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United Nations
Educational, Scientific and
Cultural Organization

Message from Director

ICHARM has started the year 2014 with a refreshed enthusiasm under a renewed agreement between UNESCO and the government of Japan signed last July. The new agreement requires us to establish the Governing Board, which was the Advisory Board in the previous agreement. We expect that the Governing Board of top international executives will examine ICHARM's activity plan to ensure proactive implementation. We are making our best effort to prepare for the first board meeting, scheduled on February 25.

Near the turn of the year, we had another devastating disaster, when storm surges by Typhoon Haiyan (locally called Yolanda) hit Leyte Island of the Philippines on November 8. It was reportedly the strongest typhoon ever recorded among the landed. Many houses and towns were completely swept out, and more than 6,000 people were killed. It was only 7 years ago when Leyte experienced a giant landslide, which occurred after weeks of heavy rains and killed more than ten thousand people. Meanwhile, in Japan, people in Oshima Island were still at a loss after a deadly debris flow, unable to make any plans yet for recovery. Right after the turn of the year, we also saw many pictures of floods in Southwest England and Wales. Indeed, extreme hydro-met phenomena have been increasing.



Wallingford, England
photo by John Rodda 2014.1.11

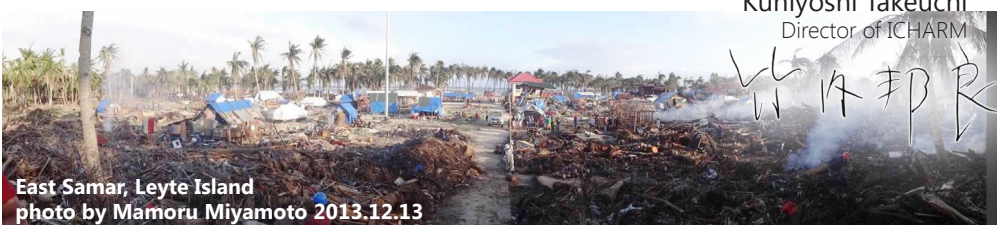
Under such circumstances, the role of ICHARM is growing. One of the reasons is that it assumes the responsibility of the most critical part of disaster prevention; that is, as Chinese philosopher Sun Tzu says, "If you know the enemy and know yourself, you need no fear even against a hundred battles." In disaster prevention, to know the enemy is to know the characteristics of the hazards and their forecasts, and to know yourself is to assess exposure and vulnerability of human activities, coping capacities and institutional arrangements.

ICHARM, together with foreign students, is concentrating on acquisition and production of such knowledge on hazards and society in combination with capacity development programs, and apply the research results to local practices by helping practitioners of national and regional governments. Based on such substantive experiences, ICHARM also takes part in international efforts of policy and strategy making.

We hope ICHARM receives even further cooperation and support from the world to continue activities under the renewed agreement.

31 January 2014

Kuniyoshi Takeuchi
Director of ICHARM



East Samar, Leyte Island
photo by Mamoru Miyamoto 2013.12.13

ユネスコのカテゴリー2センターに関わるルールの見直しに伴い、昨年7月、ユネスコ・日本政府間の協定も改定されました。したがって2014年は、ICHARMにとって新協定下での新年になります。センター員一同、気持ちも新たに活動を開始しました。新協定では、従来の諮問委員会に代り、運営理事会にICHARMの運営を審査頂くこととなります。理事会には内外関係機関のトップを迎え、大所高所からの審査とご指導を期待しています。第一回理事会は2月25日に開催の予定で、それに向けた準備を進めています。

昨年末には、また悲惨な災害が起きました。11月8日にレイテ島を中心に襲ったサイクロン・ハイヤン(台風30号)による高潮で、多くの町が壊滅し6000人以上の方々が亡くなりました。上陸した台風としては観測史上最大規模だったと報じられています。レイテ島ではわずか7年前、巨大地すべりで1000人以上の方が亡くなったところでした。日本ではこれに先立つ台風26号で、大島の土石流災害により50人近くの方が亡くなり、避難された方々の帰還の計画も立たない時期でした。新年早々にはイギリスから、暮れからの雨で各地で洪水が発生したニュースが届けられています。気象の極端現象は進化の一途をたどっています。

そんな中でICHARMへの期待はますます高まっています。水防災という戦いの中で最も重要な、「敵を知り己を知れば百戦危うからず」と言うところを分担しているからです。敵を知るのはハザードの特性研究、予報であり、己を知るのは人間活動の暴露と脆弱性の評価です。対策や社会の仕組みの評価も含まれます。これら敵と己を知る技術の研究を、能力開発プログラムを一体に、留学生と一緒に研究し、その成果を現地の実務者を通じて実践に移しています。その上で、リスク削減の国際政策や体制作りにも参加しています。

新しい協定の下でのICHARMの発展に、一層のご支援をお願いします。

Research

ADB Project in Myanmar: Transformation of Urban Management (CDTA 8456)

