Newsletter

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International Centre for Water Hazard and Risk Management under the auspices of UNESCO







Message from Director

The year 2011 has started with devastating floods in Australia, Brazil and Sri Lanka. ICHARM sends our deepest condolence to those who lost their family members and friends and sympathy to those who were affected and are still in the midst of the suffering.

In Australia, the state of Queensland has always been subject to droughts, but since the late last year, it has been hit surprisingly by a series of floods. The flooding is now expanding to Victoria. In Brazil, newly developed towns in the State of Reo de Janeiro have been seriously attacked by flooding and mudslides, and more than 600 people are reported killed. In eastern and central Sri Lanka, unusually heavy rains started on 26 December last year, the exactly same date when the Great Indian Ocean Tsunami hit parts of the country six years ago. The heavy rains caused overwhelming floods affecting more than a million people. Societal impacts inflicted on those respective areas must be among the worst in their histories.

Responding to these calamities, ICHARM has been engaged in various help plans including short- to medium-term aftermath programs. ICHARM staff including myself is going to be sent to Pakistan and Sri Lanka in the last week of January to have discussions with national and UN officers on potential ICHARM contributions in such as early warning, preparedness and capacity development programs.

While ICHARM has been busy working one after another here and there, five years are about to pass this March since the establishment. On 13-14 January, we received an official review team sent by UNESCO; Prof. Soontak Lee and Dr. Olivia la O'Costillo, accompanied by Dr. Shahbaz Khan. We appreciated their visit and the kind review for the centre's continuation and improvement.

In the meantime, we are in preparation of an important international event happening this fall. That is the 5th International Conference on Flood Management (ICFM5) "Floods: from Risk to Opportunity", scheduled to be held on 27-29 September in Tsukuba, Japan. It will be a great occasion for all flood management practitioners to gather and discuss what we can do in practice for flood risk reduction before disasters happen and emergency management such as rescue and recovery when they actually happen. We strongly encourage water experts to submit abstracts through the web and gather in Tsukuba to meet and share wisdom and experience with fellow professionals.



It is the year of Rabbit, a symbol of leap and safety. Let us take a giant leap in search for safety.

Kuniyoshi Takeuchi Director of ICHARM

计外邦良

2011 年は、豪州をはじめとし、ブラジル、スリランカでの破壊的な洪水で幕を開けました。ICHARM 一同、これらの災害でご家族や友人を失った方に、心から哀悼の意を表すとともに、被災者の方々のご無事をお祈りしています。

豪州クイーンズランド州では、常に干ばつが問題となっていましたが、昨年末から洪水が発生、今やヴィクトリア州にまで被害が及んでいます。ブラジルでは、リオデジャネイロ州内の新興住宅地が、深刻な洪水・土砂災害に見舞われ、犠牲者は600名以上に上ると言われています。スリランカ東部・中部では、昨年12月26日から続いた豪雨による洪水で、100万人を超える人々が被災しています。奇しくもこの26日は、同国が6年前にインド洋沖津波を被った日でもありました。今回の洪水による社会的影響はどの被災地にとっても史上最も深刻なものとなるでしょう。

この惨事に対応すべく、ICHARM は短・中期的な被災地支援など、様々な支援計画を遂行していきます。1月下旬にはパキスタンとスリランカに人員を派遣し、早期警報他、どのような貢献が可能かを両国および国連機関と協議する予定です。

さて、ICHARM はこの 3 月で設立以来 丸 5 年を迎えます。1 月 13、14 日には、 UNESCO 評価団が来所、これまでの活動の評価をしていただきました。これ は今後の発展につながる重要なステップであり、評価団の方々に感謝しているところです。

一方で、第5回洪水管理国際会議 (ICFM5) の準備も着々と進んでいます。この会議は、「洪水ーリスクを機会に」をテーマに、災害前における洪水リスク 軽減、災害発生時における救出・復興といった危機管理の重要性について、洪水管理実務者が一堂に会し、議論する絶好の機会です。ぜひ多くの皆様に発表要旨を投稿していただき、水関連問題に携わる者として、知恵と経験を共有できればと考えております。

今年は卯年。飛躍と安全安心の年です。 安全安心な社会を目指し、大きな飛躍を 遂げたいものです。

Special Topics & Events

5th International Conference on Flood Management (ICFM5)

(Tsukuba, Japan, 27-29 September 2011)

