Informative Speech by Dr. Yoshiaki Kawata

Mr. Chairman, members of ISDR, Swiss hosts, ladies and gentlemen: I am particularly honored to have been invited to speak at this ceremony. Today I would like to talk to you about some of our work in the field of disaster reduction. I should like to give you this talk in two parts. The first pat deals with memorial activities after 1995 Kobe earthquake. The second part concerns implementation advice for disaster reduction policy through comprehensive research and field survey on disasters. I have only ten minutes presentation so that some topics such as voluntary activities at NPO and promotion of research projects.

- No. 1 slide shows transfer of live lessons of catastrophic disaster and Disaster Reduction Alliance, DRA. These activities began in 1995 after Kobe earthquake. I have responsibility to promote these activities by workshops as well as symposium.
- No. 2 slide shows the twin-buildings of DRI, Disaster Reduction Institution in Kobe. Total cost of this structure was about \$100 million supported by Hyogo prefectural government and Japanese government. The first short writing shows the mission of DRI. Through its museum exhibits, DRI demonstrates to the public the importance of disaster reduction and mutual dependence of people. DRI also undertakes action research, develops human resources to lead disaster reduction, assists managers in disaster response, and promotes cooperation through various networks. Ensuring that these activities are conducted in an integrated way, DRI strives to effectively create, systemize, and share such wisdom and information. DRI has six major functions introduced slide.
- No. 3 slide shows the forth floor layout at the earthquake museum. We have 1.17 virtual 3D theatre with sound, vibration and great earthquake disaster cinema hall with recovery of a damaged family from the Disaster. The heroine of the cinema is 15 years old at a junior high school. The corridor between two theatres exhibits the reality of the damaged district just after the Disaster. The visitor can understand what happen at the moment of the earthquake.
- No 4 slide shows some examples of the shots at 1.17 theatre. The magnitude of the earthquake was 7.3 and seismic intensity was 7 in JMA scale. We lost 6,434 and the number of the injured people was about 44,000. About 90% of the dead were killed instantly within 15 minutes. In the case of wooden made house, it is very difficult to have effective search and rescue. The golden 72 hours was not applicable in Japan.
- **No. 5** slide shows some exhibition at the museum. The left upper shows the recital corner. Voluntary people passed through the earthquake tell their experiences to the visitors. The right lower shows the workshop of liquefaction at the moment of the earthquake. The registered volunteers are about 200. The museum was opened in 2002 and we had about 2.7 million visitors. 42% of them were elementary, junior and senior high school students.
- **No 6** slide shows the Disaster Reduction Alliance established in 2002 aiming at promoting organized operation among the disaster related organizations situated in DRI buildings and HAT Kobe area to the best of their functions. Now the number of members is 17. Of course, DRI and DPRI, Disaster Prevention Research Institute, Kyoto University has a good partnership to promote disaster research. Therefore, this alliance has been strongly supported by academic societies.
- **No 7** slide shows the objectives of the Alliance. Under collaboration, we would like to realize a sustainable world through efforts of health, environment and disaster reduction. The important keywords are Multi-disciplinary research, information exchange, Coordination, Partnership and networking, Education and training and project implementation (shown in the slide).
- No 8 slide shows an example of activities of DRA. We had disaster reduction forum in 2004, 2005, and 2006. The man title is transfer live lessons of catastrophic disasters. We had recommendations to the international community as the first, each disaster stricken area should begin to organize in their respective ways to transfer live lessons, in particular to their citizens and communities and as the second, each government and supporting organization should recognize the importance of transferring live lessons and start supporting such activities.

No 9 slide shows the examples of 2005 forum in Kobe. The main title was for effective education and public awareness for citizens and the networking was completed. The activities of this network include 6 contents as shown on slide. The results were opened though internet.

No 10 slide shows invited panelists in our forum. Every disaster has own characteristics depended on history and area. Therefore, comparative approach is very effectives to understand the progress of the disaster in accompany with the changes of our society. Especially, Japan has long history of disasters so that risk reduction efforts are really full of variety. During the rapid economic growth in 1960s, we had excessive urbanization and finally our land became vulnerable against disasters. The typical example is Kobe earthquake and the second one is 2004 Niigataken-Cyuetsu earthquake. The latter hit the country and mountain area which occupies about 70% of our land. Disaster reduction policy in Japanese government and adoptable countermeasures will be applied in developing countries.

No 11 slide shows international field survey on disasters conducted by us since 1991 Mt. Pinatubo eruption. And next slide shows their locations. I would like to introduce our activities of the reconnaissance team and committees. I was a team leader of the field survey in 2004 Indian ocean tsunami. Our team visited on Ache, Indonesia, Sri Lanka, India, Thailand, Maldives and Andaman Nicobar. The field survey continued more than two years because this survey includes recovery and reconstruction process. After publishing the technical report on the disaster, firstly as a chairman of tsunami committee in Japan I proposed the suggestion of tsunami disaster reduction to our government. We have also big tsunami problems in the nearest future. Gigantic tsunamis will hit the densely populated area facing the Pacific. We also developed tsunami warning systems called by TRUST. This is very useful tool to our near-field tsunami to evacuate. The numerical simulation-based warning systems can be transferred through internet because the near-field tsunamis in Japan will propagate around the Pacific Rim as far-field tsunamis.

In conclusion, I would like to introduce the following the article seven of the Article Seventeenth Constitution by Prince Shotoku (574 – 622) in Asuka era. "Each professional has own vocation. Please administer your responsibility. You must not confuse your place of work".

Thank you for your attention!