



Trilateral Junior Summit 2019

Chair Report

Committee:

Second committee

Agenda:

Trilateral Cooperation on Disaster Management: Focusing on Earthquakes

Chair Members:

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1. Introduction

Welcome to the Trilateral Junior Summit (TJS) 2019. It is our utmost pleasure to invite you to Jeju Island, Republic of Korea, a UNESCO World Heritage Site. The Trilateral Junior Summit was first held in 2018, and its success has led to the Summit being held for a second time.

At TJS, participants will act as delegates for their designated countries, and discuss a specific agenda item in each of their respective committees. In the Second Committee, delegates will discuss ‘Trilateral Cooperation on Disaster Management: Focusing on Earthquakes’ and write a draft resolution (joint statement) on it. During this process, delegates will be tested on a number of facets, from their negotiation skills to communicating and cooperating with their fellow delegates.

We, the Secretariat, wish for a productive and interesting debate during the committee meetings, and hope delegates have fun and form long-lasting relationships with others. We believe the participants, young intellectuals as well as the future leaders of Korea, China, and Japan, will forge a meaningful trilateral relationship and solidify peace and prosperity throughout Northeast Asia. We are looking forward to meeting everyone at the conference.

2. Background

In recent years extreme weather and natural events have caused many disasters around the world. The International Strategy for Disaster Risk Reduction estimates that 200 million people have been affected by natural disasters every year for the past two decades. A natural disaster is defined by the World Meteorological Organization (WMO) as: “the consequences of events triggered by natural hazards that overwhelm local response capacity and seriously affect the social and economic development of a region.” An emeritus of Earth and Planetary Science, University of California, Berkeley, Bruce A. Bolt, described earthquake as “any sudden shaking of the ground caused by the passage of seismic waves through Earth’s rocks. Seismic waves are produced when some form of energy stored in Earth’s crust is suddenly released, usually when masses of rock straining against one another suddenly fracture and slip.” Earthquakes are sometimes caused by human activities, including the injection of fluids into deep wells, the detonation of large underground nuclear explosions, the excavation of mines, and the filling of large reservoirs. The consequences of natural disasters are worse because of human involvement.

Society has been calling for international approaches to disaster management and risk reduction especially for identifying, assessing and monitoring disaster risks and enhancing early warning. Experts are highly encouraged to use knowledge, innovations and education to improve safety and resilience at all levels, in addition to reducing the underlying risk factors. By doing so, strengthening disaster preparedness for effective emergency response operations and recovery have been a priority in international community.

This trilateral cooperation on disaster management in Asia is deemed to be significant for reducing the risks and increasing societal capacities for dealing with natural disasters. Social

arena for cooperation among three countries can be a great start to fasten the networks and increase the collective capabilities of societal stakeholders' countries can utilize further.

The occurrence or threat of natural disasters creates opportunities to facilitate better cooperation or relations amongst states in conflict. The cooperative spirit generated from common efforts to deal with disasters like the notion of Disaster Diplomacy. Especially targeting on the coordination among authorities as well as effective data supply, countries are struggling to solve urgent social issue that all of them share; disaster management.

3. Major Issues

Once an earthquake occurs, the ground is shaken strongly. It happens in a short moment that cannot even be handled and effects on various things that stand on the ground, completely ruining the lives of the people in the area. Therefore, when dealing with an earthquake disaster, it is important to consider what a specific damage and what magnitude of it is as major issue.

One is damage of human life, which is basically most critical to everyone. Another is property damage, which can influence largely on people's life system. There are secondary damages which should not be overlooked. Of course, secondary damage can be included in above two kinds of damages but in the event of an earthquake, the secondary damage itself is enormous and varies beyond imagination. So, there is necessity to deal with this separately. Also, to effectively discuss how three countries can cooperate to deal with earthquake, each part of damages should be equally examined with weight.

1) Damage of Human Life

Damage of human life is one of the most critical part of damage since it is literally about 'life'. Loss of close friends, family and acquaintances (who smiled at you and talked together just a while ago) causes serious hearted pain among people. Different from other sorts of damage, this kind of damage cannot be easily recovered as someone who died cannot comes back; even leaving a huge and long-lasting grief to everyone. This is basically why preparing for earthquake is an important issue. The damage to human life is closely related to the degree of seismic design of the building. Depending on how well the seismic design works, sometimes few casualties occur in large-scale earthquakes and sometimes many casualties occur in small-scale earthquakes. Historically, the largest damage on human life was caused by China Shaanxi earthquake, when 83 million people died. For recent example, on May 12, 2008, a powerful earthquake of scale 8.0 occurred in Tibet, People's Republic of China, causing about 70,000 people to die and many people to be seriously injured and disappeared.