ミャンマーを対象とする「能力開発技術支援：都市管理に関する技術移転 (CDTA 8456)」が、2013年9月20日、アジア開発銀行 (ADB) の承認を受けました。CDTA は、地方政府組織の組織力を強化し、必要な社会基盤をニーズに基づいて優先的に提供し、基本的な洪水リスク評価も実施することで、同国都市部の持続可能な開発を促進することを目的としたプロジェクトです。CDTA は、第1部都市管理、第2部洪水管理の2部で構成されています。第2部の洪水管理は、3つの主要地域 (ヤンゴン、マンダレー、モーラミヤイン) を対象に、推進することになっています。気象水文局などの専門家には研修の機会を設け、また高度な水文気象解析の導入を予定しています。

ICHARM は洪水管理の監督機関に指定されていることから、岡積首席研究員、Shrestha 研究員、山崎専門研究員が2013年11月18日～23日にミャンマーを訪問、ADB、建設省、気象水文局との合同打ち合わせ会議に出席し、併せて、ヤンゴン川、バゴ川、ヤンゴン市の洪水多発地区の調査を行いました。

ミャンマーは、常に洪水による災害に悩まされてきました。沿岸部やデルタ地帯は高潮の影響が深刻な地帯であり、2008年には、サイクロン・ナルギスによって壊滅的な被害を被り、少なくとも13万8千人の死者が出ました。こうした状況から、同国に洪水リスク管理を導入することは喫緊の課題であり、都市管理の基盤として、適切な洪水リスク管理を実施することは、必ず同国発展の一助となると考えられます。

The Capacity Development Technical Assistance (CDTA): Transformation of Urban Management (CDTA 8456) was approved by the Asian Development Bank (ADB) on September 20, 2013, to implement in Myanmar. The CDTA will promote sustainable urban development in Myanmar towns by building institutional capacity of local authorities, leading to the prioritized needs-based provision of essential infrastructure as well as basic assessment of flood risk in this flood prone-country. The CDTA has two parts, i.e., Part I: Urban management and Part II: Flood management. Part II will focus on three key areas of the country (Yangon, Mandalay, and Mawlamyine), and involve two main counterpart institutes: the Myanmar Ministry of Construction (MOC) and the Department of Meteorology and Hydrology (DMH), the Ministry of Transport. Flood and storm-surge risk assessment will be carried out in the Yangon plain, Ayeyarwady and Thanlwin river basins. The capacity of specialists in related government organizations, such as the DMH, will be developed by introducing training programs and incorporating advanced hydro-meteorological analysis methods.

Since ICHARM is designated as the supervising agency of Part II of the CDTA, a team of ICHARM experts, Chief Researcher Toshio Okazumi, Research Specialist Yusuke Yamazaki and Researcher Badri Shrestha, visited Myanmar on 18-23 November 2013 to join a consultation meeting with ADB, MOC and DMH. MOC and DMH warmly welcomed implementation of this project in Myanmar. The team also conducted a field investigation along the Yangon and Bago Rivers and also in the flood prone areas of the Yangon city.



Flooding has always been one of the major hazards in Myanmar. Heavy rains and overflowing local rivers cause flooding in various parts of the country and many people are exposed to flood hazard every year. The coastal and delta areas are also severely affected by storm surges. Cyclone Nargis was a strong tropical cyclone that caused catastrophic destruction and at least 138,000 fatalities along its way in 2008. There is thus urgent need for flood risk management in Myanmar, and the implementation of the CDTA will definitely help the country to carry out proper flood risk management as the foundation for urban management.

(Written by Badri Shrestha, project led by Toshio Okazumi)

29th Meeting of ISO/TC 113 at Mexico

2013年11月11日～15日にかけて、メキシコ国メキシコシティにあるメキシコ政府機関の CONAGUA (Comisión Nacional del Agua) において第29回 ISO/TC113 (Hydrometry: 開水路における流量測定) メキシコ総会が開催されました。ISO/TC113の国内審議団体である土木学会から国土交通省大臣官房技術調査課電気通信室、河川情報センター、建設電気技術協会、ポンプ国際規格審議会、ICHARMの担当者の合計7名が派遣されました。ICHARMからは、SC1 (Velocity area methods) の日本代表として岩見首席研究員、萬矢研究員が参加しました。同総会では、萬矢研究員が非接触型流速計に関する技術のプレゼンを実施し、同技術の基準化に向けた技術書を作成するための主たる執筆者に任命されました。また次回の第30回 ISO 総会は2015年5月に日本 (東京) で開催することが承認されました。

On November 11-15, 2013, the 29th meeting of ISO/TC 113 was held at CONAGUA (Comisión Nacional del Agua), a government agency, located in Mexico City, Mexico, to discuss issues under the title of "Hydrometry: Method of measurement of open-channel discharge." ICHARM sent Chief Researcher Yoichi Iwami and Researcher Atsuhiko Yorozuya to attend a sub-committee on velocity area methods in addition to five other Japanese representatives from various offices including the Electricity and Telecommunication Office of the Technology Research Division of MLIT Ministry's Secretariat, the Foundation of River and Basin Integrated Communications, the Association of Electricity and Telecommunication Engineering for Land and Infrastructure, and the International Pump Standard Commission. In this meeting, Yorozuya delivered a presentation on non-contact velocity meters and was appointed as a committee member to draft technical guidelines for standardizing non-contact velocity meters. The meeting also agreed that the 30th ISO/TC 113 group meeting will be held in May 2015 in Tokyo, Japan.



