



IISEE Newsletter



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International Institute of Seismology and Earthquake Engineering BRI Japan

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Reports on Tohoku Study Trip

(Period for all courses: Nov. 9th (Mon.) through Nov. 13th (Fri.))

(1) *Mr. Hamada Saadalla MAHMOUD MOHAMED*
(Egypt, Seismology Course)

First of all, I would like to thank JICA, IISEE and BRI for arranging to visit the areas affected by the Great East Japan and the Mid Niigata prefecture Earthquake in 2004.

The both group (Seismology and Earthquake engineering) visited the Miyagi prefecture which was affected by the Great East Japan Earthquake on March 2011.

At Miyagi Regional Bureau of Reconstruction, Reconstruction Agency, we learnt about the recovering and reconstruction progress in Miyagi after the Great East Japan Earthquake. Then we visited Zuiganji temple, where we learnt about the



outlines of foundation work. Also we visited Ishinomaki Municipal Hospital. The Seismology-course participants visited Tohoku University (Research Center for Prediction of Earthquakes and Volcanic Eruption). Prof. Matsuzawa presented a lecture about the 2011 Tohoku–Oki Earthquake. I learnt a lot about the disaster management and recovering as well as seismic isolation system in the study trip.

In Niigata prefecture which was affected by the 2004 Niigata Chuetsu Earthquake, we visited the land slide site (Myoken Earthquake Memorial Park). We learnt about the damages caused by Chuetsu Earthquake and quick recovering of roads at the site. Cooperation between Japanese organizations is an example for all countries.

At the term of the trip we visited various attractive places in Yamakoshi village such as Alpaca Farm. The information acquired during the study trip has expanded our knowledge about disaster management and recovering and we can apply it to our countries.

(2) *Mr. Lintu GAZI*
(Bangladesh, Earthquake Engineering Course)

Main target of study Trip to Miyagi and Niigata Prefectures was a close observation of affected area by the two Great Earthquakes and to observe how the people of this area and government (central and local) together recovered and reconstructed everything after this disaster.

On 9th Nov. in the way to hotel Unisite Sendai we enjoyed the journey by Bullet Train.

Earthquakes

The 2011 off the Pacific coast of Tohoku Earthquake

Reports of Recent Earthquakes

Utsu Catalog

Earthquake Catalog

Call for Papers

IISEE Bulletin is now accepting submissions of papers for the seismology, earthquake engineering, and tsunami. Developing countries are targeted, but are not limited.

Your original papers will be reviewed by the editorial members and some experts.

NO submission fee is need.

Try to challenge!!



In 2nd and 3rd day of our trip we visited different part of Miyagi Prefecture and came to know the depth of disaster of Great East Japan Earthquake, current status of reconstruction, recent initiatives, status housing, roadmap of reconstruction of housing, status of progress of town development, status of the reconstruction of industry etc.

On 11th Nov. Just before sunset we took the chance of seeing beautiful scenery of Sendai from Sendai castle ruins.

In 4th and 5th day of our trip we visited different part of Niigata Prefecture. In a video we observed during Chuetsu earthquake (October 23, 2004) what happened and after the earthquake how the villagers recover their own home with the help of local government and external human resources.

From this trip I learned that the nature through which we are nourished can be driven in such a way that we have nothing to do without becoming a victim. So we should learn how to cope with the nature.

After all it turns out to be a fruitful and memorable experience for us. I'm very grateful to all the people who share this knowledge with us.

(3) Mr. Mohamed Abdelrasoul Ahmed SHAHEEN (Egypt, Earthquake Engineering Course)

The three days we spent in Sendai were precious for me and all participants because of the new experience and knowledge we gained about disaster management and recovery. We were learnt the importance of preparing a plane for any anticipated disaster to management the emergency response and hence reduce the losses in life and damages.

The tsunami occurred following by the Great East Japan 2011 (Magnitude 9.0) was beyond the Japanese's expectation and the loss in life and building damages was huge. However they respond promptly and start recovery and restoration after the disaster immediately.



Also we experienced the different isolation and damage dissipation systems in important building such as hospitals.

It was interesting to know that no damages occurred due to the earthquake for these isolated building. It is very important to avoid damage in such building to still functional during and after the earthquake.

Following our visit to Sendai we spent two days in Nigata prefecture. Besides the excellent nature scenes we experienced there, we were fascinated by the unity of resident to face the damages occurred by the 2004 earthquake (Magnitude 6.9). During this period we became closer to Japanese rural culture.

Also we learnt about the importance to convey the current crisis to next generation to be prepared. For example, to convey the lesson and record of the earthquake to future generations, the CHU-ETSU Earthquake Memorial corridor was built.

