2016 Kumamoto Earthquake Report on Fukuoka City's Disaster Relief Activities in the Areas Affected by the Disaster

—To Help Improve Disaster Response in the Future—



Soichiro Takashima Mayor of Fukuoka City

| 1 | Introduction | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | 1 |
|---|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|---|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

2 Self-contained relief activities provided by Fukuoka City · · · · · · · · · · · · · 2
(1) Relief supplies

- A. Accurate understanding of the needs
- B. Framework to eliminate the labor and time for sorting
- C. Framework to realize efficient delivery to the shelters through utilization of ICT
- (2) Volunteers
- (3) Waste disposal
- 3 Efforts to make further improvements in providing assistance to disaster-affected areas • 11
 - (1) Re-development of a structure of command related to disaster relief and recovery efforts
 - (2) Training on providing and receiving assistance conducted from ordinary times
 - (3) Recognizing the value of information dissemination utilizing SNS
 - (4) Active efforts towards resolving reputational damage "WITH THE KYUSHU"

1 Introduction

Kyushu, and other areas throughout Japan, are endowed with the blessings of Mother Nature, such as beautiful landscapes and hot springs. However, on the flip side to this, we are destined to live with the constant threat of earthquakes and other natural disasters.

On the day after the Great Hanshin-Awaji Earthquake, the late Masaharu Gotouda is known to have said to the then Prime Minister, "there is no way for us to prevent earthquakes and natural disasters, but if we go about our relief and recovery efforts in the wrong way, it could become a man-made disaster, so make sure you do this right."

We cannot prevent natural disasters from happening, but we must keep the disaster level—or its impact and the strain that it has on the people—to a minimum.

In particular, this 2016 Kumamoto Earthquake was followed by large aftershocks. In fear of secondary disasters, which could occur when private citizens and organizations are swarming into disaster-affected areas immediately after the quake, only government organizations were allowed to enter the area to provide disaster-relief activities. This situation continued for a period of time.

Under this situation, there were long delays in distributing relief materials to the affected people, even though the supplies had already arrived in Kumamoto. There were also major differences in the time it took for shelters to receive sufficient relief material, depending on whether they were designated shelters or not. In particular, there is room for improvement in the actions taken by the local government during the initial moments immediately following the earthquake, during the phase when every moment counts in saving lives.

We also discovered that methods of information dissemination have advanced and diversified, including the use of SNS. While we see that there is plenty of potential for developing a new framework that allows citizen participation in disaster relief, we also found areas that need to be strengthened towards the future.

My mission is to create a government that can be relied on, especially during times of emergency. In recent years, our country has been hit by disasters of great magnitude, such as the Great Hanshin-Awaji Earthquake in 1995, Chuetsu Earthquake in 2004, Fukuoka Earthquake in 2005, the Great East Japan Earthquake in 2011, and the Kumamoto Earthquake this time in 2016. Through them, we are steadily accumulating experience and wisdom in responding to such disasters.

In order to establish a more practical and agile method of providing relief to the disaster-affected areas, I, the person responsible for the administration of Fukuoka City, which is the closest ordinance-designated city to the afflicted area, felt the necessity of sharing what we learned from

the relief activities that we provided this time to as many government-affiliated individuals and groups as possible. As such, this report has been put together based on my own findings as of this point and time. My earnest hope is that the people in the government, including myself, would make an active effort to share the lessons we learned in our own roles, so that these information would become universally known and be utilized towards better disaster responses in the event of future earthquakes.

Fukuoka City, under my leadership, is committed to providing continuous assistance to the disaster-affected areas. We are also planning to reflect the knowledge that we have acquired through this experience into measures for dealing with disasters that may occur in Fukuoka City.

2 Self-contained relief activities provided by Fukuoka City

The earthquake this time occurred on Thursday, April 14. This meant that we entered into the weekend without having been able to sort through all the information, such as what the damage situation was like. In addition, the main shock occurred in the early morning hours of Saturday, April 16. Some parts within Fukuoka City also registered a seismic intensity of lower 5, so our first priority was to ensure the safety and security of the citizens of Fukuoka City. After checking for damages within the city, we were fortunate to learn that we had no major damages.

