exchange Association and Japan Broadcasting Corporation, Wakayama Branch made a "Disaster Prevention Guide" for foreigners in 2016²⁴⁾. However it is not clear if those activities have been effective in helping immigrants. In a real situation of disaster, there is no such a time to use those databases and handbook. In addition, internet and wifi become unavailable, depending on the scale of the disaster. It is reported that immigrants were isolated at the time of the Kumamoto earthquake (2016) and Great East Japan earthquake (2011), because of the lack of information (e.g. about the location of evacuation centres)²⁵⁾. There is a significant lack of community disaster prevention that involves immigrants. Language is an important issue but it is not enough to cope with disasters. There is also a need for education and training for immigrants. For example, an international student from France who participated in disaster/evacuation training in Kyoto in 2016 stated that "I didn't know anything. I would like to use the knowledge obtained at this training when disaster happens."²⁶⁾ In addition, even if the immigrants are from countries where there are many disasters, they are not always trained and the knowledge in their countries cannot be applied in Japan. For example, a worker from the Philippines where the population who are displaced due to disasters is the third largest in the world, commented "There is no evacuation plan in my country. I am glad to see emergency electric generators, water filters and the way to perform cardio-pulmonary resuscitation. The training was helpful." after participating in a training session in Iwata City, Shizuoka Prefecture²⁷⁾. It is apparent from these examples that there is a need to assist immigrants to obtain and enhance their knowledge of disasters and encourage them to participate in community-based schemes.

In this context, the interaction of immigrants with other members of community is essential. Immigrants tend not to have much interaction with other community members, which makes them significantly disadvantaged at the time of disaster. The recent Kumamoto earthquake 2016 has strikingly shown the challenge for immigrants. An assistant professor of Kumamoto University who is from Bangladesh did not know what actually happened when the earthquake occurred, because he never experienced one. He could not understand the information from the radio, and spent 5 hours in a car with his wife who was six months pregnant. A neighbour who accidentally passed by guided them to the evacuation centre by communicating with them through body language²⁸⁾. Another example is a university lecturer from Sri Lanka moved to Kumamoto two weeks before the earthquake. She had no-one she could ask for assistance and was very isolated²⁹⁾. These cases show that immigrants get limited information at the time of disaster and feel socially excluded, which makes them considerably anxious.

In summary, immigrants have multiple challenges in living in the Japanese community. The current Japanese community planning does not take into account those challenges of immigrants and is made on the basis of the Japanese people's knowledge of local areas, disasters and communication. This is no longer effective in a diversified community. We argue that there is a need for collaborative community planning for disaster risk reduction which does not treat immigrants as disadvantaged people. Rather there is a need for a new paradigm where people from different background can share, and co-produce a new scheme. There is an urgent need of the paradigm shift in the present situation where Japan is encouraging more immigrants for economic development.

3. A paradigm shift

3.1 Gap in literature in immigration studies

The most relevant concept to this article in the field of migration studies is Internally Displaced Persons. The notion of Internally Displaced Persons deals with those migrants who are forced to move to a safe destination either domestically or internationally, to escape from natural or climate disasters. Internally Displaced Persons basically means;

- 1- those people who were forced to be removed due to natural and climate disaster; and
- 2- those people who did not cross the border of nation-states, unlike refugees (though there are some exceptions)³⁰⁾. This concept is useful to capture post-disaster movements. Until now, it has only been used to capture and analyse the status of Internally Displaced Persons prior to disasters. Not all Internally Displaced Persons are citizens. Those foreign and non-citizen residents who already lived in a disaster area are also put in the same category of citizens, and their different status prior to the disaster is neglected. The notion of

Internally Displaced Persons (and also Environmental Migration) assumes a movement from being citizens prior to a disaster to being displaced persons after disasters. This assumption is simply unable to capture the diversified status of residents prior to a disaster.

Table 1. Characteristics of displaced person and environmental migrants

	Actors of mobility	Factors causing mobility	Destination
Displaced Person	Citizens	Disasters, Civil Wars, Human right abuses	Mainly domestic sites
Environmental Migrants	Citizens	Damage caused by environmental changes	Domestic and international sites

* Created based on Koser, 2015³⁰⁾ & McAdam, 2015³¹⁾

This type of limitation is also demonstrated in the model used in the report Global Estimates 2015: People displaced by disasters³²⁾. This is a model to explain how risk reduction can influence displacement. The point here is not about the usefulness of this chart, but about its categorization of "population" and "displaced population". "Population" (prior to disaster migration movement) and "Displaced Population (after disaster migration movement)" both consist of the same category. The category "Population" does not seem to recognise different statuses within a population, which in fact includes non-citizens and citizens prior to a disaster. The report also mentioned those who are likely to be vulnerable to a disaster by referring to "people with limited mobility because of age, illness or disability or sickness, and children who become separated from their carers"³³⁾. However, non-citizen residents are not mentioned as potentially vulnerable people at a time of disaster. Although non-citizens might not be regarded as people with limited mobility in terms of physical abilities, their mobility is limited due to other disabilities such as lack of community ties, and lack of information because of language abilities and experiences of natural disasters. What these examples demonstrate is a blind side of the concept: it neglects non-citizen residents who lived in a disaster area prior to a disaster, due to its embedded assumption that all the people in a disaster area are citizens. This blindness can also be considered as a blind spot of migration studies as a whole, as migration studies itself has been developed as a policy tool of a nation-state, to govern and control the increasing influx of migrants into Europe and the United States after WWII. Migration studies is supposed to understand movements of migrants, however, its basic analytical unit is nested in the framework of a nation-state.

enhancing capacity.

Displaced persons and refugees are commonly seen in many developing countries after disasters, due to the limited capacity of those countries to progress recovery. Those countries broadly receive assistance from international organisations including the United Nations and NGOs. Japan, as a developed country, has coped with disasters and developed its capacity. However it significantly lacks experience in assisting and involving immigrants as “new residents”. The displaced and isolated immigrants’ cases clearly show that Japanese communities need to develop capacity in this area. There is a need for research in the area of immigrants’ involvement in disaster risk reduction that would inform Japanese communities. For Japan, the knowledge in developed countries such as the USA and Australia would be applicable. Those countries have immigrants from a variety of countries and cultural backgrounds. Building a database of the experience of those countries and the development of a practical way of involving immigrants in community planning are suggested as initial steps. An inter-disciplinary approach would be necessary to enable this. In addition, the possibility of encouraging social inclusion should be explored.

In the 21st century, a key to build a successful knowledge-based economy is diversity through various populations in a society, and an increase of migrants in Japanese society can allow it to ensure such diversity. In this context, “planning for disaster resilience” in 21st century Japan can be understood as a superb opportunity to create a new disaster resilience by incorporating the diverse migration population of this rapidly ageing society of Japan, not by regarding that population as a burden to take care of.

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