2) Property Damage

When an earthquake occurs, property damage happens easily because of destruction of buildings by ground shaking. Most times this kind of damage seems to be solved as time goes can be assisted by donation or government support. However, the damaged property itself cannot be returned to the party who lost a place of life. Even in some cases, historically valuable

cultural assets are lost or gain problems with their preservation status due to earthquakes. This results in damage that cannot be paid with money or returned. The largest earthquake in the world was the 1995 Kobe earthquake in Japan. At that time, property damage amounted to about \$100 billion, and the death toll was 6434 (Japan Geographical Survey, 2008).

3) Secondary Damage

Secondary damage causes bigger harm as it interlocks together. This includes not only physical and material damage but also mental and invisible damage. Big fire, lack of water, electric paralysis and electric shock, gas leak, destruction of telecommunication network, and the disruption of the living material distribution network are main examples. This damage has a feature that becomes bigger and harsher if it is in case of cities, especially caused by petrochemical plants, fuel for automobiles, and building fire. What is even worse, in countries which use nuclear power generation as one of main power source such as Japan and Korea, the probability of nuclear power plant accident increases. For example, Fukushima Daiichi nuclear disaster occurred because of earthquake. On March 11, 2011, a major earthquake of magnitude 9.0 hit the northeastern part of Japan, triggering the shutdown of reactor 1 to 3. As tsunami occurred, the emergency core cooling system, which cooled the reactor halted and a hydrogen explosion started to occur on March 12. Fukushima Daiichi nuclear disaster is still left in economic and cultural dimension in Japan and made indelible wound to people.

4. Previous Efforts

The past to current efforts done by each government, traces of trilateral cooperation and international exertions are as follow:

1) Republic of Korea

According to Korean government and related institutions such as Ministry of Interior and Safety, major government/national efforts include the followings:

- Emergency disaster texts are required to illustrate specific action tips. Earthquake warning announcement time has also been shortened to 7 ~ 25 seconds.
- Text alerts are operated to send to all mobile phones when the vicinity of an earthquake measuring 4.0 or higher and that alerts will come directly from the Korea Meteorological Association to save time.
- Institutions have been highly encouraged to cooperate in enhancing public facilities with high earthquake resistance.
- Government has been enforcing the implementation of "Seismic Safety Facility Certification System" and planned to complete National Fault Study until 2036.
- National wide earthquake evacuation drills have been enforced regularly especially in schools and workplaces.

- Government has increased subsidies for disaster recovery more than 44% and alleviated standard for apply requirement.
- Institutions have been continuously investing on technologies used during rescue process both in quality and quantity.

2) People's Republic of China

According to Chinese government and related institutions such as China Earthquake Administration, major government/national efforts include the following:

- The China Earthquake Administration developed an early earthquake warning system that is systemized to alert people in the region more than a minute before the initial tremor.
- The China Earthquake Administration invested about 2 billion yuan (\$300 million) on the early warning and quick intensity reporting system.
- Government planned to have 15,000 monitoring stations across the country by 2020, particularly in key areas.
- National Remote Sensing Center of China has been reacting quickly and organizing an information-sharing mechanism, so all government departments could share remote-sensing data for further analysis.
- Local authorities are trained to relocate affected residents and ensure access to a house, food and clean water.
- For victims, tents, clothes, prefabricated homes, food and funds would be ready to be distributed by the central government.
- Government is working on rebuilding hospitals, roads, power grids and telecommunications, reconstructing infrastructures that better withstand earthquake.

3) Japan

According to Japanese government and related institutions such as Earthquake Research Institute, major government/national efforts include the following:

- Local fire departments take groups of children into earthquake simulation machine to familiarize them with the sensation of being in an earthquake.
- Schools with two stories or more have evacuation chutes which children can slide down for safety.
- All television and radio stations are systemized to switch immediately to official earthquake coverage if an earthquake strikes in Japan.

- All offices and most of private houses are required to have earthquake emergency kits, including dry rations, drinking water, and basic medical supplies.
- Government focuses on providing enough knowledge about earthquakes and tsunamis through training sessions and/or exhibitions about disaster prevention.
- The Japan Meteorological Agency has installed more than 200 seismic forecast stations across the country, and the Ministry of Disaster Prevention has set up 800 stations for the creation of the warning system.
- Government has invested heavily in monitoring system such as the Tsunami Warning Service operated by the Japan Meteorological Agency (JMA).

