

## Hydrological Modeling Workshop for Pakistan Officials

A hydrological modeling workshop was held at ICHARM on October 2-4, 2017, on a request from the Asian Institute of Technology, and attended by eight government officials from Pakistan. The workshop began with a lecture on hydrological modeling by Senior Researcher Mohamed Rasmy on the first day, Senior Researcher Badri Shrestha gave hands-on training on the Rainfall-Runoff-Inundation model on the following day, and Senior Researcher Yoshio Kikumori and Research Specialist Liu Tong gave hands-on training on the Integrated Flood Analysis System (IFAS) on the final day. In the IFAS hands-on training, after outlining IFAS, Kikumori explained the PWRI Distributed Runoff Model, which is the computing engine of IFAS. Then the participants installed IFAS software in their laptop PCs, and spend the day practicing runoff simulation utilizing sample data to learn the basic usage of IFAS. The participants diligently attended the workshop, asking the lectures questions about the function of flood control using dam operation and other related issues.

**Date:** October 2-4, 2017

**Venue:** Training Room on the 1st floor of ICHARM Building, Public Works Research Institute

**Lecturers:** Dr. Abdul Wahid Mohamed Rasmy, Senior researcher

Dr. Shrestha Badri Bhakta, Senior researcher

Dr. Yoshito Kikumori, Senior researcher

Dr. Liu Tong, Research specialist

**Participants:** 8 governmental officials from Pakistan

### Content of the Workshop

Lecture on hydrological modeling (Dr. Rasmy)

RRI model hands-on training (Dr. Shrestha)

IFAS hands-on training (Dr. Kikumori and Dr. Liu)



Senior Researcher Kikumori gives IFAS hands-on training to Pakistan officials in the workshop

(Written by Yoshito Kikumori)

2017年10月2日から4日、アジア工科大学の依頼により ICHARM においてパキスタンの行政官 8 名に対して水文モデリングのワークショップが開催されました。ワークショップでは初日に、ラスミー主任研究員による水文モデリングに関する講義を行った後、翌日、シュレスタ主任研究員により RRI モデル（降雨流出氾濫モデル）の操作演習と翌々日に菊森主任研究員とリュウ専門研究員により IFAS（総合洪水解析システム）の操作演習が実施されました。IFAS 操作演習では、IFAS の機能紹介と IFAS の計算エンジンである土研分布型流出モデルの解説を行った後、受講者各自が持参したコンピュータを用いて、IFAS のインストールからサンプルデータを用いた流出解析まで、一通りの IFAS の利用方法の講習を 1 日かけて行いました。受講者は、ダムによる洪水調節のシミュレーション機能について、詳しく質問をするなど、終始積極的に講義に臨みました。

■ 日時：2017年10月2日～4日  
 ■ 場所：土木研究所 ICHARM 棟 1 階研修室

■ 講師：ラスミー主任研究員、シュレスタ主任研究員、菊森主任研究員、リュウ専門研究員

■ 参加者：パキスタン国行政官 8 名

■ 講習の内容：

水文モデリングに関する講義（ラスミー主任研究員）

RRI 操作演習（シュレスタ主任研究員）

IFAS 操作演習（菊森主任研究員、リュウ専門研究員）

## Follow-up Seminar in Myanmar

ICHARM has been holding Follow-up Seminar overseas annually since 2008 as part of its capacity development effort. The purposes of the seminar include giving advice to former participants and students of ICHARM's educational and training

フォローアップセミナーは、ICHARM で行なう能力育成に関連し、2008 年以降、年 1 回、海外の

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1ヶ国を選び、帰国研修員を中心とした参加者を得てセミナー、現地見学を行なう活動です。この主なねらいは、帰国研修生の活動のフォローアップ、ICHARMの今後の研修テーマの検討や研修内容の質向上、関係機関とのネットワーク強化、今後の研修に優秀な研修生を派遣してもらうための広報があります。