(4) Mr. Dandy Navarro CAMERO (Philippines, Tsunami Disaster Mitigation Course)



Enjoy, Now

The 2011 Tsunami

Four years and eight months have passed since the 2011 Tohoku Tsunami, but the aftermath of that devastating disaster can still be found in some areas we visited. Some of the aftermaths we saw are damaged school and disaster buildings, hotels, housing apartments, sea walls and others.

We also have the chance to see the 37.8 and 40 m tsunami run-up heights observed at Koborinai port and Aneyoshi, respectively, in Miyako city.



One of the interesting facts of the visit is how the community preserved Tsunami century mark stones and how they comply by not constructing houses below them. I also noticed that most of the coastal villages we visited have sea walls to protect them from any ocean like a threat.

The Recovery Program

Though a lot of the affected residents are still living in temporary houses, the government laid out recovery plans by relocating the villages to a higher ground and some areas are constructing better and bigger sea walls.

The Lessons

I will enumerate some lessons to ponder:

1. After a large earthquake, wherever you are, move quickly to higher ground. Do not wait for the announcement.
2. Do not rely on the sea walls to protect your community from tsunami.
3. Always practice tsunami drills at school or home.

The Lecturers

It has been a fruitful trip from day one to day five. It's been a wonderful experience to visit those affected areas by the past tsunamis and to see how the villages recover from that disaster. I appreciate the effort of Dr. Sugawara, Dr. Tsuji and Dr. Fujii for sharing their knowledge and experience and also for patiently answering our questions.

Contact Us

The IISEE Newsletter is intended to act as a go-between for IISEE and ex-participants.

We encourage you to contribute a report and an article to this newsletter. Please let us know your current activities in your countries.

We also welcome your co-workers and friends to register our mailing list.

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Visit to Italy

By Mr. Mizuo Inukai, Chief Research Engineer, IISEE

When BRI and European Laboratory for Structural Assessment (ELSA) Unit, Joint Research Centre, European Union (Photo 1) have the Collaborative Research Activities, I and 2 researchers of BRI participated in the Management Panel in Ispira, Italy on October 2015. And we move to L'Aquila City to see the Recovery Works after the 2009 L'Aquila Earthquake.



Photo1: View of ELSA



Photo 2: View of Japan side presentation (2)

At the Panel, from EU side, the presentations, (1) Introduction of ELSA and

JRC, (2) JRC Support to Policies and Standards for Construction, (3) Presentation of the SERIES Tests done at ELSA, and others were made. From Japan side, the presentations, (1) Overview of BRI and Predominant periods of multi-degree-of-freedom system analysis and dynamic soil-structure interaction, (2) Shaking table tests for non - structural components and systems (Photo 2) and (3) Developments on Seismic Design Method for Buildings with Post-EQ Functional use, were made.

The discussion was in a most friendly and cordial atmosphere. Both sides consider that the meeting was successful and fruitful.

It was possible to see the monuments recovery works in L'Aquila, Abruzzo, Italy, after 2009 L'Aquila Earthquake, according to the cooperation of officers in Civil Protection Department, Italy, National Fire and Rescue Service, L'Aquila Province Headquarters, Italy and others.



Photo3: Front View of Santa Maria di Collemaggio (under recovery works)



Photo4: Front View of Sant'Agostino dell'Aquila (under recovery works)

The Basilica of Santa Maria di Collemaggio (Photo 3) is most important and famous in L'Aquila, damaged to the collapse of a part of the roof in 2009 Earthquake, was recovered to the temporary roof and the temporary steel supports for the Community Activities.

The Church of Sant'Agostino dell'Aquila (Photo 4) near the City Main Square (Piazza del Duomo) was also under the recovery works of the damaged roof. The preservation of the cultural heritages needs more time for the recovery works.

Fall Meeting of the Seismological Society of Japan

By Dr. Tatsuhiko Hara, Chief Research Scientist, IISEE

The seismology and tsunami staff attended the Fall meeting of the Seismological Society of Japan held from October 26 to 28 in Kobe.

Reflecting that twenty years passed after the 1995 Southern Hyogo Prefecture Earthquake (the Great Hanshin-Awaji Earthquake) occurred, a special session "Destination and Challenge of Seismology Learned in the 20 Years since the Great Hanshin-Awaji Earthquake" was held, where achievements and progresses in the last two decades and issues in the future were presented and discussed.

Total number of the sessions was twenty three, and among them two other special sessions, "New Insights into Earthquake Science through Big Data of Seismic and Geodetic Observations" and "The 30 May 2015 Deep Earthquake off the Bonin Islands" were programmed.

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