

# **ADRC** Highlights

Asian Disaster Reduction Center Monthly News

## Promoting Cooperation with Member Countries <u>GLOF Project in Bhutan</u>

The risk of glacial lake outburst floods (GLOF) has been increasing due to climate change in recent years. Since these types of floods are faced by several Asian Disaster Reduction Center (ADRC) member countries, the development of countermeasures is urgently needed. ADRC selected Bhutan as the site for a pilot project that aims to help all member countries facing similar risks to do the following: develop hazard mapping



[Suspension bridge over the Mo River]

methods, support capacity building and disaster management through workshops for governments and communities, and creating manuals related to the above-mentioned activities. Mr. Arakida, a Senior Researcher with ADRC, visited Bhutan in August, and had various meetings with the Department of Disaster Management (DDM), the Department of Geology and Mines (DGM), the Department of Energy (DOE), and the Japan International Cooperation Agency (JICA), which had already begun work on another GLOF project. He also visited Punakha province, the prospective project site, where he exchanged views with the provincial governor and school principals, and toured the DOE's early warning center. The current situations is as follows:

- GLOF occurred along the Po River in 1984, and the UNDP is now conducting a project on the Po River.

- Five glacial lakes in the upstream regions of the Mo River were identified as being at risk of GLOF flooding, but their risk level is low and constant monitoring in those areas would be difficult.

- Due to a lack of data, it is difficult to estimate the river water levels that would result from GLOF flooding.

ADRC and DDM ultimately agreed on a two-year cooperative project, as follows:

- Focus on the Mo River, which flooded in 2009.

- Install community-based river level gauges, and develop an early warning system.

- Create a map of with elevation data in the upstream areas of the Mo River.



[Governor of Punakha province and participant of the JICA training course ]

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Mr. Dinesh Hemachandra

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- Create a hazard map based on past flood records in Punakha.
- Conduct disaster education and training among local residents.

During the mission, Mr. Arakida met Mr. Norbu Tshering, a former trainee who participated in JICA's comprehensive disaster risk management course from January to February 2010 in Kobe. ADRC is pleased to be able to support those who are utilizing their disaster management training to promote disaster management efforts.

#### Participation in International Conferences Japan-U.S. Sister Cities: Natural Disaster Preparedness and Response (15-17 September 2010)

This program was jointly organized by Peace Winds America (NPO) and the City of Seattle, and was held from 15-17 October at the Seattle Office of Emergency Management. The program aimed to promote the sharing of experiences and ideas regarding natural disasters and emergency management between local government officials in the US and Japan.

The Asian Disaster Reduction Center (ADRC), at the request of the organizers, provided help with the coordination of the participating organizations from Japan. Also, ADRC gave a presentation on "Government Coordination" in Japan and facilitated discussions throughout the program.

The participants included Japanese officials from the Ministry of Defense, Osaka Prefecture and the City of Osaka, Hyogo Prefecture and the City of Kobe, and Hiroshima Prefecture and the City of Hiroshima, as well as American representatives from the Federal Emergency Management Agency (FEMA), the City of Seattle, King County, the City of Honolulu, Microsoft, Boeing, and other organizations. The participants gave presentations on their own experiences and the outlook for the future from the viewpoint of those who are doing practical disaster management work on the ground. The Japanese participants were particularly impressed with the collaborative frameworks that have been developed in the US to enable local governments, private companies, and NGOs to work together.

This exchange program is expected to become an annual event and thus is expected to prove highly useful to both US and Japanese local governments long into the future.

#### •<u>ADRC Visiting Researcher Report</u> Mr. Dinesh Hemachandra (Sri Lanka)

I am Dinesh Hemachandra and I am a geologist at the National Building Research Organisation (NBRO) in Sri Lanka. I am currently serving as a Visiting Researcher at the Asian Disaster Reduction Center (ADRC) in Kobe.

Sri Lanka is an island in the Indian Ocean, located south of the Indian subcontinent. As a tropical island, it has beguiled travelers for centuries with its palm-fringed beaches, diverse landscapes, and historical monuments. Sri Lanka's climate is governed by the Intertropical Convergence Zone and by the Bay of Bengal. Sri Lanka experiences two distinct monsoons, namely the southwest and northeast monsoons which bring rainfall to the island from those directions. Due to these rhythmic rainy seasons, Sri Lanka is vulnerable to hydro-meteorological and geological disasters. Landslides have caused damage to lives and property in populated hilly areas with increasing frequency over the last three decades.

The NBRO was established in 1984 to investigate geo-hazards in vulnerable areas, and it began

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mapping landslide hazards in 1993. Vulnerable landslide zones are identified mostly using landslide hazard maps and preliminary landslide investigations conducted when landslide disasters occur.

The Indian Ocean tsunami tragedy of 2004 drove the government of Sri Lanka to take steps to strengthen its disaster management system. As a result, the Disaster Management & Human Rights Ministry was formed on 12 December 2005. Just after the tsunami of 2004, NBRO, as a pioneer in the field of disaster management, conducted rapid assessments and started mitigation activities at landslide hazard sites in Matale, Kandy, and Padiyapelella districts.



The Visiting Researcher Program at ADRC has been a great opportunity for me and my country to learn about disaster countermeasures through various activities, including conferences, seminars, and visits to disaster-affected areas and other organizations. During my stay, I will also be able to immerse myself in traditional Japanese culture by participating in various festivals and eating many Japanese foods. It will be my great pleasure to develop friendships with many students and other people. I look forward to taking all of the skills and disaster management knowledge that I gain through this Visiting Researcher Program and putting them to good use back at my workplace in Sri Lanka.

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