(Written by Atsuhiko Yorozuya, Project led by Yoichi Iwami)

Sentinel Asia

The first joint project team meeting of Sentinel Asia Step 3 was held in Bangkok, Thailand, on November 27-29, 2013. Chief Researcher Yoichi Iwami of ICHARM attended the meeting as the chair of the Flood Working Group (Flood WG) along with 82 participants from 51 organizations of 15 countries.

Sentinel Asia was first proposed in 2004 by the Asia-Pacific Regional Space Agency Forum (APRSF) to promote the effective use of satellite observation data provided by space agencies for disaster management purposes. More specifically, APRSAF intended to facilitate the use of such information by disaster management organizations through information and communication technology to mitigate disaster damage in the Asian region. Sentinel Asia has been in operation since 2006 in collaboration with relevant organizations of the member countries.

Sentinel Asia has since gone through three multiple-year stages called Steps. At Step 1 (2006-2007), it started a pilot effort to explore how the members can share information by using its newly-launched website. In addition, the Flood and Wildfire Working Groups were set up, and the Global Flood Alert System started offering its service. At Step 2 (2008-2012), as the number of satellites used for the project increased, the Data Analysis Node was organized as a center to analyze and process satellite data. Two more working groups for glacial lake outburst floods and tsunamis were also added to the previous two at this step. Step 3 has started since 2013. The project is expected to operate at its full potential and working towards sharing and using a wide swath of information in a disaster management cycle from pre-event preparedness to post-event restoration.

At the first joint meeting of Step 3, Iwami made a presentation as the chair of the Flood WG regarding satellite-based flood area detection, the development and operation of a flood forecasting system using satellite rainfall information, a satellite-data calibration technology as well as a future direction of disaster management. At the Flood WG meeting, the Asian Development Bank and the International Water Management Institute were invited to report their current activities, which were followed by exchange of views among participants.

Sentinel Asia has finally started its operation at a full scale and is expected to play a vital role in quickly providing satellite data for the mitigation of damage caused by increasingly frequent floods. In recognition of the importance of the project, ICHARM is committed to provide continued assistance in its activities.

(Written and Project led by Yoichi Iwami)

センチネルアジア・ステップ3第1回合同プロジェクトチーム会合が、2013年11月27日～29日にタイのバンコクで開催され、ICHARMからは岩見上席研究員が、同会合の洪水ワーキンググループ座長として参加しました。

センチネルアジアは、アジアにおける災害軽減のために、ICTを活用し、宇宙機関が提供する衛星観測データを防災関係機関が有効利用することを目的にした取り組みです。ステップ1(2006-2007年)では、情報共有のためのウェブサイトを設立され、データ共有のパイロット的取り組みが開始されました。ステップ2(2008-2012年)では、利用衛星数が増加し、提供された衛星データを分析・加工する機関連合が組織されました。2013年からは、本格的な実施段階(ステップ3)に入り、衛星データの幅広い共有と活用を目指しています。

ステップ3の初回の合同会議である今次会合では、ICHARMの代表者は洪水WGの議長として、衛星データを活用した洪水氾濫域把握、衛星降雨データを活用した洪水予測システムの開発・運用、衛星データの補正技術等これまでの取り組みと今後の方向性についての発表を行いました。また、洪水WGセッションでは、ADB、IWMIの活動報告を招聘し、意見交換を行いました。

Sentinel Asiaは本格実施段階に入りましたが、ますます頻発する水災害の軽減のために重要な役割を果たしていくと考えられ、ICHARMは、今後もSentinel Asiaの各種活動を支援していく所存です。

Capacity Development

IFAS Training in the Philippines

On October 8-11, 2013, ICHARM conducted training on the Integrated Flood Analysis System (IFAS) in Manila, the Philippines. This training was provided for 26 engineers in charge of flood forecasting and warning over the Cagayan River basin as part of the joint technical assistance project (ADB TA8074-REG) organized by the Asia Development Bank (ADB) and the Japan Aerospace Exploration Agency (JAXA).



This project has been assisting local engineers in the development of technological tools for improving the accuracy of satellite rainfall data (i.e., GSMaP) used as IFAS input data as well as the installation of more ground rain gauges. Improved GSMaP will then be used for IFAS to carry out runoff analysis. IFAS and GSMaP with better accuracy will help issue more effective flood forecasts and warnings.