第5回洪水管理国際会議(ICFM5)が、2011年9月27~29日、つくば市で開催されます。提出するアブストラクトのトピック範囲は、洪水災害管理サイクルです。

発表要旨: A4 サイズ 1 枚に 500 語以下 (ICFM5 専用サイトに用意されている発表要旨用テンプレートを利用)

投稿期限:2011年4月1日

投稿要旨:すべてICFM5 国際技術委員会が審査、受理された場合は2011年4月30日までに著者宛に受理通知をお送りします。受理されたアブストラクトは全て会議録に掲載されます。また、選考されたアブストラクトの著者の方には、査読つき学会誌に掲載するため全原稿の提出をお願いさせていただきます。

アブストラクト提出方法の詳細については、下記の ICFM5 のウェブサイトをご覧ください。

http://www.ifi-home.info/icfm-icharm/icfm5.html

(問い合わせ先/ICFM5 事務局: info@ifi-home.info)



Call for Abstracts

ICFM5 will be held in Tsukuba, Japan on 27-29 September 2011, and topic areas for abstract submission are formed based on flood disaster management cycle. All abstracts should be on one A4 page with less than 500 words using the ICFM5 abstract template available on the ICFM5 website. The deadline for abstract submission is April 1st 2011. All abstracts will be reviewed by the International Technical Committee, and an acceptance notification will be sent to the authors of the accepted abstracts no later than April 30th 2011. All accepted abstracts will be published in the conference proceeding. Authors of some selected abstracts will be invited to submit their full manuscripts to be published in peer-reviewed journals. For detail of how to submit abstracts, please visit the ICFM5 website at:

http://www.ifi-home.info/icfm-icharm/icfm5.html

Topic Areas for Abstract Submission (Oral, Poster)

Topic 1: Flood Risk Management (Prevention, Mitigation and Adaptation)

- Structural measures (design, construction, operation and maintenance)
- 1.2 Non-structural measures
- 1.3 Flood risk management policy and strategic planning
- 1.4 Land use control measures
- 1.5 Climate change adaptation
- 1.6 Environmental and ecological consideration
- 1.7 Flood management in the context of Integrated Water Resources Management
- 1.8 Maximizing flood benefits

Topic 2: Flood Disaster Management (Preparedness, Emergency Response and Recovery)

- 2.1 Flood disaster preparedness
- 2.2 Flood hazard mapping
- 2.3 Emergency management and recovery
- 2.4 Risk communication and damage assessment
- 2.5 Social capital and community defense

Topic 3: Flood Forecasting and Early Warning Systems

- 3.1 Observation, monitoring and forecasting of precipitation and discharge
- 3.2 Hydro-meteorological processes
- 3.3 Rainfall-runoff modeling, flood routing and inundation modeling
- 3.4 Prediction in ungauged basins
- 3.5 Flood warning visualization and dissemination

Topic 4: Flood Management in Different Climate Conditions and Geographic Zones

- 4.1 Urban floods, flash floods, riverine floods, storm surges
- 4.2 Landslides and debris flow
- 4.3 Floods in deltas and estuaries
- 4.4 Floods in arid areas and seasonal rivers,
- 4.5 Floods in cold regions
- 4.6 Trans-boundary rivers floods
- 4.7 Glacial lake outburst floods (GLOFs)
- 4.8 Dam malfunction flood, dam break and natural dams after earthquake, etc.
- 4.9 Reports on recent floods (lesson learned and the best practices)

Topic 5: Cross-cutting and other topics

- 5.1 Flood risk index (assessment and indicators of exposure, vulnerability and capacity)
- 5.2 Integrated flood management approaches
- 5.3 Uncertainty analysis and management
- 5.4 Role of training, information networking and public awareness
- 5.5 International cooperation and assistance
- 5.6 Indigenous flood management knowledge

Abstract Submission Deadline:
1st April 2011



Online registration will start from 1st March 2011. All fees are in Japanese Yen (JPY)

Registration Categories	Fee (Japanese Yen)
Full Registration (Early-bird, From 1st March to the end of April 2011)	30,000 JPY
Full Registration (From 1st May to the end of June 2011)	35,000 JPY
One day registration	15,000 JPY
Accompanying Person Registration	15.000 JPY

Full Registration includes: Technical sessions, coffee breaks, welcoming reception, banquet, luncheons, book of abstracts, and CD proceedings.

One Day Registration includes: Technical sessions, coffee breaks, luncheon on that day, book of abstracts, and CD proceedings. Welcoming reception and banquet is not included for and tickets must be purchased separately.