4) Trilateral Cooperation

There are also some previous traces of countries aiding each other in both governmental and private level when earthquake happened in a country. For example, when tsunami swept coastal villages in Eastern Japan on March 11, 2011, earthquake was recorded to be 9.0 magnitudes. In response to that, the Korean government decided to dispatch a rescue team within days of the crisis. Korea has sent fifty-three tons of boric acid to help control the Fukushima nuclear plants and delivered one hundred tons of water and six thousand blankets. Not only government, but also individuals helped Japan as well. For example, the Korean Red Cross collected 21.3 billion won (\$19.6 million) in two weeks. The Chinese government also offered nearly 29 million-yuan (\$4.6 million) emergency aid and first relief packages to Japan. The first relief package sent consisted of 2,000 blankets, 900 cotton tents and 200 lights for rescue operations, which is estimated to be around 7.2 million yuan (\$1.1 million). In addition to public condolences, many Chinese private institutions and individuals have also donated as a form of humanitarian aid in hope to save as many people as possible and work on restoration.

This was one of the major, but not an exclusive example of trilateral cooperation. Another example can be in 2018, when China's Sichuan was devastated by a 7.9-magnitude earthquake, leaving an estimated 87,000 dead or missing. The Japanese government rushed a rescue team to China consisted of 60 people, which was the first foreign aid group to arrive. Big Japanese companies like Honda and Panasonic donated millions of dollars which were used in rescuing people and providing them with necessities. Similar efforts were taken by Korean government and individuals as well.

5) International Efforts

Focusing on United Nations (UN)' efforts, such exertions can be divided into institutions for preventative measures and emergency actions when disasters occur.

In terms of prevention measures, United Nations Office for Disaster Risk Reduction (UNDRR) has been arranged as the subordinate body of the UN. It was established by the United Nations General Assembly resolution (56/195) to serve as the focal point in the UN system for the coordination of disaster reduction and to insure synergies among the disaster

reduction activities of the UN and regional organizations and activities in socio-economic and humanitarian fields. UNDRR works toward the substantial reduction of disaster risk and damages to get closer to sustainable future. UNDRR's main goal, Disaster Risk Reduction (DRR) aims to reduce the damage caused by natural hazards like earthquakes, floods, droughts and cyclones, through an ethic of prevention. DRR is based on the thought that there is no such thing as a 'natural disaster, only natural hazards. It supports countries and societies' disaster risk reductions, monitoring and reviewing the progress. As an international organization, it coordinates with other small-sized platforms to tackle with disasters, campaigns for safe schools and hospitals, advocates welfare of disaster-hit regions. It also informs causes and present condition of worldwide disasters and monitors each country's efforts and prevention structures.

In terms of emergency actions, UN Disaster Assessment and Coordination (UNDAC) is an international emergency response system for sudden-onset emergencies. It is established to help the UN and governments of disaster-affected countries during the first phase of a sudden-onset emergency. UNDAC teams can deploy within 12-48 hours anywhere in the world. They are provided free of charge to the disaster-affected country and deployed upon the request of the United Nations Resident or Humanitarian Coordinator and/or the affected Government. Assessment, coordination and information management are UNDAC's core mandates in an emergency response mission. In response to earthquakes, UNDAC teams set up and manage the On-Site Operations Coordination Centre (OSOCC) to help coordinate international Urban Search and Rescue (USAR) teams responding to the disaster.

5. Possible Solutions

1) Preventative Measures:

Regardless of the agenda item, collecting and analyzing data, and sharing it with other nations is vital to thinking of a solution to the issue at hand. By doing so, countries can accumulate invaluable information and experience regarding dealing with natural disasters, specifically related to what methods or means are effective and which are ineffective when dealing with similar situations. This process is called "disaster diplomacy". When used correctly, starting from data collection and analysis to providing feedback to each individual country's preventive and post processing measures, countries can set an example for their regional counterparts and various international actors and institutions.

Moving on, of course, there are also domestic measures which can be implemented: raising social awareness and encouraging participations in various voluntary activities and services. The domestic publics of each country must be educated and be kept aware of the potential dangers and devastation these natural disasters pose. Additionally, they must also be encouraged to participate in various voluntary services should a disaster occur.