The training consisted of three phases: a lecture on IFAS, practice of IFAS operation with the participants' personal computers, and presentations of the training results. In the practice phase, the participants started with the installation of the IFAS software, moved on to setting the target basin, creating a river channel network, setting and calibrating the target rainfall, and finally simulating a past flood while calibrating various parameters. Four instructors from ICHARM were at the training, making sure that the participants understood the procedures, giving comments and advice, and answering questions. In the final phase, they presented simulation results with improved accuracy, which clearly shows that they successfully strengthened the ability

2013年10月8日～11日まで、フィリピン国マニラ市において、アジア開発銀行(ADB)と(独)宇宙航空研究開発機構(JAXA)が共同で実施するADB TA8074-REGプロジェクトの一環として、フィリピン国カガヤン川の洪水予警報を担当する技術者など26人を対象としたIFASのトレーニングを実施しました。

当該プロジェクトでは、IFASの入力データとして用いる人工衛星雨量データ(GSMaP)の精度向上ツールの開発や、地上雨量計の増設が行われています。この精度を向上させたGSMaPをIFASに入力して流出解析を行うことで、IFASとGSMaPを洪水予警報を補助するツールとして活用することを目的としています。

トレーニングは、IFASについての講義、受講者が持参したパソコンを用いたIFASの操作トレーニング(ハンズオンエクササイズ)、成果のプレゼンテーションにより構成されました。ハンズオンエクササイズでは、IFASソフトウェアのインストールからパラメータのチューニングによる既往洪水の再現計算までを一通り行いました。

これにより受講者のIFASに係る技術

Capacity Development

力が向上し、プレゼンテーションにおいて精度の高い再現計算結果が示されました。今後もフィリピン国の技術者が、継続的な水文観測体制の増強、トレーニングを行う事によって、効果的な洪水予警報の実現が期待できます。

to operate IFAS through the training.

The Philippines should be able to realize more effective flood forecasting and warning as long as its engineers continue working to enhance the hydrological observation system in the country and to increase their skills through further training.

(Written by Yusuke Yamazaki, Project led by Yoichi Iwami)

Training Course Updates

ICHARM は、(独) 国際協力機構 (JICA) 及び政策研究大学院大学 (GRIPS) と連携して、2013 年 10 月から 7 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。12 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、現地訪問を通して学んでいます。

10 月 30 日～11 月 1 日にかけて、利根川中流部及び鬼怒川上流部にかけての現地訪問を行いました。概要は以下ようになります。

- ・ 1947 年のカスリーン台風による利根川と渡良瀬川合流点付近の被害状況を中心とした講義を受けた上で、渡良瀬遊水地を訪問し、遊水地を活用した治水及び利水技術について学びました。
- ・ 鬼怒川上流部に位置する川治ダム及び湯西川ダムを訪問し、それぞれのダムの機能及びダムの統合管理に関する技術を学びました。
- ・ 日光、足尾地区の砂防堰堤等の施設を訪問し、山地における土砂管理技術について学びました。

また、12 月 4 日～6 日にかけて、関東地方整備局、気象庁への訪問および鶴見川流域内の総合治水対策の訪問を行いました。総合治水対策とは、都市河川を対象に、ダムなどを活用した対策に加えて、地下貯留施設を設けるなどといった対策のことです。概要は以下ようになります。

- ・ 関東地方整備局及び気象庁において、洪水予警報に関する講義を受けました。雨量観測～洪水予測～警報まで一体として講義をして頂き、日本の洪水予報技術及び警報のシステムについて学びました。
- ・ 鶴見川流域内において、川和遊水池、恩廻公園調節池等の施設を訪問し、都市域の地下空間を活用した治水技術について学びました。

当日は、研修生は熱心に見学を行っており、活発な質問も行われました。特に、洪水予測に関して、ICHARM 内での講義に関係する内容を現場担当者の方へ質問している様子も見受けられました。

お忙しい中、現地訪問のご対応を頂いた国土交通省関東地方整備局、利根川上流河川事務所、鬼怒川ダム統合管理事務所、日光砂防事務所、渡良瀬川河川事務所、神奈川県横浜川崎治水事務所、気象庁の皆様には大変お世話になりました。ここにお礼申し上げます。

ICHARM offers a master's program entitled "Disaster Management Policy Program Water-related Risk Management Course," which is jointly organized with the Japan International Cooperation Agency and the National Graduate Institute for Policy Studies. Currently, 12 students are enrolled at this 7-year-old course, attending lectures and visiting places for better understanding of flood management in Japan. The following reports recent activities in which the students participated as part of their study at ICHARM:



At the Watarase retarding basin

Last year, from October 30 to November 1, the students visited places in the middle Tonegawa River basin and the upper Kinugawa River basin and had opportunity to learn the following:

- They attended a lecture about damage caused by Typhoon Kathleen in 1947 around the confluence of the Tonegawa and Watarasegawa Rivers, and then visited the Watarase retarding basin and learned water use management using the retarding basin.
- They visited Kawaji and Yunishigawa Dams in the upper Kinugawa River basin and learned dam functions and integrated dam management.
- They visited erosion control dams in the Nikko and Ashio areas and learned sediment management in mountains.