Accompanying Person Registration includes: Technical sessions, coffee breaks, welcome reception and luncheon. There is no registration for accompanying

Accompanying Person Registration includes: lectinical sessions, corree preass, welcome reception and uncheon. There is no registration for accompanying persons that would like to join only the welcoming reception and/or banquet. For them tickets must be purchased separately.

* There is a 50% discount in all categories for students. For more information contact ICFM5 Secretariat.

(For inquiry, contact the ICFM5 secretariat at ICHARM : info@ifi-home.info)

Special Topics & Events

UNESCO Evaluation Team Visits ICHARM (ICHARM, 13-14 January 2011)



Dr. Soontak Lee, the chairman of the UNESCO-IHP Inter-Governmental Council, Dr. Olivia la O'Castillo,a member of the UN Secretary General's Advisory Board on Water and Sanitation, and Dr. Shahbaz Khan, the chief of Water and Sustainable Development Section of UNESCO, visited ICHARM on 13-14 January in order to evaluate ICHARM's activities on behalf of UNESCO. They conducted the

evaluation through checking prepared documents which show the relations between ICHARM activities and UNESCO's programmes and interviewing with ICHARM staff.

The evaluation was mandatory based on "the Agreement between PWRI and UNESCO Concerning the Operation of ICHARM" as UNESCO category II centre, which came into effect about five years ago on 3 March 2006.

(For inquiry, contact the ICHARM International Technical Exchange Team: icharm@pwri.go.jp)

2011 年 1 月 13 ~ 14 日、2006 年 3 月 3 日に締結した「ICHARM 運営に関する土木研究所と UNESCO との間の契約」に基づき、ICHARM の UNESCO カテゴリー II センターとしての契約更新のための評価を行うため、UNESCO IHP 政府間理事会議長で Yeungnam 大学の Soontak Lee 教授と、水と衛生に関する国連事務総長諮問委員会委員の Dr. Olivia la O'Castillo、UNESCO 本部職員の Dr. Shahbaz Khanが ICHARM を訪れました。

評価委員は ICHARM のこれまでの活動 をまとめた関連書類の審査や ICHARM スタッフへの質疑を通して評価を行い ました。

(問い合わせ先/ICHARM 国際普及 チーム:icharm@pwri.go.jp)

Information Network

ICHARM holds special session at the 5th APHW conference (Hanoi, Vietnam, 8-10 November 2010)

The 5th Asian Pacific Association of Hydrology and Water Resources (APHW) Conference was held in Hanoi, Vietnam, on 8-10 November 2010. In this conference, ICHARM organized a special session entitled "Flood Disasters and Predictions in Asian Pacific Countries". The session primarily discussed appropriate flood predictions for



different flood types based on a common premise that types of flood hazard and damage vary significantly in different river basins. The special session was composed of four presentations (see below) on: 1) urban flash floods in Metro Manila in the Philippines and their analysis with a kinematic wave model, 2) prediction of the 2010 flood in the Changjiang River basin and its utilization for flood operation of the Three Gorges Dam, 3) flood prediction in Australia with ensemble hydrologic models, and 4) rainfall-runoff-inundation analysis of the Pakistan Flood 2010. The session had a great turnout of more than 60 participants actively joining discussions on a variety of flood issues.

Name Recent flash floods and their prediction for rural and Prof. Leonardo Q. Liongson University of the Philippines, the Philippines urban catchments in the Philippines Dr. Yan Huang Bureau of Hydrology, Changjiang Water Flood management in 2010, Changjiang River Resources Commission, China Development of a continuous flow modeling Dr. Prasantha Hapuarachchi CSIRO Land & Water, Australia package for flood forecasting in Australia Regional scale Rainfall-Runoff-Inundation model for Dr. Takahiro Sayama ICHARM, Japan flood risk assessment

(For inquiry, contact the ICHARM Hydrologic Engineering Research Team :suimon@pwri.go.jp)

第5回アジア太平洋水文水資源会議(APHW)がベトナムのハノイにおいて開催されました(2010年11月8~10日)。同会議において、ICHARMは「アジア太平洋地域における洪水災害とその予測」という特別セッションを開催しました。このセッションでは、洪水現象と被害の形態が、流域によって大きく異なるという前提条件のもと、それぞれの形態に適した予測とはどうあるべきかを主題として議論を進めました。