- Data collection and exchanging service
- Technology, information and experience sharing
- Raising social awareness by addressing key issues

- Delegating experts to provide feedback on each country's prevention system (Disaster Diplomacy)

2) Emergency Procedures:

An emergency can happen at any time especially when it comes to disasters, even if preventative measures were enforced. This means planning for emergency procedures and coping with nearby countries with fixed manuals are crucial for ensuring safety of citizens. The two unique requirements of emergency management - immediacy and accuracy – make the situation extremely important for trilateral cooperation. For countries to decrease national chaos and save time when disaster occurs, solving language barriers among supporting emergency vehicles and medical personnel should be discussed in detail. By sending emergency aid and supplies to the country immediately after an earthquake occurred, the country can rescue more earthquake victims and provide them with necessity quickly. For tourists, quick alarm system with their own language can help them acknowledge the situation accurately and act in accordance with local rescue team to minimize the damage.

- Diversifying language to solve language barrier on text alarm system for foreigners
- Providing trilateral emergency aid and rescue team
- Alarm system for tourists

3) Forming Organization for Trilateral Cooperation:

To efficiently cooperate on earthquake, founding an independent organization can be considered. This issue needs support both from Ministry of Environment and Foreign Affairs so that inefficiency of work can be worried if countries just deal with this issue in existing administrations. Therefore, elaborating specific manual and raising experts can be more sophisticated and professional if it is led by an independent cooperation. To build the independent organization, delegations need to consider how three countries can administrate this organization separately and fairly. Moreover, organization needs additional communication with existing agency and should think about how to fund budget.

- Stereotyped decision-making process
- Forums by experts
- Funding system

6. Definitions of Key Terms

- *Disaster Diplomacy*: concerned with the extent to which disaster-related activities – prevention, mitigation, response and recovery – induce cooperation
- *Resilience*: the capacity to recover quickly from difficulties

- *Societal stakeholders*: the individuals or groups that have an interest in the organization and are affected by its actions
- *Human activities*: something that people do or cause to happen
- *Disaster Management*: management of resources and responsibilities for dealing with all humanitarian aspects of emergencies, such as preparedness, response and recovery in order to lessen the impact of disasters
- *Property*: anything owned by individuals or groups that has economic value
- *Trilateral cooperation*: collaborating in governmental, societal and individual levels to promote common value of peace and prosperity among the three countries

7. Critical Questions and Points to Consider

- Why should we design approaches to disaster management and risk reduction?

This is a basic question to the topic; checking fundamental necessity to approaching disaster management and risk reduction.

- Why do we especially need trilateral cooperation?

While tackling disasters with ‘trilateral cooperation’, there should be exclusive benefits countries gain from trilateral cooperation in comparison to solving individually.

- What should countries mainly target on?

For disaster management, there are many subsections we can consider, such as prevention, emergency action, monitoring, or campaign. For effective cooperation, three countries can mainly focus on several parts or collaborating in these all parts. How can delegations make the cooperation system efficiently?

- How would three countries divide the roles and responsibilities of disaster management?

Japan has accumulated endurance by experiencing many disasters while Korea has great digital and researching technology which can be effective in preventive measures and dealing with the aftermath of such disasters. China also has a fair history of dealing with earthquakes and is also a powerhouse in regard to technology and research. In addition, it has a large population which can potentially contribute in disaster management. As each country has different strengths and weaknesses in disaster management, delegates should think about how three countries will divide the roles and responsibilities.

- How will three countries cooperate with financial problems?

Cooperative disaster management would cost and require funding system. As financial burden is critical issue for all countries, how three countries will divide financial burden should be considered.

- Is it necessary to make an independent organization?

In cooperating, three countries can just collaborate among government departments or make an independent organization. It is obvious that individual organization will cost more budget, time and manpower but delegations can also expect more professional approach. Thus, delegations need to consider if an independent organization is necessary/beneficial.

- Whether beneficiary of cooperation concentrated to a particular country is acceptable? If not, how can we prevent this?

Realistically as the situation now stands, Japan has more experts and past experiences to offer in this issue than the other two countries. The frequency of earthquake is also highest in Japan statistically. In this situation, what can delegation of Japan uniquely provide/get from this trilateral cooperation? What kinds of measures can be implemented to assure other two countries to be involved/get benefit as well?

- What benefits would these three countries have by trilateral cooperation?

For substantive cooperation, each country should obtain such benefits by cooperation that cannot be obtained by individual efforts. Particular benefits for each country should be come up for discussion.

- How can three countries train/educate experts in this field?

As experts are needed to tackle this problem, each delegation should think about how three countries will train/educate experts in diverse parts of disaster management. Will experts be trained by each country? Will they be divided into realms and be taught by a country that has more developed for each section?

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