



SATREPS NEWSLETTER



Project for Development of a Comprehensive Disaster Resilience System and Collaboration Platform in Myanmar

Vol.2: Issued on 1st December 2016

1. JCC Meeting

2nd Joint Coordinating Committee (JCC) Meeting was conducted in Nay Pyi Taw on 13th September 2016. The meeting was attended by 59 participants and finished with fruitful discussion based on the reports for the proper and effective activities of the project. The discussion centered on enhancement of research activities, issues raised by each 6 groups, proper management of provided equipment and so on.

Committee identified and approved the actions to be taken for the next step as to the recommendation in the 2nd JCC Meeting.



2nd JCC Meeting at Grand Amara Hotel, Nay Pyi Taw

2. Outline of SATREPS Project

Project Purpose:

YTU understands is use of scenario analysis systems to assess Myanmar's future vulnerability

Expected Outputs:

1. Development of physics model to evaluate disaster vulnerability
2. Development of scenario analysis system for assessing future disaster vulnerability
3. Support to establish Research Centre for Urban Safety in YTU to sustain and enhance research activities and human resource development
4. Development of integrated disaster response system including infrastructure maintenance management with adequate technologies

Project's Period:

April 2015 to April 2020

Project Office:

Ground Floor, Technological Research Centre (TRC) Building, YTU

Abbreviations

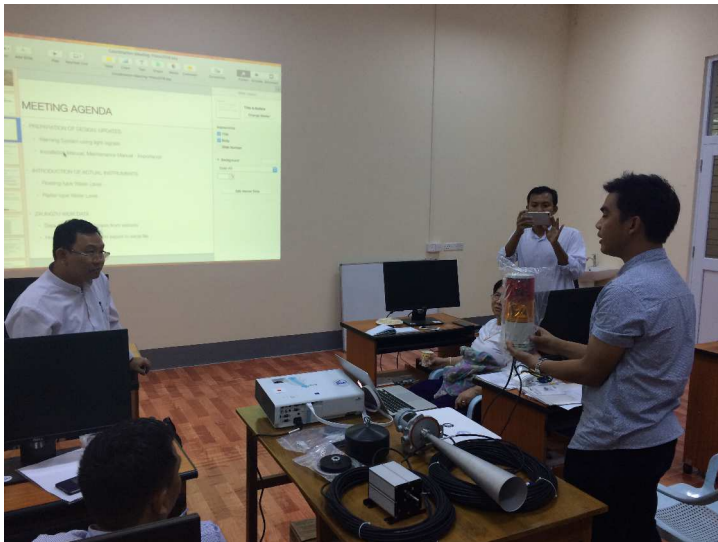
DMH - Department of Meteorology and Hydrology
DHPI - Department of Hydropower Implementation
DWIR - Directorate of Water Resources and Improvement River Systems
IWUMD - Irrigation and Water Utilization Management Department
JICA - Japan International Cooperation Agency
MoC - Ministry of Construction
RRD - Relief and Resettle Department
YTU - Yangon Technological University

3. Summery of group activities

(July 2016 to November 2016)

1) Water-related Disaster Group

4 weather observation stations and 4 hydro sensors was provided to YTU on September 2016. Project team had conducted coordination meetings among stakeholders such as YTU, IWUMD, DWIR, DMH and DHPI for establishment of Bago River Basin Telemetry Network on August and November at YTU. Those equipment is planned to be installed before rainy season begins next year. Project team has been trying to transfer weather observation data from weather station installed in Zaung Tu Wier on March 2016 to Project server at YTU.



Mr. Acierto Ralph Allen is explaining about hydro sensor (Floating Type) to be installed in Bago River (Nov.)



Project members and stake holders are discussing to identify locations for weather/hydro sensors to be installed in Bago River Basin. (Nov.)

4 group members of YTU has been attending on training course in Japan "Establishment of Water and Energy Budget-based Distributed Hydrological Model (WEB-DHM) in Myanmar" from 17 October to 23 December 2016. Trainees is expected to enhance capacity for using WEB-DMH for flood hazard assessment and risk evaluation research in Myanmar.



Training course at Hongou Campus, Tokyo Univ. (Nov.)