このセッションを構成した4件の発表は右に示した通りです。それぞれ、1)2009年9月のフィリピンマニラにおけるフラッシュフラッドとキネマティックウェーブモデルを用いた洪水解析について、2)2010年8月中国長江における洪水予測とそれを用いた三峡ダムの治水操作について、3)アンサンブルモデルを用いたオーストラリアの洪水予測の実務について、4)2010年パキスタン洪水を対象にした降雨流出氾濫解析と被害地域の推定について発表がありました。

多様な洪水の問題を取り扱ったこの特別セッションには、多くのAPHW参加者が関心を寄せ、60名以上の実務者・研究者が一堂に会して熱心な議論を繰り広げました。

(問い合わせ先/ICHARM 水文チーム: suimon@pwri.go.jp) Information Network

ADB project update

ICHARMでは2009年11月に、アジア開発銀行(ADB)との間で、アジアの水災害軽減に関する地域技術協力連携プロジェクトの協定を締結し、現在主に6つの活動を推進しています。(ICHARM Newsletter No 15 参昭)

以下では、そのうち3つの活動について最新の状況をお知らせします。

インドネシア、ソロ川流域への IFAS 導入プロジェクト

鍋坂誠志研究員、Dinar Istiyanto 専門研究員、川上貴宏交流研究員、小澤剛交流研究員が、2010年12月10~17日に、インドネシア、ソロ川へ行き、早期洪水予警報システムの導入に必要な現地調査と、IFASのトレーニングを行いました。多くの現地技術者が、IFASを用いてソロ川の洪水流出解析を行うことができました。ICHARMは、ソロ川での適切な洪水予警報ができるようにIFAS 導入プロジェクトを進めていきます。

洪水早期警報システムのレビューと将 来に向けての提案

2010年12月12日にダッカでバング ラデシュ水開発局 (BWDB) と共同で 第1回の関係者会議を開催しました。 ワークショップのメインテーマは、バ ングラデシュにおける洪水予警報シス テムの開発における課題の抽出でし た。バングラデシュの洪水予警報に関 する機関から約30名の参加者があり、 会議は、BWDB の A.H.M.Kausher 主任 水文官と、アジア開発銀行の上級コン サルタント竹谷公夫氏による基調講演 で開始されました。このワークショッ プより洪水予警報システムの開発にお ける課題の抽出とその優先順位を最重 要、重要、やや重要の3段階にふるい 分けすることができました。プロジェ クトは現在、バングラデシュの洪水予 警報システムのロードマップの開発段 階に進んでいます。

コミュニティ主導の洪水管理のモデル 実践

ICHARM の ADB プロジェクトの担当 チームは、インドネシアのソロ川流域 で地域災害リスク管理を推進するため の河川流域管理センターとともに共同 調査する地域の選定を行いました。ま た、それぞれの地域におけるコミュニ ティ形成過程の調査も開始しています。

(問い合わせ先/ICHARM 防災チーム: icharm@pwri.go.jp)

Model application of IFAS to Solo River Basin

ICHARM Researcher Seishi Nabesaka, Dinar Istiyanto, Takahiro Kawakami and Go Ozawa visited the Solo River basin in Indonesia on 10-17 December 2010. Recently ICHARM has started an ADB-funded project in this basin to introduce a flood forecasting and early warning system. Their visit was to carry out a field investigation and IFAS training, which are both necessary for the system implementation. A number of local engineers participated in the training and learned



ICHARM engineers explains how to operate IFAS at the Bengawan Solo River Basin Agency of Indonesia's Ministry of Public Works.

to perform flood run-off analysis over the Solo River basin. ICHARM will continue Solo's IFAS project and help local engineers become able to appropriately operate the advanced flood forecasting and early warning system in the near future.

Review and proposals for improvement on the early flood warning system in Bangladesh



Stakeholders workshop on screening the long-list of flood early warning issues in Bangladesh (12 December, 2010)

ICHARM held the First Multi-stakeholder Consultation Workshop jointly with the Bangladesh Water Development Board (BWDB) on 12 December 2010 in Dhaka. The main objective of the workshop was to review long listed issues on early warning system development in Bangladesh. The workshop was attended by about 30 participants from different institutions related to flood early warning in Bangladesh. It started with

the opening remark by chief hydrologist Mr. A. H. M. Kausher of BWDB, followed by the key notes from invited guests including Mr. Kimio Takeya, a senior consultant from ADB.

