

KNOWLEDGE NOTE 3-4

CLUSTER 3: Emergency Response

Supporting and Empowering Municipal Functions and Staff



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A megadisaster can destroy government offices and kill public officials. In the Great East Japan Earthquake, many municipalities in Tohoku suffered serious damage to their office buildings and incurred considerable staff losses, which hampered their disaster response timing and effectiveness. To compensate for this, many kinds of partnership arrangement were formed between localities in the affected areas and their counterparts in unaffected areas. Formalizing these partnership arrangements and building local government capacities to deal with emergency situations are key success factors for developed and developing countries alike.

FINDINGS

OFFICE DAMAGES AND STAFF LOSSES

A disaster can destroy government offices and undermine government functions. Local governments are expected to play a critical leading role in disaster response and relief activities. In the case of the Great East Japan Earthquake (GEJE), many affected municipalities suffered serious damage to their offices and lost many of their public officials, which initially prevented them from undertaking relief activities in a timely manner.

A total of 62 municipalities in six prefectures (Aomori, Iwate, Miyagi, Fukushima, Ibaraki, and Chiba) in northeastern Japan were affected by the GEJE tsunami. Among them, 28 municipalities in the three worst-affected prefectures (Iwate, Miyagi, and Fukushima) suffered at least partial damage to their office facilities. Sixteen of them had to relocate their administrative functions to other buildings or temporary offices. Furthermore, computer servers in some of these municipalities were seriously damaged or destroyed, resulting in a loss of information on residents, and other data critical to providing municipal services.

Fukushima's case was slightly different. Nine municipalities near the crippled Fukushima Daiichi nuclear power plant had to relocate their offices relatively far from the plant (mostly within the same prefecture), because of concerns about radiation levels in their jurisdic-

FIGURE 1: **The municipal office in Otsuchi City was damaged by the tsunami**



tions, even in cases where the physical damages from the earthquake and the tsunami were very limited.

To make matters worse, many municipalities in the hardest-hit areas lost their public officials: a total of 221 officials are dead or missing from 17 municipalities in the three hardest-hit prefectures. In particular, the town of Otsuchi in the Iwate prefecture lost its mayor and 32 officials including seven managers, out of a total of 139 staff (figure 1). The town was left without a mayor for 5 months. Rikuzentakata city, also in Iwate prefecture, lost 68 officials out of a total staff of 295; while the town of Minami-Sanriku in the Miyagi prefecture lost 39 officials out of 240 staffs.

EVOLVING PARTNERSHIPS AMONG LOCALITIES

One of the most interesting developments after March 11 was that a variety of partnership arrangements evolved between local governments affected by the disaster and those that were unaffected. Many prefectures and municipalities outside Tohoku took the initiative to quickly send a large number of their own public officials to the disaster-affected areas to help them with post-disaster relief activities and other emergency operations.

According to Japan's Internal Affairs and Communications Ministry, some 79,000 local government officials were dispatched to the affected prefectures and municipalities from all over Japan between March 11, 2011 and January 4, 2012. After a year, many are still serving there in every possible field, from civil engineering and urban planning to social work and finance. In FY 2012, at least 1,200 officials from local governments around Japan will spend a significant period working in the three hardest-hit prefectures as part of the reconstruction effort.

Most of the local governments outside Tohoku did this out of altruism, but they also considered it an opportunity for their officials to gain experience in dealing with post-disaster situations. So it is a win-win arrangement. The following sections describe the different kinds of partnership arrangements.

RIKUZENTAKATA WAS ADOPTED BY NAGOYA

Rikuzentakata city lost about one fourth of its officials in the disaster. This was a huge loss. Then, Nagoya city, one of the biggest cities in central Japan, came to the rescue and "adopted" Rikuzentakata. Soon after March 11, Nagoya started exploring how it could best help the disaster-affected areas of Tohoku, and decided to target primarily one of the most affected cities, Rikuzentakata.

Nagoya has so far sent 143 officials to Rikuzentakata, for a maximum term of one year, and about 30 officials from Nagoya are still working there. Nagoya sent a variety of experts such as urban planners, public health specialists, and statisticians. Rikuzentakata plans to gradually recruit more staff and to become self-sufficient by 2014. Until then, Nagoya will continue to help and to send officials to Rikuzentakata but on a declining basis.

TONO AS A HUB FOR TSUNAMI RELIEF

The inland city of Tono, in the Iwate prefecture, is located within 50 kilometers of many of the hardest-hit coastal cities and towns in Iwate, such as Miyako city, Yamada town, Otsuchi town, Kamaishi city, Ofunato city and Rikuzentakata city. Tono is about an hour by car from any one of these, and only 15 minutes by helicopter. Taking advantage of its strategic location, Tono established itself rapidly and effectively as a hub for tsunami relief by making the city's 144 facilities (schools, community centers, public parks, and so forth) available for logistics supply and other relief activities. As a result, 3,500 emergency relief workers from the Japan Self-Defense Force (JSDF), police, and fire departments based themselves in Tono within ten days of the disaster and started their relief operations from there. Furthermore, about 250 organizations and agencies used Tono as a base for their relief activities, coordinated and supported by Tono city. Tono's initiative was possible because the city had been discussing this kind of support mechanism with the tsunami-prone coastal cities since 2007, and Tono's officials were trained and well prepared for disasters.