From December 4 to 6, the students visited the Kanto Regional Development Bureau and the Japan Meteorological Agency. They also visited the Tsurumigawa River basin to learn comprehensive flood control. Comprehensive flood control is a package of flood control measures combining the use of conventional flood control structures like dams with underground storages. The following are brief descriptions of the visits:

- They attended a lecture about rainfall observation and flood forecasts and warnings at the Kanto Regional Development Bureau and the Japan Meteorological Agency and learned Japan's flood forecasting technologies and warning systems.
- They visited Kawawa and Onmawashi Park retarding basins in the Tsurumigawa River basin and learned urban flood control using underground spaces.

The students participated in the visits very seriously and asked many questions to local flood control experts. Some of them even asked local experts questions based on what they learned from lectures beforehand.

Finally, we would like to thank all offices for their cooperation despite the busy schedules.

(Written by Shun Kudo, project led by Minoru Kamoto)



At Yunishigawa Dam



At an erosion control dam site in Nikko

Salvadoran and Chinese Engineers Visit ICHARM

Eight members of the Public Works Ministry of El Salvador and six members of the Changjiang Water Resources Commission (CWRC) visited ICHARM for one-day lectures on December 3 and 5 respectively. El Salvador participants were part of the Maintenance, River and Urban Drainage and Climate Change directions under the Public Works Ministry, being therefore in charge of design and maintenance works in hydraulic infrastructure with adaptive analysis. Chinese visitors are part of the Chinese Ministry of Water Resources and are responsible for development and management of water related structures and flood control. The objective of the visits was for the visitors to learn about integrated river basin management, disaster management and implementation of emergency measures. To achieve the objectives, participants received lectures about "Introduction to ICHARM's Activities and Training" and "Integrated Flood Risk Management and Basin-Wide Modeling".



(Written by Fernandez Reynosa Rodrigo and Masood Muhammad, Project led by Minoru Kamoto)

エルサルバドル・公共事業省職員8名と中国・長江水利委員会委員6名が、それぞれ12月3日と5日に、研修のため ICHARM を訪問されました。工国公共事業省からは主に水理施設の設計・管理や気候変動に対する適応策を担当する職員、長江水利委員会からは水関連施設の開発・管理や洪水管理を担当する委員の方々でした。研修では、統合的流域管理、災害対策、緊急対策などに関連して、研修・教育活動を含めた ICHARM の活動の紹介、統合的洪水リスク管理と流域規模のモデリングに関する講義を受講されました。

Networking Activity

THE 2nd ISDR ASIA Partnership Meeting

Co-organized by the United Nations Office for Disaster Risk Reduction (UNISDR) and the Department of Disaster Prevention and Mitigation (DDPM) of Thailand, the 2nd ISDR Asia Partnership (IAP) meeting was held on November 5-7, 2013, in Bangkok, Thailand. As a channel toward the Asia-Pacific consultation to establish the Hyogo Framework for Actions beyond 2015 (HFA2), this meeting gathered more than 150 participants consisting of representatives from UN entities, 20 governments in Asia, inter-governmental institutions, private organizations, international research institutions, universities, civil society organizations, and so on.

The meeting was divided into three sessions as follows:

- I. IAP Working Group on AMCDRR : IAP members discussed conference programs (especially during its Technical Session) for the 6th Asia Ministerial Conference on Disaster Risk Reduction (AMCDRR), which is the major milestone toward the 3rd World Conference on Disaster Risk Reduction.
- II. IAP Working Group on HFA monitoring and HFA2 : UNISDR and Key Area Coordinators reported the current status of the HFA2 consultation process and the Asian-Pacific contributions. IAP members identified the information gaps for each Key Area of the HFA2 consultation process.
- III. Updates from partners and governments : In order to update the HFA2 consultation process, many members gave presentations on their background studies.

ICHARM sent Chief Researcher Toshio Okazumi and Research Specialist Sangeun Lee to this meeting to deliver ICHARM's intent to make contributions to the HFA2, present various technologies available for water-related risk indicators, and make technical comments at the events. During this meeting, IAP members also welcomed ICHARM's participation and encouraged participants to discuss collaboration.

(Written by Sangeun Lee, Project led by Toshio Okazumi)



2013年11月5日から7日にかけて、国連国際防災戦略（UNISDR）とタイ国災害防止軽減局の共催で、第2回 ISDR アジアパートナーシップ会議がタイ・バンコクで開催されました。会議は以下のように3つのセッションに分かれて行われました。

- I. アジア防災軽減関係会議 (AMCDRR) に関する部会: この部会では、第6回 AMCDRR の会議内容について議論されました。この閣僚会議は、2015年3月に日本で行われる第3回世界防災会議に向けた非常に重要な会議となります。
- II. HFA の監視と HFA2 に関する部会: この部会では、UNISDR と主要分野コーディネーターから、HFA2 に関する審議の現状とアジア・太平洋地域による審議への貢献に関する報告がありました。参加者にとっては、各主要分野に関する情報不足を確認する機会となりました。
- III. 連携機関および各国政府からの報告: このセッションでは、HFA2 の審議に関わる情報提供が行われ、多くの参加者による研究発表がありました。