The workshop successfully screened and categorized the listed issues as very important, important or less-important. The outcome will go through a dependency test and will later be converted into interventions. The project component is now heading to development of a national road map for an early warning system development in Bangladesh.

Demonstration of community-based flood management approaches

A community selection survey was jointly organized with the Centre for River Basin Organizations and Management (CRBOM) for implementation of community-based disaster risk management in the Solo River basin in Indonesia. In addition to the Bojenogoro district in the lower Solo basin, which has already been selected as a project area, a few communities in Desa Semen Pinggir and Desa Kendung Sumber were surveyed as project area candidates. Based on the flood severity and requirements of the Community-based Disaster Risk Management (CBDRM), Balai in Desa Semen Pinggir and Sugihan in Desa Kendung Sumber were finally selected. The project team will now start the community mobilization process with various activities in each selected community.



The flood depth reached about 2.5 meters in 2010 in Bojonegoro.



Rice fields are completely flooded.

(For inquiry, contact the ICHARM Disaster Risk Management Research Team: icharm@pwri.go.jp)

Information Network

ICHARM and UN/ESCAP Co-organizes Workshop on Space Application to Reduce Water-related Disaster Risk in Asia (Bangkok, Thailand, 7-9 December 2010)

ICHARM and UN/ESCAP (United Nations Economic and Social Commission for Asia and the Pacific) co-organized a workshop on satellite application to reduce water-related disaster risk in Asia at the United Nations Conference Centre in Bangkok, Thailand, on 7-9 December 2011.

Over 60 people participated from 12 countries such as Bangladesh, Cambodia, China, Indonesia, Laos, Malaysia, Pakistan, the Philippines, Korea, Vietnam, Thailand, and Japan. Some international organizations also joined the workshop, including ADRC (Asian Disaster Reduction Center), MRC (Mekong River Commission), and our partners for this workshop such as WMO (World Meteorological Organization) and ESCAP/WMO Typhoon Committee.



Workshop participants make a presentation on calculation results.

The workshop was organized as an addition to a satellite application workshop originally planned by ESCAP with the cooperation of JAXA. ICHARM was given opportunity to provide a related workshop to promote the Integrated Flood Analysis System (IFSAS) to Asian countries as a part of an ongoing project which ICHARM has been jointly implementing with ADB.

The objectives of the workshop were to exchange information on space application to water-related disaster risk reduction measures such as flood risk assessment, flood forecast and early warning and evacuation, and also to conduct training on how to use IFAS.



From Day 1 to the first half of Day 2, space application to reduce water-related disaster risk in Asia was outlined by JMA, JAXA, and ESCAP. Each participating country also reported actual disaster response cases utilizing space technology, followed by general discussion on the issue.

From the second half of Day2 to Day3, the participants had a hands-on training on how to

use the IFAS software and perform run-off analysis using data of their own country. Some of them quickly learned even how to calibrate parameters and obtained highly accurate simulation results. The training was very successful in helping many participants understand satellite technology and IFAS as a practical satellite application.

After the joint workshop, the participants were asked to fill in a feedback sheet, and their comments were almost all about IFAS. This confirmed the usefulness of IFAS in flood management and revealed a strong demand for IFAS training. The workshop was a great opportunity for the ICHARM staff, too, to realize a high level of interest in IFAS in Asian countries and the need for providing more training such as this.

For the report and presentation materials of "the Workshop on Space Application to Reduce Water-Related Disaster Risk in Asia", held on 7-9 December 2010 in Bangkok, visit the following wesite; http://www.unescap.org/idd/events/2010-JAXAicharm7-9DEC/

(For inquiry, contact the ICHARM Disaster Risk Management Research Team: icharm@pwri.go.jp)

2010年12月7~9日、バンコクにおいて、アジアにおける水災害リスク軽減のための衛星利用に関するワークショップが、ICHARMと国連アジア太平洋経済社会委員会(UN/ESCAP)により共同開催されました。

参加者は、60名をこえ、参加国は、バングラディシュ、カンボジア、中国、インドネシア、ラオス、マレーシア、パキスタン、フィリピン、韓国、ベトナム、タイ、及び日本の12カ国、参加機関は、アジア防災センター(ADRC)、メコン委員会(MRC)、並びに、本ワークショップの協力機関でもある世界気象機構(WMO)やESCAP/WMO台風委員会など多岐にわたりました。

本ワークショップは、ESCAPが、JAXA の協力のもとに予定していた衛星利用のワークショップに、ICARMがアジア開発銀行(ADB)のプロジェクトの一環として、IFAS の関係諸国への普及活動を兼ねて参加することにより実現したものです。