While our thoughts were on how to provide a secure living environment for the residents of our city, I was also thinking about the necessity of giving assistance to the disaster-affected areas as soon as possible. What I was worried about was the delay of initial response. We do not need to refer back to past examples to know that when faced with disaster, each of the local governments would wait to provide disaster relief until they receive request for assistance from the afflicted areas under the framework of the Conference of Mayors or Conference of Governors. Since the main shock of the earthquake occurred in the early morning hours of Saturday, I thought it was highly probable that the judgment standards and code of conduct practiced during normal times—such as the question of what to do about the burden of personnel costs if government employees are called into action on a weekend—would still be put to use, despite this state of emergency.

However, our neighboring prefecture of Kumamoto was faced with an emergency situation where more than 100,000 people had to be given shelter. I felt we were in a crisis situation; at a time when work needed to be done to realize the quickest recovery, I thought that if such work were delayed for reasons of it being the weekend, we would be turning this natural disaster into a manmade disaster. And so, as the leader of our city, I made the immediate decision that Fukuoka City would give assistance to the disaster-affected areas, under a recognition of the situation as a state of emergency, ridding ourselves from the way of thinking of ordinary times, and putting ourselves into the mentality of doing everything that we possibly can to protect the lives and livelihood of the people of our neighboring prefecture. To realize this, I gave highest priority to disaster relief duties to create an environment where our employees would be able to concentrate on providing assistance to Kumamoto. In giving support immediately following the earthquake, at a time when lives still could be saved, we also had to make it understood that speed was of the highest value.

For government employees, their most important mission during ordinary times is to make their best effort to serve the people within their jurisdiction. However, when we encounter an emergency situation, I think they also need to give their best efforts to help the municipal organizations and the people of the community affected by the disaster. This is because that is what the people of Fukuoka City want from us. While the employees of Fukuoka City were busy working to help the disaster-affected areas, we received many comments from the people of Fukuoka that expressed their feeling of pride in their city for doing its best to help the afflicted areas. I firmly believe that the initial response made this time by Fukuoka City more than answered the expectations of the people of our city.

In the first 72 hours immediately after a disaster, the highest priority is placed on saving lives. In Kumamoto, we experienced large aftershocks during the first 72 hours, and as there were only confused information, it was difficult to even ensure the safety of the local residents. In this type of situation where there were still no infrastructure for accepting volunteers, having private citizens and organizations enter into the disaster-stricken areas would bring significant risk of incurring secondary disasters.

It was important for us to ensure the delivery of volunteer works and relief supplies donated by the people of Fukuoka City to the disaster-stricken people. But meanwhile, in Kumamoto, it was not just the residents but also local government employees who were affected by the disaster, and on top of that, these government workers were inundated with various disaster-relief tasks that needed to be done. Thus, we needed to find a method of dividing relief supplies and finding placement for the volunteer workers in a self-contained manner that would place the least burden on the disaster-affected municipalities.

After the Kumamoto Earthquake, bottlenecks occurred at the athletic field where trucks loaded with relief supplies converged, and at the Volunteer Center where volunteers gathered. This resulted in major delays in delivering invaluable supplies and volunteer helpers that were already in the disaster-affected municipalities into the hands of the people who needed them. In order to prevent bottlenecks at the disaster-affected areas, it is important to first send relief supplies and volunteers to neighboring municipal organizations. Then these neighboring organizations will sort the supplies and determine the placement of the volunteers, so that supplies can be easily delivered to the affected areas in small and sorted batches, and volunteers sent directly to their place of work. With this earthquake disaster, an important point for us was in developing a framework for sorting and organizing supplies and volunteer workers while still in Fukuoka City.

Moreover, local governments that have few experiences in dealing with disasters lack the understanding that the required actions and information would change as time passed—from 24 hours after the disaster, to 72 hours, and one week. What they need to work on would change continuously, from saving lives, to creating shelters, distributing supplies, recovering lifelines, issuing victims' certificates, constructing temporary housing, and so on. But they would be too busy dealing with whatever required their attention at the time, causing them to fall behind on performing the necessary relief activities. Thus, instead of trying to tell these local governments about how to go about their relief activities from the sidelines, Fukuoka City initiated direct leader-to-leader communication with the local governments, and also dispatched people experienced in disaster-relief to work as core members of the local emergency response center to provide advice on how to do things more efficiently and to develop aid initiatives that look towards the future.



