

◇Disaster : Measures and Resilience

◎Definition of Disaster

Disaster damage is caused by the combination of “hazard and social vulnerability”.

“Hazard” here refers to threats such as earthquakes, volcanic eruptions and droughts, and “social vulnerability” refers to social factors such as administrative systems, local communities and disaster prevention education; therefore, disaster damage is a social phenomenon.

Vulnerability can be divided into internal vulnerability and external vulnerability. We will focus on “internal (social)” vulnerability in this summit, and will not deal with external vulnerability as it includes factors that we cannot control, such as weather conditions and the nature of the soil.

◎Focus

Among the factors determining disaster damage scale, “disaster prevention” is an approach to weaken hazard. Antiseismic reinforcement and tide embankment are among the efforts to control damages from the viewpoint of “disaster prevention”. Although “disaster prevention” is an important concept, it has proved ineffective against the unexpected level of hazard as “disaster prevention” is merely structural mitigation.

Accordingly, the concept of “disaster mitigation” is getting more attention in recent years. It is called “non-structural mitigation” and aims to reduce disaster damage by reducing the social vulnerability while balancing among the three factors of Recovery, Preparedness and Response.

We will share the differences in social vulnerability from region to region and the important factors to reduce it, and discuss how resilience against natural disaster can be constructed. During the discussion in this Summit, we define Resilience as "The ability to quickly recover the overall function of a society from disaster".

It is not only the government that can reduce the social vulnerability. There are communities of various sizes in our living environment, and there are many things that can be done on the individual or local community level. In short, depending on the scale of the society that we belong to or our position in it, what we have to do is different. Therefore, we will focus on the social vulnerability seen from the two viewpoints of follower and leader.

◎Theme

Group1 :Follower

A. Awareness and Preparedness at the Individual Level

It is said that Japanese citizens' individual awareness towards hazards is extremely low and they tend to heavily depend on the government, lacking sufficient preparedness of their own against possible hazards. At the time of the Great East Japan Earthquake, the disaster disabled local authority's control. As a result, the necessary support and vital information for citizens did not spread thoroughly and many people of the disaster-stricken area lost their lives or wandered homeless. To prevent such situations, we at WSEN will exchange opinions about how individuals should be aware of and prepare for future hazards. By extracting the common ideas from the discussions, we seek to compile essential guidelines for citizens against every hazard.

We will also try to find a solution of how people can stay aware that the occurrence of a hazard is not someone else's problem but could affect their own lives.

● **Awareness and Preparedness at the Local Community Level**

When a hazard occurs, it is crucial not to be isolated in order to survive. It is therefore important for each of us to be recognized by someone nearby in our daily lives, thus, be recognized in the local community.

Most local communities also contribute enormously when it comes to saving people who cannot evacuate on their own during hazards.

By understanding the different circumstances of communities around the world, we will seek the most effective state of a local community against hazards.

Group2: Leader

B. Disaster Education

One factor that affects the magnitude of disaster damage is people's knowledge of hazards, or lack thereof. The public administration has the obligation to disseminate to its citizens the knowledge necessary in acting appropriately when a hazard occurs.

In this regard, we will discuss the examples of disaster education currently conducted in various countries, their strengths and weaknesses, and whether they proved successful or not, so as to find a better method of education.

In addition, we will talk about how the public administration should enlighten the citizens to deepen their knowledge of hazards and to promote appropriate actions to citizens at the time of hazards.

D. Preparation and implementation of support for reconstruction

National as well as local governments need to work on various kinds of risk management on a daily basis to react immediately when a hazard occurs. This is because the more delayed the reaction is, the more serious the secondary disaster becomes and the more delayed the reconstruction will be. In order to react with equal promptness no matter which region is hit by a disaster, the government needs to set up a distribution network of goods and information beforehand so that it can quickly send off man power and relief supplies.

In particular, "Development of laws" is one of the key factors in securing prompt and accurate transmission of information during disaster. The government must establish a strong administrative structure that functions even in the catastrophic area. In addition, the support to get victims back on track for normal lives, like building temporary housing or financial support, is necessary in the process to recover from disaster.

We must examine what the participating countries learned from past disasters and how they incorporate the hazard experiences to develop a legislative counterplan against hazards. Then, we will consider both the achievements of the participating countries and newly emerged problems to search for the ideal administrative system against future hazards.

©Poster session

- Day and Time: August 27 15:30- 17:30
- Contents : About theme A -D(one theme per person)

◎Lecture and Workshop

○Lecture

- Day and Time: August 27 9:30-10:30
- Guest speaker: Naoyuki Kato (Earthquake Research Institute, The University of Tokyo)
- Content of the lecture: TBA (About disaster)

○Workshop

- Day and Time: August 27 10:30-12:00
- Content: Let's experience an earthquake with an earthquake simulation vehicle!!
- Purpose: An earthquake simulation vehicle is equipped with a “vibration device for a simulated experience of an earthquake”. Delegates will deepen understanding of earthquake, one of the major hazards in Japan, by experiencing an earthquake on the earthquake simulation vehicle.