ワークショップの目的は、洪水リスク評価、洪水予報、及び早期警報、避難など水災害リスク軽減のための衛星技術に関する情報の共有及び、衛星技術を活用したIFASの実践的活用に関するトレーニングの提供でした。

1日目から2日目前半にかけては、アジアにおける水災害リスク軽減のための衛星利用について、気象庁(JMA)、JAXA、及びESCAPによる全体的な説明、及び各国による主に衛星技術を活用した災害対策の実例についての報告があり、それにもとづく議論がありました。

2日目の後半から3日目は、ICHARMによるIFASの実習が行われ、参加者は自国のデータを使って、流出解析を行いました。中には、パラメータの調整までを行い、精度の高い計算結果が得られた参加者も見受けられました。このように、多くの参加者に、衛星技術に関する知識に加えて、その実践的な活用としてのIFAS 研修を効果的に提供することができました。

アンケートによる参加者からの共同ワークショップに関する感想は、そのほとんどが IFAS に関するものでした。これにより、IFAS の洪水管理への有用性、さらには、より多くの機会を作って欲しいなど多くの要望を得ることができ、参加者のIFAS に関する関心の高さとさらなる研修機会の必要性が強く感じられました。

http://www.unescap.org/idd/events/2010-JAXAicharm7-9DEC/

(問い合わせ先/ICHARM 防災チーム: icharm@pwri.go.jp)

Information Network

Governmental Policy-Oriented Discussions in Washington D.C.

(Washington D.C., U.S., 30 November-1 December 2010)

2010年11月30日~12月1日、ワシ ントンにおいて、政府間国際政策討論会 が開催されました。この会議は、米国工 兵隊が主催し、アメリカ連邦危機管理 庁、イギリス環境庁、オランダ水管理局、 欧州連合、国土交通省国土技術政策総合 研究所 (国総研)、ICHARM などが協力 したものです。19 カ国 100 名の専門家 が参加。日本からは、国土交通省河川局 河川計画課舘健一郎課長補佐、国総研河 川研究部藤田光一流域管理研究官、国 総研河川研究部河川研究室服部敦室長、 竹内邦良 ICHARM センター長、加本実 ICHARM 上席研究員が参加しました。

会議では、洪水リスクに関する共通認識 のもと、国際的な洪水リスク管理の理論・ 実践両面に関して議論が行われました。

また、気候変動、環境機能、社会要因な どを認識した上で、各国政府が構造物対 策を含む幅広い洪水リスク管理手法を採 用し、氾濫原を管理しようという最近の 傾向を反映して議論が進むよう工夫され ていました。会議を通じて、参加者は洪 水リスク管理手法の開発・実施状況、他 組織の国際的活動やそれがもたらした恩 恵などに関し情報交換を行い、パート ナーシップの推進が相互利益をもたらす 分野を見出すなど、非常に貴重な機会を 持つことができました。

(問い合わせ先/ICHARM: icharm@ pwri.go.jp)

The Governmental Policy-Oriented Discussions was held in Washington D.C. from 30 November to 1 December 2010. The conference was organized by U.S. Army Corps of Engineers in cooperation with Federal Emergency Management Agency of the United States (FEMA), Environment Agency (U.K.), Rijkswaterstaat (Bureau of Water Management in the Netherlands), EU, MLIT Ministry of Land, Infrastructure, Transport Commemorative coins are presented to the contributors to the Conference by the and Tourism (MLIT) and ICHARM. It drew about 100



U.S.Army Corps of Engineers

experts from 19 countries including five from Japan, who were Mr. Kenichiro Tachi, Dr. Koichi Fujita and Dr. Atsushi Hattori from MLIT and Dr. Kuniyoshi Takeuchi and Minoru Kamoto from ICHARM.

The conference shared the common understanding of flood risk and focused on both theoretical and practical aspects of international flood risk management approaches. The discussions were planned to reflect the current trend that governments are moving to broader flood risk management approaches that encompass structural measures and managing floodplain development while recognizing climate change, environmental functions, and social factors. It was a great opportunity for event participants to share their progress in developing and implementing flood risk management approaches, learn what others have accomplished internationally and identify the strengths of their achievements, and highlight areas where partnerships can provide mutual advantage.

