2013 Capacity Development for Integrated Flood Risk Management in Pakistan

From May 28 to June 6, 2013, ICHARM conducted a workshop, “Capacity Development for Integrated Flood Risk Management in Pakistan,” specifically designed to middle- to high-ranking officials of the Pakistani government. It was the second installment of the workshop, following the first held last year with six participants.

The workshop was originally organized as part of a project, “Strategic Strengthening of Flood Warning and Management Capacity of Pakistan,” which was launched in response to the mega flood that hit Pakistan in 2010. The project was funded by the Japanese government through UNESCO.

The following five Pakistani officials participated in this workshop:

- Mr. Salman Memon
  Advisor, Water Distribution Cell, Irrigation & Power Department, Government of Sindh

- Mr. Muhammad Naeem
  Director General, Flood Damages Restoration Directorate, Floods & Irrigation Department, Government of Khyber Pakhtunkhwa

- Mr. Hazrat Mir
  Chief Meteorologist, Pakistan Meteorological Department

- Mr. Alamgir Khan
  Chief Engineer (Floods), Federal Flood Commission, Pakistan Ministry of Water and Power

- Mr. Iftikhar Mir
Suprintending Engineer/Provincial Coordinator, Irrigation & Power Department, Government of Balochistan

The workshop consisted of lectures and field studies. In the series of lectures, the participants learned about Japan’s legal system for flood measures, methods for collecting and communicating meteorological and flood information, workings of flood forecasting and warning, and collective operation of multiple dams. In addition, researchers of ICHARM and JAXA presented their latest research for them, including IFAS, the RRI model and GSMaP. On May 30, when they visited the Japan Meteorological Agency, the Wide-Area Water Management Headquarters of the River Department of the MLIT Kanto Regional Development Bureau, and the Japan Water Agency, they were also provided with lectures on outline of the Network of Asian River Basin Organization (NARBO). They were particularly overwhelmed to learn that about 3,000 monitoring cameras were installed in the service area of the Kanto Bureau for real-time monitoring of rivers and roads.

From May 31, the participants took a series of study tours. They were first taken to see flood control measures implemented in major rivers in the Kanto region such as Tonegawa, Kinugawa and Arakawa. On May 31, they visited the MLIT Tonegawa-joryu River Office, at which they listened to a lecture about water-level forecasting and cooperation with local municipalities. After that, they looked around the Kurihashi district for signs and facilities to promote public awareness towards floods. The district has been practicing the “Marugoto-machigoto hazard map” project, in which signs are posted on power poles to show water levels during the 1949 flood disaster due to Typhoon Kathleen. At the Kurihashi Branch Office, they also saw a tall tower that shows the current water level of the Tonegawa River. At Kurihashi Station, there is also a display to show river information. After that, they went to the Watarase retarding basin. Very interested in the roles of the retarding basin in improvement of water quality and preservation of the environment, they asked many questions.
Marugoto-machigoto hazard map

“Kawaraban,” a Tonegawa water-level indicator at Kurihashi Branch Office of Kuki City

River information display at Kurihashi Station

Visit to Watarase Retarding Basin
On June 3, the party visited dams and sabo structures located in the upper Kinugawa basin. They first went to the Kinugawa Dam Management Office and listened to explanation about four dams in upper Kinugawa and collaborative operation of Ikari and Kawaji dams. Then, they moved to Kawaji Dam, where they walked through an inspection gallery inside the dam and took a catwalk up around an outlet gate. The final destination of the day was the Nikko Sabo Office, where they learned about a sabo project for the Inarigawa River and took a close look at a sabo structure.

On June 4, the participants visited a museum named “amoa,” where they learned about urban river flood control measures with help from the Arakawa-karyu River Office. They were first given a lecture about the history of the Arakawa River as a man-made diversion channel and then took a close look at the super levee, a disaster management station, quake-resistant water gate, and a lock gate. After that, they also visited the Pakistan Embassy and had a chance to talk with Ambassador of Pakistan to Japan Farukh Amil.
On June 5, the participants paid a courtesy visit to Japan’s governmental agencies related to this Pakistan project, including MLIT, Foreign Ministry, Education Ministry, and JICA. Each visit was a great opportunity for them, for they had a chance to meet with high-ranking agency officials there.
On the final day, the participants presented the results of the workshop, followed by discussions with ICHARM researchers. In the closing ceremony, after PWRI Chief Executive Taketo Uomoto’s speech, each participant was awarded with a workshop certificate, which ended the entire training process.

The participants praised the workshop for its excellent contents and organization. They were particularly impressed with river management in Japan, including how steadily plans are put into action. They also commented that retarding basins like the one they saw at Watarase should be effective for flood control in the Indus River basin. Furthermore, they seemed inspired by the fact that the Arakawa diversion channel has been playing a very important part in Tokyo’s development. Some of them showed a strong interest in sabo structures at Nikko and the CCTV system implemented in the Kanto Bureau’s service area. Back home, they will discuss and plan how to cope with floods and what measures to take, based on what they have learned in this workshop.

Finally, we would like to thank all MLIT offices and agencies that cooperated with us for this successful installation of the workshop.