Third Workshop on Landslide and related Disaster Management successfully held at Gangtok, SIKKIM in India

Third workshop on landslide and related Disaster Management with National Institute of Disaster Management (hereinafter "NIDM"), Central Gov.of India was successfully held from 13 February to 15, 2012 at Gangtok, State Capital City of SIKKIM, India. Around 300 researchers and officers from State Gov.of SIKKIM including Chief Secretary and Ministers of the state attended as well as Institutes of Central Gov of India, Public Work Research Institute, Japan and lots of private sectors.

This cooperation has put the joint actions on the base of the Memorandum of Cooperation between NIDM and NILIM, and the Memorandum of Understanding between NIDM and PWRI. And also it has been identified as one of the mechanisms referred to in the Action Plan to Advance Security Cooperation based on the Joint Declaration on Security Cooperation between India and Japan.





Following the last joint workshop in 2011, both sides made presentations and discussions and as a result of that, 2 road maps of the cooperation were drafted to proceed to the next action.

(Joint Research Road Maps)

(1) Research Cooperation on Warning system

Each year, the information exchange and related trainings and instructions are delivered along with core actions below.

(2012FY)

- i)Explanation of the system by Japan side, Selection of the site and office in India side (NH31A operated by BRO is a proposed site), Setting the system up by the cooperation (Test Equipments are to be sent into Sikkim from Japan side and the Operation is conducted by India side)
- ii) Additional system putting on for recording the data of rainfall and operating of the

system

iii) Observation of Sediment disaster conducted continuously after the Work shops and Check the status of the system operating

(2013 FY)

Collecting the rainfall data recorded, Analysis and evaluation of recorded rainfall data in comparison to how sediment disasters happened,

(2014 FY)

Identify the issues in the operating the system and find out the solutions, Drafting joint reports and publications

(2) Research Cooperation on Basic Approach and Test investigation for Landslide Disaster Management

Each year, the information exchange and related trainings and instructions are delivered along with core actions below.

(2012FY)

- i) Information exchange in general to mutual understanding of the landslide
- ii) Presentation and Discussion of Countermeasure Packages, Observation to select the cooperation site
- iii) Presentation and Discussion of Survey methods, Carry out the Survey on site with setting up the equipments

(2013FY)

Presentation and Discussion of Countermeasure Works and Facilities Maintenance, Carry out the Survey on site

(2014FY)

Review and Evaluation of the Cooperation to file the reports in public

Concerning dramatic improvement of the transport in mountainous areas like Sikkim, Tunnel technology in the field of planning and construction and its impacts were generally presented so as to enhance ground networks with safety and resilience against earthquake and related disasters, and also X-band technology which is effective to evacuate from "Guerrilla heavy rain" recently increasing its frequency in Climate Change was introduced in this Work Shop.

(International Research and Promotion Division)