For more details, see at: http://www.nfrmp.us/IFRMA/

(For inquiry, contact the ICHARM: icharm@pwri.go.jp)

Capacity Development

JFY 2010 "Local Emergency Operation Plan with Flood Hazard Map" starts 2nd year

2011年1月12日、土木研究所講堂 にて、平成22年度地域別研修「洪水 ハザードマップを活用した地域防災計 画」コースの開講式が行われました。 この研修は、洪水関連災害対策を所管 する組織を対象に、洪水に対する抵抗 力を高めること目的として、3年間に わたって実施するもので、本年はその 2年目にあたります。参加者は、ADB の資金による2名を含め、ブータン、 インドネシア、ラオス、ミャンマー、 ネパール、パキスタン、スリランカ、 タジキスタン、タイ、バングラデシュ からの計 12 名です。本研修は 2 月 16 日まで行われ、研修生たちは、講義、 演習、現地見学などを通して、日本の 地域防災について学び、最後に今後の 活動計画を記したアクションプランを 作成する予定です。

(問い合わせ先/ICHARM 国際普及 チーム:icharm@pwri.go.jp)



The opening ceremony of JICA training course "Local Emergency Operation Plan with Flood Hazard Map" was held on 12 January at PWRI. This training course is designed especially for management organizations to enhance organizational resilience against floods. This is the second of the three years. The 12 people are participating from Bhutan,

Indonesia, Lao PDR, Myanmar, Nepal, Pakistan, Tajikistan, Thailand and Bangladesh including ADB fund two participants. The course will be conducted for four weeks till 16 February, during which participants will study on local disaster prevention practiced in Japan through lectures, exercise and field trips and finally make an action plan for future activities in flood management for their own local areas.

(For inquiry, contact the ICHARM International Technical Exchange Team: training.icharm@pwri.go.jp)

Capacity Development

Short course "Early warning system for flood disaster mitigation" conducted (Hanoi, Vietnam, 6-7 November 2010)

ICHARM conducted a short training course, "Early warning system for flood disaster mitigation," on 6-7 November at the Institute of Meteorology and Hydrology in Hanoi, Vietnam, with the cooperation of UNESCO Jakarta Office. This course was planned to follow up the activities of the ex-trainees of ICHARM's training course and to further enhance their technical abilities in flood management such as flood forecasting and early warning. The participants were all engineers from Lao PDR, Mongolia, Myanmar, Thailand, Malaysia, Vietnam and Japan, including nine invited ex-trainees and 28 researchers of Vietnam's Institute of Meteorology and Hydrology.

The first day included two lectures: "Early warning system for flood disaster mitigation" and "Outline of IFAS". After that, hands-on training on how to operate the IFAS system was given.

On the second day, after finishing up the rest of the hands-on training, trainees delivered presentations on publication, dissemination and application of flood hazard maps. They also discussed effective ways to distribute hazard maps in groups.

The course was considered very productive in that the participants experienced the latest technology though the hands-on training and were given an opportunity to think about the purposes and effective ways to distribute hazard maps through PCM-based discussions.





▲ Group discussion

◀ Participants and staff

(For inquiry, contact the ICHARM International Technical Exchange Team :training.icharm@pwri.go.jp)

2010 年 11 月 6~7 日、ベトナム、ハノイにある Institute of Meteorology and Hydrology で、UNESCO ジャカルタ事務所との連携のもと、Short course "Early warning system for flood disaster mitigation" を開催しました。本コースは、ICHARM の過去の研修生の活動をフォローアップするとともに、洪水予警報システムなどの洪水管理について参加者の専門能力を強化することを目的として開催したものであり、9名の招聘研修生のほかに Institute of Meteorology and Hydrology の研究者 28名が参加しました。

1日目は、"Early warning system for flood disaster mitigation"、"Outline of IFAS" の各講義を行い、その後 IFAS 演習を行いました。

2 日目は、まず IFAS 演習の続きを行い、その後各研修生によるプレゼンテーション "Publication, dissemination and application of flood hazard map" や、ハザードマップの配布についてグループディスカッションを行いました。

参加者は、IFAS 演習を通して最先端の 技術を経験したほか、PCM 手法を活用 したグループディスカッションを通し てハザードマップの公表の意義、方法 等について考えることができたなど、 非常に有意義なコースとなりました。

(問い合わせ先/ICHARM 国際普及 チーム:icharm@pwri.go.jp)

IFAS FAQ IFAS

2. Project manager

The IFAS project manager is designed to work properly when the language and area of your computer's OS are set to English (U.S.). Make sure that those settings are set rightly when using IFAS. If they are set to Thai, for example, data names and calculation periods will not show properly because they will be determined based on the Buddhist calendar instead of the Western calendar. Also, if they are set to Indonesian, the system will recognize only the 'degree' value of latitudes and longitudes while leaving minutes and seconds unrecognized due to the language's use of comma (,), not dot (.) for decimal point. IFAS is yet incapable of accommodating those differences. So, for now, we advise all users to check the language and area setting of your computer in advance of starting the IFAS program.

