Training

Follow-up seminar in Manila, the Philippines

フォローアップセミナーは、ICHARM で行う能力育成に関連し、2008 年以降、年 1 回、海外の 1 ヶ国を選び（2016 年を除く）、帰国研修員を中心とした参加者を得てワークショップ、現地見学などを行う活動です。この主なねらいは、今後の ICHARM の研究テーマの検討や研修の質向上を図るとともに、関係機関とのネットワーク強化、優秀な研修生の今後の ICHARM 研修への参加促進です。

2016 年度は 1 月 31 日から 2 月 2 日の 3 日間フィリピン共和国のマニラ及びパンパンガ地方において実施しました。参加者は ICHARM から、江頭研究・研修指導監、徳永上席研究員、Shrestha 主任研究員、フィリピンからは公共事業道路省（DPWH）、国家かんがい庁、大気地球物理天文局（PAGASA）、環境天然資源省からの帰国研修員など、また、JICA 事務所及び専門家など総勢 24 名により行われました。

活動内容について、第 1 日目は、24 名全員が集まり、参加各機関の最新の政策、研究、技術開発に関する発表、そして修士コースの帰国研修員 5 名の現在の活動及び今後の ICHARM への期待についてなど意見交換を行いました。

第 2 日目は、帰国研修員を含む 14 名とともにマニラ近郊のパンパンガ地域を訪問し、カルンピット市防災部局及び洪水常襲地区長 / 住民との意見交換、パンパンガ川洪水予報警報センター（PAGASA）、DPWH 第 3 地域局及び DPWH 洪水プロジェクト事務所の見学を行ないました。この地域は ICHARM 研究対象であることから、ICHARM の有する研究、能力育成、ネットワークの 3 つの機能の融合が期待されています。

第 3 日目は、帰国研修員の 1 名が現在所属する DPWH 地方事務所で課題となっている土砂堆積が著しいアラマセン川の事業箇所を見学し、途上国の有する深刻な問題のひとつを把握しました。

ICHARM has been conducting the Follow-up Seminar in the aim of capacity building. The annual event started in 2008 and has been held in an overseas country except the one in FY2015. The seminar is attended by former students and participants in ICHARM's training and educational programs, as well as other experts, and consists of workshops and study visits to local sites. Besides providing additional assistance and advice for former students and trainees who are now working at local organizations, the Follow-up Seminar has also helped ICHARM review its current research themes, improve training programs, strengthen the network with overseas organizations, and encourage motivated individuals to join ICHARM's training and educational programs.

The FY2016 Follow-up Seminar was held in Manila and Pampanga, the Philippines, from January 31 to February 2, 2017. A total of 24 people participated: Research & Training Advisor Shinji Egashira, Chief Researcher Yoshio Tokunaga, and Senior Researcher Badri Bhakta Shrestha from ICHARM; former participants in ICHARM's training and educational programs from Pilipino government organizations such as the Department of Public Works and Highways (DPWH), the National Irrigation Administration, the Philippine Atmospheric Geophysical and Astronomical Services Administration (PASAGA), National Irrigation Administration (NIA), the Department of Environment and Natural Resources (DENR); experts from the Japan International Cooperation Agency (JICA); and other experts and practitioners.

On the first day, all 24 participants gathered and listened to presentations by participating organizations on the latest policy, research, and technological developments. Five graduates from ICHARM master's course in disaster management also spoke at the meeting about their current work and expectations they have for ICHARM.

The meeting on the first day

The meeting with a district leader in Calumpit

On the second day, 14 participants including the former students of ICHARM visited the Pampanga area near Manila. They first visited the Calmpit Municipal Bureau of Disaster Management and interviewed with the leaders and residents of flood-prone districts. They also visited the Pampanga River Basin Flood Forecasting and Warning Center (PRFFWC) of PAGASA, Region III office of DPWH and Flood Project Office of DPWH. Since the Pampanga area has been one of the study areas for ICHRM's research activity, local experts expect ICHARM to provide well-coordinated assistance combining ICHARM's three principal activities of research, capacity building, and information network.

On the last day, the participants visited a project site on the Almacen River. One of the graduates from ICHARM master's course is with a DPWH regional office which is responsible for the project that is taking place in an area troubled with

The project site on the Almacen River

increasingly severe flood damage due to constant sediment deposition. The visit was very instructive in that the ICHARM researchers could have a firsthand look at one of the serious problems faced by a developing country.