<<Photo left: Relief supplies being transported on the day after the main shock Photo right: Support group of 100 persons departing 3 days after the main shock>>

(1) Relief supplies

When we are shown repeated news coverage of the quake-hit areas, it is only natural for Fukuoka City residents to have a surging desire to do something to help. I thought it was necessary to develop a scheme that would enable us to bring together these caring thoughts of our people and transform it into an appropriate and orderly form of action. Specifically, we began by accepting donations from Friday, April 15, the day following the first earthquake. We also began accepting relief supplies from Sunday, April 17.

We need to have full awareness of the fact that, when many residents are spurred by their concerns to take action, at the same time, it could produce explosive results, especially in the moments immediately following a disaster. I heard that after the Great East Japan Earthquake, various locations faced chaotic situations because people began sending out messages that they should go and bring supplies to the afflicted areas, which resulted in the delivery of far more supplies than had ever been imagined. Moreover, if vehicles transporting unneeded supplies should cause traffic jams, it may have the contrary effect of delaying the recovery effort. Thus, the reception of relief supplies immediately after a disaster needs to be managed by the government under a firm structure.

When Fukuoka City started collecting relief supplies for Kumamoto, we did so by thinking about the sorting process from the first. We made use of the former Daimyo Elementary School building, and asked people to donate only specific items after narrowing down the choices to only those that were truly needed, designating a different classroom for accepting and storing each item. Many supplies were delivered here not only from the residents of Fukuoka City, but also from the benevolent hearts of people living elsewhere. We also received many comments thanking us for being so quick in creating a place where they could act on their wish to provide help and deliver supplies to the afflicted areas.

We learned from this incident that by using SNS to send out easy-to-understand messages to both residents and employees during each of the relief and recovery stages, starting from immediately after the disaster and onwards throughout the relief efforts, it could bring a sense of solidarity among the residents and the government to become a powerful driving force towards assisting the earthquake-hit areas. Examples of the messages that Fukuoka City sent out during the various stages are as follows: "Fukuoka City is committed to ensuring the safety and security of the city residents"; "no major damages were found in Fukuoka City, so we will next focus our efforts in supporting the disaster-affected areas"; and "we will strive to match the desire of the city residents to be of assistance and the needs of the afflicted areas."



<<Photo left: Volunteers sorting the supplies gathered at the former Daimyo Elementary School Photo right: Relief supplies sent in, filled with caring thoughts>>

The key to providing relief supplies are the following three points: A. Accurate understanding of the needs; B. Framework to reduce the labor and time for sorting; and C. Framework to realize efficient delivery to the shelters through utilization of ICT

A. Accurate understanding of the needs

Following the Kumamoto Earthquake, there were discussions as to whether the push- or pull-type of assistance is more appropriate. However, I believe it is necessary to provide a combination of both types of support. In acquiring an understanding of the needs, we need to take proactive action and ask what the necessary items are, instead of waiting for a request. We determined what items to ask for donation from our residents by reflecting the situation in Kumamoto City in a timely manner. And we talked directly by telephone with the leaders of the local governments in Oita Prefecture, and offered them a detailed menu of the supplies that we had available to make it easier for them to request what was needed. In this manner, we created the appropriate environment in a push-type manner.

With regards to delivering relief supplies, we need to send items actively in a pull-type manner in a way that is adapted to the rapidly changing needs of the disaster-stricken area. And, it would be more productive if the supplies could be sent out to the disaster-affected areas from nearby municipalities that offer better transportation efficiency.

Meanwhile, other than supplies, there are also issues that require the dispatch of employees with specialized skills, such as for the issuing of victims' certificates. Such tasks require a huge amount of manpower, and thus, it is necessary to send in staff to help from various local governments nationwide.

At the same time, it is important to establish in advance a framework that could make speedy use of the know-how and human resources that other cities have gained from their past experiences with dealing with disaster.

B. Framework to reduce the labor and time for sorting

It becomes a huge burden in manpower for the disaster-affected municipality to sort out the relief supplies delivered to them from all across the country. And so, this time, Fukuoka City narrowed down the items that it would accept as donations from the public, and used the classrooms and gymnasium of an elementary school in the center of the city that was no longer in use as the site for collecting the supplies. We also received help from volunteers to divide the supplies by classroom, and developed a system so that the supplies were already sorted at the point when it was received. At Undo Koen, which was the reception site in Kumamoto City for the supplies, mountain loads of boxes packed with an assortment of various supplies arrived on large trucks from all over the country, so that the sorting process could not keep up with the amount of supplies coming in. After seeing this situation, we held discussions with Mayor Onishi of Kumamoto City, and made arrangements so that the trucks from Fukuoka, which were loaded with items that had already been sorted and clearly defined as to what they were, would not have to go through Undo Koen, which was in a bottleneck situation, and could go deliver the items directly to the shelters. As a result, we were able to provide assistance in a smoothly efficient and self-contained manner.