How to set the language and area of your computer

<u>Windows XP:</u> "start" - "control panel" - "area and language option" Choose "English (U.S.)" from the area option tab.

<u>Windows Vista Ultimate:</u> "windows" - "control panel" - "area and language option" Choose "English (U.S.)" from the current format

IFAS system can be downloaded from the following site freely: http://www.icharm.pwri.go.jp/research/ifas/index.html

(For inquiry, contact the ICHARM Hydrologic Engineering Research Team :suimon@pwri.go.jp)



Buddhist calendar dates show up when the OS is set to the Thai language and area.



Only 'degree' values show up when the OS is set to Indonesian because the Indonesian setting uses a comma, not a dot, for decimal point.

Other Topics

Conference on Globale Water Resources Management to be held

Scotland, U.K., 20-24 June 2011

The Centre for Water Law, Policy and Science under the auspices of UNESCO will hold an international conference entitled "National Water Law: Managing Global Water Resources: Symposium and Workshop 2011" on 20-24 June 2011 on the main campus of the University of Dundee in Scotland, U.K.

Key topics to be addressed include:

- What is the role of comparative national water law?
- What is the role of law in integrated water resource management?
- How do national legal frameworks influence water allocation and water quality?
- What special rules exist for the management of groundwater?
- How does the Water Framework Directive take European Union water law forward?

You can find more detailed information at: http://www.dundee.ac.uk/water/symposium

(For inquiry, contact the HP-HELP Centre for Water law, Policy and Science under the auspices of UNESCO, University of Dundee, U.K.: water@dundee.ac.uk)

New ICHARM Member

黄 光偉

2011 年 1 月 17 日から、ICHARM に加わりました。今まで、東京大学、金沢大学、新潟大学で准教授として水関係の教育・研究を従事してきました。今までの経験を生かし、国際教育プログラムおよび研修プログラムに携わります。

Huang Guangwei



Dr. Huang Guangwei joined ICHARM on 17 January 2011. His main mission is to strengthen the educational program jointly established by ICHRAM and GRIPS and other training programs as well.

Before coming to ICHARM, he worked as Associate Professor at the University of Tokyo. His research objective is to develop a disaster-resilient society without compromising environmental integrity.

Coming Events ·····

革新プロジェクト 平成 22 年度研究 成果報告会

日時: 2011 年 2 月 21 日 9:30~17:00 場所: 一橋記念講堂

第3回気候変動予測に関する国際ワークショップ モデリング、相互比較、 影響評価

日時: 2011 年 3 月 9 ~ 11 日 場所: つくば国際会議場エポカル

第 5 回洪水管理国際会議(ICFM5) 日時: 2011 年 9 月 27 ~ 29 日

場所:つくば国際会議場エポカル

♦ The Kakushin Research Report Conference in 2010

Date & Time: 21 February 2011, 9:30-17:00 Venue: Hitotsubashi Memorial Hall, Tokyo, Japan

URL: http://www.jamstec.go.jp/kakushin21/jp/meeting/2010/index.html

◆ 3rd International Workshop on Global Change Projection: Modeling, Intercomparison, and Impact Assessment

Date: 9-11 March 2011

Venue: EPOCHAL TSUKUBA, Tsukuba, Japan,

URL: http://www.prime-pco.com/kakushin2011/index.html

♦ 5th International Conference on Flood Management (ICFM5)

Date: 27-29 September 2011

Venue: EPOCHAL TSUKUBA, Tsukuba, Japan,

URL: http://www.ifi-home.info/icfm-icharm/icfm5.html

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メーリングリストへ登録ご希望の方/今後の配信を希望されない方は下記アドレスまでご一報ください。ご意見・ご感想もお待ちしています。 〒 305-8516 つくば市南原 1-6 (独)土木研究所 ICHARM(アイチャーム)

Tel: 029-879-6809 Fax: 029-879-6709 Email: icharm@pwri.go.jp URL: http://www.icharm.pwri.go.jp