ICHARM からは、岡積 首席研究員と李 専門研究員が参加し、HFA2 採択に向けた協力を表明、また、水関連リスク指標開発に関わる様々な技術について発表を行い、技術的な助言も行いました。参加者は、この活動への ICHARM の参加を歓迎すると同時に、さらに連携を深めるための議論を行いました。

14th Governing Council Meeting of APWF and the Consultation Workshop on Asian Water Information System, November 25-27, 2013 in Manila, Philippines

アジア・太平洋水フォーラム (APWF) 執行審議会第14回会合 (2013年11月25日) 及びアジア水情報システム (AWIS) に関するワークショップ (同26～27日) がフィリピン・マニラで開催されました。

APWFは2006年9月27日に正式に設立され、2007年別府、2013年タイ・チェンマイで、それぞれ第1回、第2回のアジア・太平洋水サミットが開催されました。水関連災害対策を含め、アジア・太平洋地域に共通して見られる重点課題の解決が目標です。今回が第14回になる執行審議会は通常年2回開催されており、ICHARMは水関連災害対策分野の統括機関として参加しています。ICHARMからは水および災害に関するリスク管理への貢献として、タイおよびカンボジアの取組み、バングラデシュおよびインドネシアでの現地実践、実務者対象の能力開発研修や現地政府や関連機関との連携などを紹介しました。ADBからアジア水情報システム、UNESCAP、UNESCO、UN-Habitatから水と環境等がそれぞれ報告されています。各重点分野における活動や進捗状況を明らかにし、今後取り組むべき行動計画を具体化していくことが今回の会議で確認されました。

AWISワークショップはAWISの進め方、とりわけ2015年3月を目標にパイロット事業の取組みについて議論するために開催されました。第2回アジア・太平洋水サミットでも、このAWISの促進が宣言の中で述べられています。ADBによるAWISの概略説明では、組織内のデータ管理の改善と、データ管理について協力関係を構築するために、国内組織とどう連携するか問題提起がなされました。ICHARMからは、世界的に入手可能なデータを利用した、現地重視の水関連災害リスク管理という視点から、IFAS、RRI、Global BTOP、浸水深地図、全球洪水リスク評価、能力開発などの活動を紹介しています。本ワークショップでは、2015年4月、韓国・テグで開催される第7回世界水フォーラムでAWISパイロット事業の発表を目指していくことが確認されました。

The 14th Governing Council Meeting of the Asia-Pacific Water Forum (APWF) took place in Manila, the Philippines, on November 25, 2013. The workshop on the Asia Water Information System (AWIS) hosted by Asian Development Bank (ADB) followed on November 26-27.

Since its official launch on September 27, 2006, APWF organized the 1st Asia-Pacific Water Summit in Beppu, Japan, in 2007 and the 2nd meeting in Chang Mai, Thailand, in 2013. Under priority themes common across the Asia-Pacific region including water-related disaster management, APWF has been trying to provide



top-quality and user-friendly network coordination services on a highly participatory bottom-up approach supported by a light managerial and administrative structure responsible for coordinating the activities. Its Governing Council meeting is normally held twice a year, including the participation of lead organizations under the three priority themes. At the 14th Governing Council, ICHARM, as the lead organization for water-related disaster management, expressed its willingness to contribute to water and disaster risk management and introduced case studies in Thailand and Cambodia as well as local practices for achieving reduced vulnerability and increased resilience in Bangladesh and Indonesia, and capacity building for practitioners through training and collaboration with local governments and institutions so that the application of technological tools can be appropriately processed, understanding the APWF as an important platform to create partnership with international and national institutions. The other themes, highlighted for APWF activities in the previous Governing Council, were also followed up: Asian Water Information System by ADB, Water and Green Economy by UNESCAP, UNESCO and UN-Habitat, Urban Water Management by UNESCO, UN-Habitat and PUB, and Integrated Water Resources Management by NARBO. The Governing Council confirmed that the APWF's activities and achievements to each priority area should be clarified to help visualize how much its activities have contributed to increasing water security in the region and identified APWF's concrete future action plans.

The main object of the following AWIS workshop was to develop time-bound targets and strategies for AWIS establishment, and to identify a core-group of institutions and countries to lead development of a pilot demonstration of the AWIS by March 2015. AWIS is one of the APWF priority areas, as declared to "invite the Asia-Pacific Water Forum to mobilize initiatives in support of all these recommendations, and to encourage consideration, as appropriate, of green economy policies in the context of sustainable development and poverty eradication, as well as the establishment of Asia Water Information System" at Chiang Mai, Thailand, during the second Asia-Pacific Water Summit on May 20, 2013. At the initial stage of the workshop, ADB gave an overview of AWIS. The first key issue for AWIS is to improve internal data management and learn how to work with other agencies in the same country to establish partnership on data management. ICHARM showed its activities in the context of globally available data and local practices to manage the risk of water related disasters, such as IFAS, RRI, Global BTOP, Flood Inundation Depth Map, Global Flood Risk Assessment, and related capacity development. Following on from the discussion around the concept of the AWIS, participants discussed the expected outcome of such a demonstration phase which was to be completed for presentation at the 7th World Water Forum in Daegu, Korea in April 2015.