<<Photo: Classroom for collecting PET bottles>>



<< Photo left: Truck loaded only with toilet paper

Photo right: Volunteers loading supplies>>

C. Framework to realize efficient delivery to the shelters through utilization of ICT

Even at the shelters in the Higashi Ward of Kumamoto City, where Fukuoka City was giving aid, the main bodies that were providing relief assistance—which were Fukuoka City, the Self-Defense Force, and Kumamoto City—were all working separately, so that at times, there were overlapping deliveries of the same requested supplies.

Many of the employees in Higashi Ward were extremely busy negotiating over the telephone for relief supplies, so that invaluable manpower was lost to such activities. However, if we could utilize ICT, we would be able to make a significant reduction in the amount of manpower needed for issues related to supplies, so that such employees could be diverted to work on areas that truly need their attention, such as providing attentive assistance to the needs of the victims and offering consultation services.

However, I believe it is important to remember here that this ICT system needs to be simple and unified nationwide, and that it needs to have been already put in place during ordinary times.

Following this Kumamoto Earthquake, Fukuoka City newly developed our own supply provisioning system in cloud, and instructed the dispatched employees about it before they were sent to the disaster-affected areas. This system was made so that requests for supplies could be easily inputted by smartphone, and allowed users to confirm by whom and when the supplies would be delivered.

At the disaster-affected area, in addition to using this main system to provide supplies, we also created LINE groups in order to communicate horizontally across shelters. By these efforts, the support groups in Fukuoka City managed to deliver what was needed to the shelters.

However, there are also employees who are unused to dealing with tablets and ICT, so that even if these technologies were implemented into the disaster-affected municipalities, the local governments would have difficulty making full use of them if they do not have prior familiarity operating such systems, especially in the already chaotic situation after a disaster. We need to first discuss thoroughly what system would be best to realize the appropriate delivery of supplies to the disaster-stricken people, and to create a nationally unified system that could be easily operated by anyone. It is highly important that we not only implement such a system, but also provide training on the use of this system from ordinary times.

Also in recent years, we are seeing a major gap amongst local government employees in their ability to operate and utilize such tools as tablets and SNS. It is important for the local governments to prepare for a state of emergency by taking steps to improve ICT literacy of all of their employees from ordinary times.

In addition, it became clear in the aftermath of this Kumamoto Earthquake that there were major quantitative differences in the supplies received at different shelters. The cause is said to be in the difficulty of acquiring a grasp of shelters other than those that have been designated by the government. However, this is an era when anyone can easily disseminate information through the use of SNS. If someone staying at a non-designated shelter, or a person near such shelters, could send out information on the shelter's location and the number of people there, as well as the supplies that are needed, then it should not be difficult to add these non-designated shelters into the list of places requiring aid. It is important to consider a method for sending out information and delivering assistance that works in partnership with the help of the residents.

