Master's Program Report on the "Water-related Risk Management Course of Disaster Management Policy Program"



The first class of graduates from the Master's program gathers for photos at the front gate of the National Graduate Institute for Policy Studies (17 September 2008).

The International Centre for Water Hazard and Risk Management conducted a one-year Master's program entitled the "Water-related Risk Management Course of Disaster Management Policy Program" for the first time from 30 September 2007 to 19 September 2008 in collaboration with the Japan International Cooperation Agency (JICA) and the National Graduate Institute for Policy Studies (GRIPS).

Out of eleven who initially started this program, ten students, consisting of three each from China and Japan, two from Bangladesh, one each from Nepal and India, finally fulfilled the graduating requirements and were granted a degree of "Master of Disaster Management". After the graduation ceremony, the first graduates proudly went back to their home countries with their enhanced expertise.

This Master's program is unique in several points. For example, students need only one year to earn a Master's degree. Also, the program emphasizes problem-solving capability. To this end, it is designed to help students enhance their capacity to come up with and propose solutions to problems they are facing in their home countries. Additionally, the program focuses more on practical than theoretical aspects of disaster management.

Reflecting the uniqueness of the program, its annual course curriculum was arranged to intensively

provide students with lectures and exercises in the first six months.

Lectures and exercises cover a wide variety of issues necessary to have good understanding of disaster management. Theoretical and fundamental subjects include "Disaster mitigation policy", "Disaster risk management", "Hydrological observation, modeling & forecasts", and "Hydraulics", while practical ones cover "Integrated flood risk management", "Hazard mapping and evacuation planning", "Sustainable reservoir development & management", "Control measures for landslide & debris flow", and "Introduction to International Cooperation". In September 2007, the participants of the "Flood Hazard Mapping" training course, also organized by JICA and ICHARM, joined the students of the Master's program to take part in lectures and exercises for flood hazard mapping and evacuation planning. This joint class consisted of 30 students in total from 13 countries, including Bangladesh, Cambodia, China, India, Indonesia, Japan, Laos, Malaysia, Nepal, the Philippines, Sri Lanka, Thailand, and Vietnam. It was an inspiring experience for each student to study with this many people with different nationalities and backgrounds.



The Master's program students listen to a lecture with the participants of the "Flood Hazard Mapping" training course.



The students listen to a lecture by Prof. Fukuoka of Chuo University.

In the second half of the program, each student was required to write a Master's thesis which should also be an action plan to contribute to the reduction of water-related disasters in his or her country. And the students took field trips to several major rivers across Japan. The field trips were arranged for them to have better understanding of flood management in Japan and help them come up with practical solutions for flood management in their countries. Some of the field-trip destinations were: the Chugoku area including the Hiigawa and Ohtagawa Rivers (March 2008); the Tokyo area including the Kanda River Underground diversion channel, the Tsurumi River Multi-purpose Runoff Retardation Area, and the Tamagawa River (April 2008); the Kinugawa River for its integrated dam management and the Nikko/Ashio area for sabo management (May 2008); the rivers of Imogawa, Shinanogawa, and Iwaigawa (Iwaigawa was affected by the Iwate-Miyagi Inland Earthquake), the Kitakamigawa for the Ichinoseki Flood Control Basin, and the Tateyama

area for sabo management (September 2008).



The Master's program students visit the Tsurumi River Multi-purpose Runoff Retardation Area.



The Master's program students visit a natural dam site along the Iwaigawa River.

The students were diligently engaged in lectures and exercises while having some difficulty living in an unfamiliar environment for a long period of time. In particular, when working on their Master's theses, they spend many hours in a study room at ICHARM completing the theses while getting helpful advice from ICHARM researchers. On 22 August 2008, they presented their theses at the ICHARM Auditorium in front of researchers.

This Master's program helps not only students but ICAHRM as well. The program is a great opportunity for students to increase their professional knowledge by working on their theses. Also, it greatly helps ICHARM itself to build closer relationships with students and create and spread a global network through them. The network of this kind will surely contribute to future ICHARM activities to a great extent.

On 17 September 2008, the graduation ceremony was held at GRIPS, followed by the closing ceremony at the JICA Tsukuba Office on the next day. Mr. Mitra Baral of Nepal was awarded the "Outstanding Award" by ICHARM for his highest technical achievement in this one-year Master's program.

The original goal of this program is to foster solution oriented practitioners with solid theoretical and engineering bases who can serve for planning and practices of flood management within the



A student presents his Master's thesis at the ICHARM Auditorium.

framework of integrated river basin management at all levels from nations to localities. The

program organizers, however, have realized that the goal is not attainable for a short period of time and constant follow-ups are essential even after students go back to their countries.

The program completed its first year from September 2007 to September 2008 without major troubles and problems. This is due to many others who gave us a lot of support both directly and indirectly. The organizers would like to express great thanks to lecturers from universities and public offices despite their busy schedules. The gratitude should also go to those in local public offices and the regional offices of the Ministry of Land, Infrastructure, Transport and Tourism as well as local residents. They were all willing to arrange their schedules around the students' field trips and have informative talks with them.





Dr. Takeuchi, director of ICHARM, gives a diploma to a student at the graduation ceremony.

Mr. Mitra is awarded the Outstanding Award by Dr. Takeuchi, director of ICHARM, for his distinguished achievement.