(Written by Masahiko Murase)

Budapest Water Summit: The Role of Water and Sanitation in the Global Sustainable Development Agenda

Leaders, academics, decision- and opinion-makers gathered in Hungary for the Budapest Water Summit on October 8 to 11, 2013. Representing ICHARM, Professor Takeuchi and Research Specialist Kelly Kibler were in attendance. This meeting was an opportunity for the international water community to organize support for a dedicated Sustainable Development Goal (SDG) on Water and to discuss how such a goal may be structured, financed, implemented, and monitored. In his opening address, the Secretary General of the United Nations, H.E. Mr. Ban Ki-Moon, called for full engagement across all sectors and actors to design SDGs, which are bold and ambitious, yet simple in design, inclusive and applicable to all, and which support equitable provisions of human rights. The key themes of discussion included the Water- Energy-Food nexus, building green economies, importance of strong water governance to support SDGs, and the need to forge new partnerships, most notably with the private sector.

Many speakers referenced relationships between water-related disaster risk and successful attainment of a comprehensive sustainable water goal; however, ICHARM's Professor Takeuchi was the only speaker to confront this issue head-on in his keynote address. As a strong voice for those whose human rights are compromised by burdens of repeated disasters, Professor Takeuchi and ICHARM worked to ensure that the outcome document of the meeting, the Budapest Statement, included water-related disasters as one of the four recommended priority themes of a dedicated water goal. As a crucial milestone leading up to adoption of the SDGs, opinions created at the Budapest Water Summit will likely be echoed in SDG proposals from many agencies which will appear in coming months.

(Written by Kelly Kibler)

各国の指導者、学識経験者が集まり、2013年10月8日～11日、ハンガリーでブタベスト水サミットが開かれました。ICHARMからは、竹内センター長とキブラー専門研究員が出席しました。今回の会合は、水に関する持続可能な開発目標 (SDG) の設定のために開催されたもので、いかにその目標を立て、財政支援し、実行し、監視するかなどの議論が行われました。開会にあたって、潘基文国連事務総長から、大胆かつ野心的、しかしシンプルな仕組みで、誰もが参加し、取り組むことができ、また人権に十分配慮した目標設定となるよう、分野にかかわらず、全員が全力で取り組むよう要請がありました。

多くの発表者が、水に関する包括的で継続可能な目標を達成することが、水関連災害リスクの軽減にもつながると主張する中、竹内センター長の基調講演は、唯一、水災害軽減に正面から取り組む必要性を唱えるものでした。繰り返される災害のために人権を脅かされている人々を代弁し、水関連災害が、水に関する4つの重点テーマのうちの一つとして、ブタベスト宣言に盛り込まれるべきと主張しました。今回の水サミットはSDG採択に向けた重要な節目でありましたが、会合での見解が今後多くの組織から提出されるSDG草案にも反映されると考えられます。

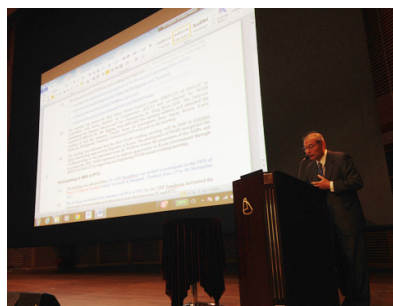
Typhoon Committee Integrated Workshop

The 8th Typhoon Committee Integrated Workshop was held at Macau on December 2-7, 2013. Chief Researcher Minoru Kamoto and Principle Senior Researcher Yoshikazu Shimizu of ICHARM participated in this event.

This time, a special session was set up to discuss issues concerning Typhoon Haiyan, an extremely strong tropical storm that hit the Philippines last November. In the session, a group of experts intently listened to reports about the storm and had an intensive discussion on what can be done and what should be done. Filipino experts told the participants that warnings of 6-meter-high storm surges had been out hours before, but no storm-surge risk maps were available and no information was provided about where to evacuate.

The Hydrological Working Group session was also held during the workshop. Kamoto chaired the meeting, and Shimizu reported on a research project aiming at detection of debris flow and shallow landslide risk by using satellite-based rainfall data. Experts from Thailand commented in favor of the project, recognizing that it will be effective in their country.

On the final day of the workshop, Kamoto reported the discussion results of the Hydrological Working Group session at the plenary meeting.