| 福岡市 避難所運営支援システム | (DØ79F) | 避難所運営 | 支援システム | | 集計結果一覧 岩銀所一覧/1 | メント編集 物資の追加/ | 制除 ログアウト |
|---|---------|----------------|---------------------|------------|--|-------------------------|----------|
| | | 避難所一覧 | | | | | 新規追加 |
| 勿資依頼入力 | 避難所選択一覧 | 穿服所名 | 0.6 | 应当看名 | 4486 | 伊斯日時 | |
| と理用品 (個) | | JEL AND 711 KG | u.u | 10.0 80.49 | | 3C BULLEY | |
| 申請数 | 0 | 健華小学校 | 照本市東区健華2丁日 25·56 | - | 4/26 10:00時点で依頼がありました分につい ては下記の通りです。 紙コップ 5 0 0 個は午前 中より順次配送予定です。 | 2016/05/10/ 17:11:02 | 16.34 |
| 前回 (2016-04-24 16:25:41) Fふきシート (ケース) 申請数 | 0 | 就軍車小学校 | 概本市東区東町4丁目 15-2 | - | 4/24 16:00時点で依頼がありました分の現在 の状況です。 ・使い揺こボリキ苺 ・20 L 取っ手付きボリ は在庫不足のため起送できませ ん。取本市へ依頼調整しております。中し訳ご ざいません。 | 2016/05/10/ 17:11:02 | 18.96 |
| 前回 (2016-04-24 16:25:41) トイレットペーパー(袋) | 5 | 尾ノ上小学校 | 照本市東区尾ノ上2丁 目8-1 | - | 4/26 16:00時点で依頼があった件について は、原次配送予定です。 4/27 10:00時点で依 親があった件については、在庫がなく配送でき ません。 | 2016/05/10/ 17:11:02 | |
| 申請数 | 0 | 山ノ内小学校 | 飛ぶ市東区山ノ内4丁 目1-1 | | | 2016/05/10/ 17:11:02 | 16.34 |
| 前回 (2016-04-24 16:25:41) | 0 | 月出小学校 | 順本市東区月出6丁目 2-40 | - | 4/2314:47時点で依頼があった分についての 配送状況。ウエットディッシュ 50個 マス ク 100枚17:00浄化センター発で配送 済みです。 | 2016/05/10/ 17:11:02 | 16.9, |
| | | 東町小学校 | 縣本市東区東町3丁目 3-1 | - | 4/26 16:00時点で住職があった存について は下記の通り配送予走です。 ・ペーパータオル 20個 ※スプレータイプアルコール除菌。料理 用手表使い捨てはなし(連結済み) | | 16.92 |
| 1 +1+1+10+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+ | 7 | 束极高校 | 照本市東区小峰3丁日 1 | - | 殺虫剤については、在庫不足のため配送できま せん。 | 2016/05/10/ 17:11:02 | 16.94 |
| 入力内容で依頼する | 5 | 東部中学校 | 载本市東区上南部2丁 月21-1 | | | 2016/05/10/ | 18.98 |

<<Photo left: Smartphone input screen delivery status>>

Photo right: Computer screen showing comments on the



<<Photo: LINE group chats created amongst dispatched Fukuoka City employees to supplement the supply provisioning system>>

(2) Volunteers

A disaster-affected area enters into a phase of requiring the attentive assistance of volunteers at about one week after the earthquake.

However, most of the Volunteer Centers ("VC" hereafter) in Kumamoto were located at places that were difficult to access other than by car, bringing with it the concern of causing traffic jams. Also, it was time consuming for the VC to give assignments to the volunteers coming in, resulting in cases where the time actually spent in doing volunteer activities were extremely short. Just as with the relief supplies, this was the same situation where a bottleneck had formed at the site where volunteers were being accepted.

Since people saw on the news the long lines of volunteers looking for work, and the complaints made by some that they hardly had time to do any activity, by the weekend of the Golden Week holiday period, the number of volunteers arriving had already gone down, causing shortage of volunteers.

And so, Fukuoka City decided to take on the challenge of developing a self-contained system of assistance, even in the field of providing human resource assistance.

At Fukuoka City, we gathered information on where and what type of volunteer work was needed, and completed the task of matching the volunteer with the work they would be doing before they left Fukuoka. Then, we operated buses that took the volunteers directly to the various locations in Kumamoto, and during the bus ride, we divided the volunteers into teams and informed them of the work that they would be doing, so that they would be able to begin their volunteer work immediately upon arrival. We believe that this method would realize the efficient and effective utilization of volunteers while also enhancing their level of satisfaction, thus contributing towards repeated participation by the same volunteers and helping to reduce shortage in the volunteer workforce.

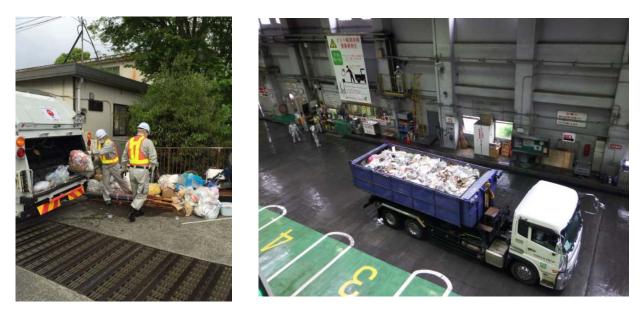
(3) Waste disposal

In order to prevent secondary damages through the spread of infectious diseases and such resulting from food waste, it is necessary to have specialized garbage trucks for such waste.