(Written by Yoshio Tokunaga)

Field trips by M. Sc. students

ICHARM offers a master's degree program, "Water-related Disaster Management Course of Disaster Management Policy Program (JICA Training Program: Training for Expert on Flood-related Disaster Mitigation)," in collaboration with the Japan International Cooperation Agency (JICA) and the National Graduate Institute for Policy Studies (GRIPS). Currently, 10 students are enrolled in this 10-year-old program. The program includes study tours, in addition to lectures, which are an important part of its curriculum to have a good understanding of flood management in Japan. They visited Kobe and Tokushima from March 1 through 3, 2017.

On the first day, the students visited the Disaster Reduction and Human Renovation Institute in Kobe, Hyogo Prefecture, to learn the Great Hanshin-Awaji Earthquake including damage, restoration and reconstruction. Looking at photos and other exhibits, the students were shocked with the tremendous damage it caused to the Kobe area. At the same time, they were amazed that, despite the severe destruction, the area has been reconstructed very well as if nothing had happened. They were also impressed to learn about local efforts to never let the earthquake fade away from people's mind by organizing and preserving various records of the disaster and to learn and share lessons not only with people in the affected area but also many others, both at home and abroad.

After the exhibition center, the students crossed the Akashi Kaikyo Strait to Tokushima, one of the four prefectures in Shikoku Island, and visited the Ishii Disaster Prevention Station in Ishii Town. They first received a brief lecture on Yoshinogawa, one of the nation's most famous rivers, and then learned several measures that are used in flood fighting efforts in Japan. In particular, they had a chance to see the ringing sand boil method in place thanks to the staff of the local office. They also learned how to use things they can find around them in the event of disaster, such as using ropes in rescue efforts and creating a stretcher out of everyday clothes, blankets, and vinyl sheets and sand bags used in flood fighting.

The ringing sand boil method applied to a model embankment by the officers of MLIT

The students also met Mr. Kuniichi Yamamoto, a disaster prevention specialist for the Shikoku area, and learned from him "life-saving knot-tying skills," which is very useful in various situations during a disaster. Mr. Yamamoto showed a number of ways to tie knots, each of which is meant for a different scene of a disaster. All this was broadcasted by a local station of the Japan Broadcasting Corporation and reported by a local newspaper company.

At the knot-tying workshop

ICHARM は、JICA 及び政策研究大学院大学（GRIPS）と連携して、2016 年 10 月から 10 年目となる修士課程「防災政策プログラム水災害リスクマネジメントコース」（JICA 研修「洪水防災」）を実施しています。10 名の研修生は ICHARM 内での講義に加えて、日本の洪水対策についてよりよく理解するために、現地視察を通して学んでいます。

2017 年 3 月 1 日～3 日にかけて、神戸・徳島を訪問しました。

初日は、神戸において、人と防災未来センターを訪問し、阪神淡路大震災の被害及びその後の取り組みについて学習しました。研修員は、写真等で見るその大きな被害を知り、また、そのような大きな被害にもかかわらず、当時の様子を感じさせない神戸の街の復興に驚いていました。とりわけ、このような甚大な災害の記録を残し人々の中で風化させない姿勢及びそのような経験から得られた教訓を広く共有しようとしている姿勢に感銘を受けていました。

２日目には、明石海峡大橋を見学しました。橋の科学館においては、明石海峡大橋に関する様々な展示があり、またその建設には世界最高水準の架橋技術が適用されたこと等を学びました。その後、明石海峡を渡り、徳島へ移動しました。

吉野川下流に位置する石井防災ステーションにおいて、四国地方整備局徳島河川国道事務所のご協力のもと、四国防災エキスパートの山本邦一先生から、「命を守るロープワーク」の実習を受けました。最初に日本を代表する河川である吉野川の概要説明の後、日本の水防活動で適用される様々な水防工法の説明を受けました。月輪工法においては、当研修の為に実際に施工されており、実物を見ることが出来ました。また、災害時の救助活動に役立つロープの利用方法、また、身近にある衣服・毛布あるいは水防活動の際に使用するビニールシート・土嚢袋などと竹を組み合わせた担架の作成方法などを学びました。

その後、実際にロープを使用して、災害の場面で有益であると思われる様々なロープの結び方を実習しました。この実習の様子は、NHK 徳島放送局のニュース及び徳島新聞の記事で地元の方々に紹介されました。

最終日には、日本の文化を学ぶ目的で、姫路城を訪れました。

ロープワーク実習は、昨年から研修に取り入れたところですが、実践