DISASTER RELIEF AGREEMENTS

During the past couple of decades, more and more local governments in Japan have signed disaster relief agreements with one another. A typical agreement involves two localities, located far enough apart so that both are not affected by the same disaster; and if either party is affected by a disaster, the other is supposed to help. As of April 2010, 1,571, or 89.8 percent of all municipalities, had signed such an agreement, of which 820 signed with a municipality outside their own prefectures. Various kinds of support were provided to the municipalities affected by the GEJE based on these agreements.

THE UNION OF KANSAI GOVERNMENTS

In the wake of a megadisaster like the GEJE, mutual support among local governments within the same region may not work out if the entire region is severely affected, and therefore local governments in unaffected regions may play a bigger role.

A coalition of prefectural governments in western Japan called The Union of Kansai Governments (UKG) quickly stepped in after the GEJE to help the three most affected prefectures in Tohoku in an organized fashion. To distribute UKG's support equitably, each UKG member prefecture was assigned to assist only one of the hardest-hit prefectures (table 1). After being assigned a prefecture to support, the UKG prefecture dispatches its personnel to gather information, identify needs, and coordinate relief activities.

This is a Japanese version of the Twinning Arrangement that was used in China during the recovery from the Sichuan Earthquake of 2008. This type of partnership is efficient and effective because it is facilitated by local governments that have a better grasp of the needs of their disaster-affected counterparts.

Among the advantages of this Twinning Arrangement are that it avoids overlapping of support, clarifies responsibilities, and is likely to achieve efficiency, speed, continuity, and accountability.

Under this arrangement by the UKG, the Hyogo prefecture has been assigned to assist the Miyagi prefecture. The Hyogo prefecture extended the following support:

TABLE 1: **Beneficiary and supporting prefectures**

<i>Beneficiary prefectures</i>	<i>Supporting prefectures</i>
Iwate	Osaka, Wakayama
Miyagi	Hyogo, Tottori, Tokushima
Fukushima	Shiga, Kyoto

- Provision of relief supplies (clothes, food, water, and so forth),
- Dispatch of its own officials (54,589 as of December 1, 2001) and
- Acceptance of evacuees. Recognizing that continuing support is needed in the affected areas, the Hyogo prefecture is now developing a mid- to long-term support plan. This plan includes assigning technical officials such as urban development specialists, as well as those who can share lessons from the experience of the Great Hanshin-Awaji Earthquake of 1995.

STAFF IN FUKUSHIMA

While municipalities in the Iwate and Miyagi prefectures mainly receive as many officials as they ask for from the unaffected areas, municipalities in the Fukushima prefecture had difficulty filling their staffing needs because of concerns about the radiation risks. According to the Fukushima Prefectural Government, the number of additional staff requested by its 21 disaster-hit municipalities was 178 for FY 2012, but only about 40 percent of that demand has been met.

MUNICIPAL DATA PROTECTION

In addition to the office damage and staff losses, some of the Tohoku municipalities lost residential information and other critical data because their computer servers were damaged. One of these municipalities, the town of Otsuchi, which lost its on-site computer server, considered adopting cloud backup solutions for storing vital information and other key data. Cloud server backup solutions allow data to be transferred to an offsite location for secure storage, reducing the risk of losing data in times of disaster.

LESSONS

- City halls and municipal offices should be focal points for disaster response initiatives; and they play a critical leading role in relief activities. Therefore, they must be located in safer areas, or built or retrofitted to be disaster-resistant.
- Japan's experience shows that partnership arrangements between localities in disaster-affected areas and their counterparts in unaffected areas are effective. Some of these arrangements were based on formal agreements, but others were based on good will. It is advisable, before disasters strike, to formalize these mechanisms among local governments, obtaining the necessary legal backing and clarifying cost-sharing arrangements. Right after the GEJE, the Japanese Central Government decided to shoulder the cost of dispatching local officials to disaster-affected areas, which was believed to be instrumental in promoting the emerging partnerships among localities.
- When it comes to disaster relief agreements, it is essential that partnering prefectures and municipalities be geographically distant or in different regions.

Agreements within the same region may not be effective, for example, in a large-scale disaster like the GEJE that damaged virtually the entire region.

- In a large-scale disaster, it is important to allocate the support fairly and equitably to the affected areas. The UKG's initiative to assign its member prefectures to each support different individual localities was exemplary in this regard.
- Disaster preparedness by local governments should include a plan to minimize the damage to their information systems and to protect critical databases so that they can continue to function and provide emergency services to disaster victims and residents.

RECOMMENDATIONS FOR DEVELOPING COUNTRIES

- The roles that local governments must play in the aftermath of a disaster can be critical. But clear roles and responsibilities must first be assigned to each tier of government, specifying what needs to be done by which level in case of a disaster, and to strengthen their capacities accordingly.
- In disaster-prone developing countries, the locations of municipal offices should be reviewed along with their vulnerability to disasters. Consider relocating or retrofitting them if necessary so that municipalities can continue to perform their roles in the wake of a disaster.
- Partnerships among localities for emergency relief activities could work in many developing countries, particularly in relatively large countries. However, they are unlikely to work effectively if carried out in an ad-hoc manner. Formalizing these agreements and building the emergency response capacities of local officials are the keys to successful partnerships. Cost sharing under the partnership also needs to be clarified upfront.
- Municipalities in developing countries should be aware of the risk of losing their digital information and databases in a disaster, and need to come up with a cost-effective solution to minimize that risk.

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