2) Infrastructure Management Group

Project team had a meeting with MOC at Nay Pyi Taw on July 2016 for reporting results of survey so far and introducing simple monitoring system for bridges. After discussion with MOC, Project team conducted a survey on August 2016 for Patheingyi Bridge which has a possibility of collapse in the future due to inclination of suspension tower.



Meeting with MOC at Nay Pyi Taw (July)



Patheingyi Bridge, Patheingyi (August)

Fortunately, serious damage which needs urgent measures was not seen. However, Project team continues to conduct research activities and collaborate with MOC.

3) Transport and Mobility Group

Project team is going to install GPS to public buses for "Bus Location System" instead of smart phones due to occurrence of several troubles. About 200-250 GPS is planned to be installed by next April.



Meeting at YTY (Sep.)

4 group members of YTU (3from Transport and Mobility Group, 1 from GIS Group) attended on Asian Conference on Remote Sensing (ACRS 2016) and presented papers.



Daw Kyaing, a Group leader of Transport and Mobility Group of YTU presented a paper at ACRS 2016 (Oct.)

4) Geospatial Technology Group

Project team conducted a lecture for how to use 3D laser scanner which as provided to YTU on September 2016. 3D laser scanner captures images with multiple exposure rates merging them into a single High Dynamic Range image layer. This today's most innovative equipment enables us to develop research activities such as analyzing condition/form of buildings/bridges in detail.



Lecture for how to use 3D laser scanner (Oct.)

5) Earthquake-related Disaster Group

Heritage team of group conducted a workshop on November 2016. The main purposes of workshop are to 1) Understand the characteristics of streetscape in Yangon, 2) Understand cultural background and value of architecture in Yangon and 3) Discuss ideal city/ streetscapes in the future.

Participants learned a simple method of seismic analysis and 3D Frame analysis.



Workshop at YTU (Nov.)

6) Disaster Management Group (DMG)

Project team had meetings with Government agencies such as YCDC, RRD, Emergency Operation Center and GAD on August and September 2016 to analyze their basic roles for disaster management. In 2017, DMG will define the system design to build the Disaster Management System (DMS) according to the job descriptions of each stakeholders acquired through activities in 2016.



Meeting with Government agencies (Aug./Sep.)

3. Improvement of Research Environment ~Equipment support to YTU

As of November 2016, The Project has provided equipment for project office and research activities as shown in following table. Total costs of equipment are approximately 325,000 US\$.

| No. | Items | Unit |
|-----|---|------|
| 1 | Database system (computer, web server, etc) | 1 |
| 2 | 3D Scanner | 1 |
| 3 | Printer | 1 |
| 4 | Portable Dynamic Measurement Strain System | 3 |
| 5 | Reinforcement bar-detecting machine | 1 |
| 6 | Electric resistance meter for concrete | 1 |
| 7 | Ultrasonic tester | 1 |
| 8 | Schmidt hammer | 5 |
| 9 | Infrared thermal camera | 1 |
| 10 | IRI calculation | 1 |
| 11 | Micro-tremor meter | 1 |
| 12 | Hydro/meteorological sensors | 9 |
| 13 | Desktop PC | 20 |
| 14 | iPhone | 5 |
| 15 | Video camera | 1 |
| 16 | Projector | 1 |



Photos of equipment

5. Earthquake-related Disaster Group

Workshop was conducted on April and May 2016. The main purposes of workshop are to 1) Understand the characteristics of streetscape in Yangon, 2) Understand cultural background and value of architecture in Yangon and 3) Discuss ideal city/streetscapes in the future. Participants built a physical model of 6 urban blocks in CBD (Central Business District) area to learn 1) model building for the purpose of discussion, 2) method of conducting building survey and 3) a way to study and think about city by using a model.



Workshop "Re-Discover Yangon!" (May)

Team has been conducting a survey for "Typology of the building structure" in CBD area.



The project will provide micro tremor to YUT for re-search activities. Lecture for "Acquisition of Ground Information Data in Yangon based on Micro tremor surveying and boring data" was conducted from 19-23 May.



Lecture by Dr. Tun Naing at YUT (May)



4 YUT Trainees in Japan (June)