Public Report

Course: International Internship (OA00303)

Title of the Internship: International Research Seminar on Landslide Risk and Management (National Institute of Forest Science, Republic of Korea and University of Tsukuba, Japan, Joint Research Exchange on Landslide Studies).
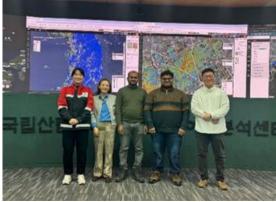
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1. Background

The global internship served as an important platform for gaining practical exposure to landslide risk and management research with international cooperation. Organized by the National Institute of Forest Science in the Republic of Korea, this internship enabled participants from the University of Tsukuba and NIFoS to participate in research activities, field trips, and seminars on possible landslide mitigation methods and monitoring technologies with the aim of research experience on landslide disaster management and forestry science.

This internship incorporated visits to the Asian Forest Cooperation Organization and the Korea National Arboretum, among other leading research centers. These presentations helped participants gain knowledge on regional and international cooperation initiatives in forestry, ecosystem protection, and disaster management. Particular attention was paid to the monitoring of landslides and the operation of hydrophones and unmanned aerial vehicles (UAVs), as well as Korea's landslide warning system, which utilizes sophisticated hazard zonation identification systems to manage risks.

In places prone to landslides, forests affected by wildfire, and experimental restoration sites, numerous field visits were undertaken. Participants were able to study and evaluate systems for mitigating damage through the observation of check dams, ecosystem surveying, and reforesting the areas where natural events took place. Such initiatives helped to gain further insight into structural and non-structural measures for managing landslide risks.

Practical work included the use of the Automatic Mountain Meteorological Observation System (AMOS), which serves as a vital piece of equipment in collecting meteorological data in real-time. Furthermore, attendants took part in both smaller and larger flume experiments in the NIFoS landslide research facility where models depicting landslides and moves of debris flows were constructed. The polish of these understandings advanced the theoretical framework developed throughout the internship regarding risk management.

One of the most important developments from the internship was the set of seminars and research exchanges aimed at disseminating information between participants where they were able to share their experiences. Participants presented their PhD research projects and interacted on current issues in the field of landslide science. These interactions fueled efforts to encourage collaboration and conduct more advanced interdisciplinary research.

Overall, the internship experience was a learning process which made participants' knowledge in landslide risk reduction and disaster management richer. The program improved technical skills as well as developing cross-border collaboration in research toward future collaborative projects in landslide studies and environmental conservation.