本年度は2017年12月13日及び14日の2日間ミャンマーのヤンゴン市においてセミナー及びエーヤワディ川の現地見学を実施しました。ICHARMから小池センター長、澤野グループ長、江頭研究・研修指導官、池田上席研究員、徳永上席研究員、佐野アシスタント、ミャンマーからは水資源・河川系開発局(DWIR) Htun Lwin Oo 局長はじめ、灌漑・水利用局 (IWUMD)、救済復興局(RRD)、ヤンゴン工科大学、JICA 事務所職員など総計28名が参加しました。

第1日目は、ICHARMからIFI(国際洪水イニシアティブ)、ADBプロジェクトなど最近の活動報告、技術講義、7名の修士課程卒業生及び7名のIFAS研修など短期研修を受けた帰国研修生の活動及び今後のICHARMへの期待についての報告と意見交換を行いました。

第2日目は、帰国研修員を含む14名とともにヤンゴン近郊のニヤンドン区を訪問し、エーヤワディ川支川のライン川沿いにある灌漑・洪水用施設及び出水時の地域の状況の説明及び意見交換を行ないました。また、ニヤンドン区における越水があった堤防及びエーヤワディ川を横断する橋梁の橋脚近くの河岸侵食の状況などを見学し、対策事務所職員の説明を受けました。

2日間のフォローアップ研修を通じて日本とミャンマーの水災害関係科学技術者が集まり、両国の状況や違い、ミャンマーの課題など多くの知見を有することができました。特に、水防団の活動や牛水制などの対策工の説明では、日本の伝統的な水防工法と同じとの印象を持ちました。

programs on their current activities, collecting feedback from them to improve our capacity development programs, strengthening ties with overseas organizations, and providing information on the capacity development programs to attract more talented program candidates. The seminar is usually attended by former participants and students of ICHARM education and training programs, offering lectures on new development and technology in the field of disaster management and a study tour to local sites having water-related problems.

This year's Follow-up Seminar was held on December 13-14, 2017, in Yangon, Myanmar. The seminar was attended by 28 participants from the two countries. From Myanmar, Mr. Htun Lwin Oo, the director general of the Directorate of Water Resources and Improvement of River Systems, participated along with other officials from the Irrigation and Water Utilization Management Department, Relief and Resettlement Department, the Yangon Technological University, and a JICA local office. Participants from ICHARM were Director Toshio Koike, Deputy Director Hisaya Sawano, Research and Training Advisor Shinji Egashira, Chief Researcher Tetsuya Ikeda, Chief Researcher Yoshio Tokunaga, and Assistant Maiko Sano.

On the first day, a series of presentations were delivered from both sides. ICHARM researchers spoke about recent activities of the International Flood Initiative and the Asian Development Bank project and gave a technical lecture. From the Myanmar side, seven former master's students and seven former training participants of ICHARM educational and training programs made presentations on their activities and advice for ICHARM to improve the programs.



Follow-up seminar in Yangon, Myanmar



Participants in follow-up seminar

On the second day, the researchers of ICHARM visited Nyandong near Yangon with 14 seminar participants. At the first place of Nyandong, they listened to explanation about irrigation and flood-control structures installed along the Line River, a tributary of the Ayeyarwady River, and how the area will be in case of a flood. The party also visited a few other places in Nyandong and listened to local river managers explaining the current situation and their activities. One was where floodwaters overtopped the levee, and the other was where the river bank erosion is in progress near the piers of a bridge across the Ayeyarwady River.



Site visiting at Nyandong

The two-day seminar was very informative, gathering scientists and engineers in water-related disaster management from Japan and Myanmar. Both parties learned a lot from each other including the current practice in disaster management and issues faced by Myanmar. The Japanese researchers were particularly interested in the flood fighting corps system and skeleton work employed in Myanmar as flood control measures, for those measures are just like traditional measures that have been widely used in Japan.

(Written by Yoshio Tokunaga)