The current framework does not allow assisting local organizations to take action unless the disaster-affected local governments make individual requests to the surrounding municipalities. However, in times of emergency such as from disasters, this system lays too much burden on the affected areas.

Fukuoka City took the lead in dispatching garbage trucks before other municipalities. Vehicles sent in from Mie Prefecture and Nichinan City also combined with the group of trucks from Fukuoka City, since we had better geographical comprehension of the disaster-affected areas. Thus, we challenged ourselves to create a framework that would realize smooth operations, without burdening Kumamoto City with the responsibility to divide workload or give directions to where to collect garbage.

Also, the Self-Defense Force was assigned by the Japanese government to transport disaster refuse, and Kumamoto was able to increase the speed in disposing waste at the disaster site. Since garbage collection always becomes a huge problem, it is important to have a pre-determined waste collection system from ordinary times that also includes involvement by the Self-Defense Force.



<<Photo left: Helping with disaster refuse collection at the disaster-affected area Photo right: Disaster refuse brought to the incinerator plant in Fukuoka City>>

3 Efforts to make further improvements in providing assistance to disaster-affected areas

(1) Re-development of a structure of command related to disaster relief and recovery efforts

In giving relief support, the first action that must be taken immediate after the disaster is to have the fire department go in to save lives, and to find out the level of disaster. Following this, work must be done to acquire and recover basic infrastructure, such as water and sewage, as well as waste disposal. Here, a major part of the work falls on the administrative organization who has the responsibility of providing basic infrastructure from a daily basis, and who has the know-how on the technologies regarding such infrastructure.

And so, in giving assistance or directions at on-site activities for the recovery of basic infrastructure, I felt the need to create a flexible framework in which the ordinance-designated cities close to the disaster-affected area could play a key role in taking leadership to proceed with the recovery efforts.

(2) Training on providing and receiving assistance conducted from ordinary times

Disaster drills and evacuation drills are being performed nationwide, but I felt strongly of the need to also conduct training from the standpoint of being on the receiving and giving end of assistance—in other words, a type of training to prepare for receiving and giving aid.

For example, from the standpoint of giving aid, we could prepare ourselves under the assumption of providing relief after a disaster, and conduct simulations on creating support parties and reinspecting our storage for truly essential supplies. At the same time, we need to also think about situations that could occur at the shelters, such as: method of providing assistance to elderly people in going to the toilets; what to do about toilets when there is no running water; and also how to create areas of privacy. This issue of privacy is something that always comes up when setting up shelters. In the aftermath of the Great East Japan Earthquake, we learned of the importance of sectioning off spaces by using cardboard boxes; however, none of the communities in Kumamoto had any cardboard boxes kept in stock. Even if cardboard boxes could be acquired quickly, we also need the know-how on how to easily create sectioned spaces using these boxes.

Training is also necessary for those receiving assistance, such as people working at schools and public buildings that are designated as shelters and the local residents who would be using those locations as shelters. They need to be informed about the rules of opening a shelter, the means of organizing supply, and the way to use the supply delivery system. We must also think about methods of sending out information on shelter locations, based on the assumption that people may gather and open shelters at non-designated sites.

I believe that it is important to conduct such training during ordinary times, thinking about what the situation would be like in an actual disaster, and to have the police as well as the Self-Defense Force be involved in such training alongside the municipal organizations.

We must also note that disaster-affected municipalities would need to divide their human resources to deal with the multitude of tasks that arise. Thus, I think it would be highly effective if, for example, we decide upon a municipal organization that would be responsible for giving aid to a certain area in advance, so that this organization would use all of its capabilities to acquire a grasp of the needs and provide supplies to their designated area in times of disaster. Following the Kumamoto Earthquake, Fukuoka City worked to help Higashi Ward in Kumamoto City, and in so doing, there was just one chain of command that the local government in Higashi Ward had to deal with in receiving aid, giving them less things to worry about and allowing them to provide aid in a variety of fields, which I believe led to providing stable disaster-relief services to the people in the disaster-stricken area. I believe it is necessary for both the Japanese government and the local municipalities to work together during normal times to develop such a system.