(Written by Yoshikazu Shimizu, Minoru Kamoto)

2013年12月2日～12月7日、マカオにおいて台風委員会第8回合同ワークショップが開催され、ICHARMから加本上席研究員、清水総括主任研究員が参加しました。

今回の台風委員会では、11月、フィリピンを襲った台風 Haiyan の特別セッションが設けられ、台風の状況に加え、今後何が出来るか、何をすべきか等について活発な議論が行われました。フィリピン国からは、6mの高潮の警報を何時間も前から伝えていたが、高潮で浸かる地域を示したリスクマップやどこに逃げるのかなどの情報は、伝達していなかったとのコメントがありました。

水文分科会では、加本が座長を務め会議を主導し参加国の報告をとりまとめました。同部会において、清水が衛星降雨量データを用いた土砂災害危険度評価手法研究プロジェクトの進捗報告を行った。タイ国参加者からタイにおいて本プロジェクトが有益であるとの意見が得られました。会議最終日、全体会議において加本が水文部会の討議結果をとりまとめ報告しました。

Other Topics

New ICHARM Members

Five new members joined ICHARM. They would like to say brief hellos to the readers around the world.

Yoko HAGIWARA

Research Specialist

Japan



Before joining ICHARM, I worked with UNISDR, and supported national and regional efforts and cooperation for reducing disaster risk that originates from natural hazards. At ICHARM, I would like to work together with rapidly-growing Asian countries to strengthen the region's capacity in managing the risk of water-related hazards by shedding light on socio-economic impacts of such hazards.

Naoko NAGUMO

Research Specialist

Japan



I studied physical geography and geomorphology, and analyzed landform development processes of fluvial lowland under tropical monsoon influences and the relationship between fluvio-geomorphic environment and establishment of human societies. At ICHARM, from a geographic point of view, I would like to contribute to mitigation of water disaster risk around the world, which has various natural and cultural backgrounds.

Md. Nasif Ahsan

Research Assistant Bangladesh



Over the years, I have enjoyed the research experience during my undergraduate and post graduate program along with my work experience as a university faculty-member. My long-term objective is to instigate and continue innovative and cutting edge works in the area of disaster risk management with specific focus on social sciences with a view to forming individual research group as well as establishing collaborations with renowned research groups in the scientific community all over the world. Hence, I am happy to choose ICHARM for my Ph.D study on Disaster Management which will help me to gain comprehensive insight into the recent developed methodologies and techniques of analyzing impacts of natural hazard led risk reduction.

Robin Kumar Biswas

Research Assistant Bangladesh



Wish you all a year of success and happiness!
Suspended sediment transport process in large braided rivers like the Brahmaputra and the Ganges is causing river bank erosion which is a unique water related disaster in Bangladesh. Every year river bank erosion causes people to lose their houses, livelihood, institutions etc. and thus often found themselves into the vicious cycle of disasters and endless poverty. I would like to devote my efforts to reduce the havoc of at risk society from the effects sediment induced hazards. With my experience and knowledge, I would also like to contribute to ICHARM's mission of water related disaster management at regional and global level. I feel much honored to be part of ICHARM family.

Andrea Juarez

Research Assistant Guatemala



Previously, I studied the water recharge potential in different river basins in Guatemala to support the development of payment for ecosystem services schemes. As part of my graduate studies I explored the governance and institutional change of flood management initiatives developed under a socio-ecological approach in Spain and the Netherlands. Currently, as a PhD student at ICHARM I would like to continue exploring how the natural, social and water related engineering systems are interlinked in order to understand better and assess comprehensive and sustainable actions for water hazard risk management.

Comments from the internship students

Mahsa Farhangi

Iran



I am a PhD student at University of Tehran, Iran and I had a chance to visit ICHARM for the internship from Oct.15 to Nov. 9, 2013 under the supervision of Prof. Takeuchi. This visit was full of new experiences. Communicating with researchers in various fields of water resources gathering from all over the world has profoundly inspired me. During my stay at ICHARM I was working on a distributed hydrologic model, BTOPMC, developed by Prof. Takeuchi and his team.

To put in a nutshell, I would like to say that my time spent at ICHARM left a memorable experience for me and I am sure I could not ask for a better internship. I am looking forward to continuing my relationship and strengthen it in the future.

Duong Duc Toan

Vietnam



I am a PhD student at Kyoto University, originary from Vietnam Water Resources University in Hanoi and I had a chance to visit ICHARM for the internship from Nov., 5 to Nov. 15, 2013. The weeks internship at ICHARM was very useful and good experience for me. The working environment in ICHARM is very professional and international. People in ICHARM are not only hardworking, full of expertise but also very friendly and supportive. I attended some lectures on Integrated Flood Risk Management, Flood Hazard Mapping, and Rainfall-Runoff-Inundation Model (RRI). I also had a chance to learn to utilize RRI model and discuss with Dr. Sayama and other ICHARM researchers about applications of RRI model in flood risk assessment in some river basins in Asia. During my stay at ICHARM, I gained not only the knowledge and working experiences but also good friendship and connection with many ICHARM members. I do hope that I have another chance to collaborate with people in ICHARM in the future.

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