(3) Recognizing the value of information dissemination utilizing SNS

In asking for relief supplies and monetary donations, it is essential to have the support of the public. Their support also becomes a powerful force, so we need to get the information out to as many people as possible. Meanwhile, since the needs of the disaster area changes rapidly during the first week after the disaster, we need to grasp the situation appropriately as the need arises, and to inform the public of this in a speedy and timely manner.

SNS today has become what can be called a basic infrastructure in the process of providing aid. Thus, I felt the need to utilize this and establish contact with the local residents even during ordinary times, so that it could serve its role fully in times of emergency.

(4) "WITH THE KYUSHU" - Active efforts towards resolving reputational damage

While long-term assistance and efforts need to be provided toward the recovery of the disasteraffected areas, these disaster sites and the neighboring areas face problems of a drop in the number of tourists and a stagnated economy due to reputational damage. Thus, we need to work to resolve this situation as quickly as possible.

Just before the earthquake, Fukuoka City had started working together with local governments throughout Kyushu to fulfill its role as Kyushu's hub city and realize the further growth of the region. This initiative is called "WITH THE KYUSHU," under the philosophy of being one together with Kyushu. And so, following the Kumamoto Earthquake, we had the city and town mayors of Oita and Kumamoto prefectures, which were actually facing reputational damage, gather together in Fukuoka to promote the vivacity and attractive appeals of their towns under the key phrase of "Imakoso Kyushu Kanko [translation: Now is the time for tourism in Kyushu]." It is important to provide this type of assistance to encourage many people to go and visit the various areas in Kyushu, and I feel the great importance of our role in continuing these activities to help contribute towards the recovery of the local economy.



<< Photo: "Kyushu tourism" PR at Kyushu Plaza>>

4 Conclusion

We do not know when, where and at what scale the next earthquake would occur, and what the level of damages would be. This is all the more reason why we need to be able to respond flexibly in accordance to the situation of the disaster. In other words, each of the local governments must think quickly about what they could do to help the people affected by the disaster, at that moment, from the perspective of protecting the lives of the citizens and their livelihood, and must have the ability to make a speedy transition from being in a mindset of "ordinary times" to a "state of emergency."

In particular, the first week after a disaster is when governments need to give full-scale support, and is also a time when every moment counts in saving lives. We should study each and every example of disasters in order to develop a system that can operate smoothly, and build up upon it by making improvements so that we can give our collective efforts into giving aid immediately.

When a major disaster occurs, it goes without saying that the local government employees would be swamped with extraordinary tasks that they could not have imagined and are not used to performing. At the same time, it is often the case that these employees or their families themselves are victims of the disaster. This results in an absolute shortage of employees in handling emergency tasks in response to the disaster, and as the days go by, the employees' level of fatigue builds so that the organization's functional ability begins to slacken.

In the aftermath of this Kumamoto Earthquake, Fukuoka City dispatched not only personnel with expertise in the fields of water, sewage, architecture, health, and cleaning, but also dispatched a total of 3,000 general employees during the one-month period after the disaster to provide aid. We are working to make sure that our employees share the know-how on providing assistance that they have acquired through such dispatches and to utilize this know-how, while also considering the possibility of recruiting the help of retired employees.

In order for affected individuals to get back to their daily livelihood, the recovery of basic infrastructure is what is most urgently needed. However, in some cases, the local governments of the disaster-affected areas faced difficulties in accepting construction workers from other municipalities, implementing recovery construction work, and coordinating work with local businesses. They overcame these difficulties by also asking for help from the Japanese government. But, such issues should actually have been organized in advance during normal times.

There were also cases where, in having received aid from other municipalities, employees of the disaster-affected area were faced with increased workload, such as the need to sort and allocate the support parties. This caused delays at some sites in making the decision to accept support parties. An effective way of resolving such situations was to have the leaders of both parties talk to each other directly to reach a decision.

And in order to bring maximum benefits from the various disaster relief efforts, it goes without saying that each of the municipalities must make preparations in advance under the assumption that they could be on the receiving end of such aid, and continue giving their assiduous efforts on a daily basis to enhance their thinking on disaster prevention and crisis management to help strengthen the structures that they have in place.

It would make me happy if this report would be of some service towards helping to develop municipalities throughout Japan that could be relied on especially during times of emergency, and to serve as a lesson in responding to earthquake disasters for the next generation.

May 12, 2016

2016.5