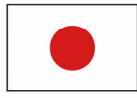




International
Hydrological
Programme



Japan
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MINISTRY OF EDUCATION,
CULTURE, SPORTS,
SCIENCE AND TECHNOLOGY-JAPAN

International Hydrological Programme

Risk Management of Water-related Disasters under Changing Climate

The Twenty-fifth IHP Training Course (30 November - 11 December, 2015, Kyoto, Japan)

Water Resources Research Center, Disaster Prevention Research Institute, Kyoto University

Hydropheric Atmospheric Research Center (HyARC), Nagoya University

Supported by

Disaster Prevention Research Institute (DPRI), Kyoto University



Outline

A two-week training course on risk management of water-related disasters under changing climate is programmed for participants from Asian-Pacific regions as a part of Japanese contribution to the International Hydrological Program (IHP). The course composed of a series of lectures, practice sessions, and technical visits to the Yodo River Basin will be held mainly at the Disaster Prevention Research Institute (DPRI), Kyoto University during the two weeks from 30 November to 11 December 2015.

Objectives

The number of human losses and economic damages linked to human practices has been exacerbated by water-related extreme events. Water-related risk might further increase for a number of reasons. The probability of extreme events which cause high impacts to society is expected to increase because of human activities and/or as a result of climate variability and change. On the other hand, increasing population and economic growth lead to intensive urbanization, often in flood prone areas. Frequent disaster will prevent from developing or exhaust society. Poor water governance coupled with lack of adequate emergency management institutions and infrastructures reduces society's capacity to cope with extreme events and therefore increases the risk to life and property. In order to realize sustainable development, appropriate risk management of water-related disasters is indispensable.

In light of the Focal Area 1.1 “*Risk management as adaptation to global change*” under the Theme 1 “*Water related disasters under hydrological change*” of the IHP-VIII, the 25th IHP training course is focused on three major objectives: (1) to acquire the latest knowledge on hydrological assessment under changing climate at river basin scale, (2) to make practice on methodologies for assessing the impact of climate change on hydrological processes, and (3) to discuss alternatives of risk management at river basin scale.

Dates

30 November to 11 December, 2015

Venue

Disaster Prevention Research Institute, Kyoto University, Uji, Japan

Program (as of 9th July, 2015)

The latest version of the program will be available on our website at http://wrrc.dpri.kyoto-u.ac.jp/index_eng.html.

30 Nov. (Mon)	Exercise 1	Self-introduction and country report on risk management of water-related disasters	All participants
	Keynote 1	Recent trends in flood risk management under changing climate J. Cullman (International Centre on Water Resources and Global Change)	
	Keynote 2	Introduction of UNESCO-IHP perspectives for flood risk management S. Khan (Regional Science Bureau for Asia and the Pacific, UNESCO)	
1 Dec. (Tue)	Keynote 3	Management of water-related disasters and sustainability K. Takeuchi (International Centre for Water Hazard and Risk Management)	
	Keynote 4	Resilience and flood management strategies P. Gourbesville (Polytech Nice-Sophia, University of Nice Sophia-Antipolis)	
	Exercise 2	Setting up of PCs and softwares	T. Hamaguchi (DPRI, Kyoto University)
2 Dec. (Wed)	Lecture 1	Projected future meteorological environment	E. Nakakita (DPRI, Kyoto University)
	Lecture 2	Fundamentals of basin-scale hydrological analysis Y. Tachikawa (Graduate School of Engineering, Kyoto University)	
3 Dec. (Thu)	Lecture 3	Fundamentals in rainfall-runoff-inundation modelling	T. Sayama (DPRI, Kyoto University)
	Lecture 4	Data Integration and Analysis System (DIAS) for water-related disasters A. Kawasaki (Graduate School of Engineering, The University of Tokyo)	
	Lecture 5	Fundamentals in flood frequency analysis	S. Tanaka (DPRI, Kyoto University)
4 Dec. (Fri)	Exercise 3	Data analysis of GCM and historical data	K. Tanaka (DPRI, Kyoto University)
	Lecture 6	Efforts to develop disaster statistics in the world Y. Ono (International Research Institute of Disaster Science, Tohoku University)	
	Exercise 4	Flood frequency analysis	S. Tanaka (DPRI, Kyoto University)
5 Dec. (Sat)		Technical visits to the Lake Biwa and the Yodo River	
6 Dec. (Sun)		Technical visits and cultural exchange with students at the Katsura river	
7 Dec. (Mon)	Exercise 5	Rainfall-runoff-inundation modelling	T. Sayama (DPRI, Kyoto University)
	Lecture 7	Fundamentals in river basin modelling	Y. Sato (Faculty of Agriculture, Ehime University)
8 Dec. (Tue)	Lecture 8	Fundamentals in optimum operation of reservoir systems	T. Hori (DPRI, Kyoto University)
	Exercise 6	Optimization of reservoir operation	D. Nohara (DPRI, Kyoto University)
9 Dec. (Wed)		Field workshop at the Katsura River and Hiyoshi Dam	D. Nohara (DPRI, Kyoto University)
10 Dec. (Thu)	Lecture 9	Sustainable management of water resources in arid areas	S. Kantoush (DPRI, Kyoto University)
	Lecture 10	Flood risk assessment toward flood risk management	H. Tatano (DPRI, Kyoto University)
	Lecture 11	Integrated sediment and floating debris management	T. Sumi (DPRI, Kyoto University)
11 Dec. (Fri)		Report presentation by each participant and completion ceremony	

Downloading the Textbook for Participants from the Net

The textbook of “the 25th IHP Training Course”, which is converted in PDF style, will be prepared and be put on the IHP Nagoya/Kyoto forum website of “www.ihpnagoyaforum.org”. The participants are requested to download the PDF file from the website in advance as a preparation to the lectures of the training course. The textbook will include one page abstracts and presentation materials of the lectures.

Web Broadcasting the Lectures

The lectures except exercises and technical visits will be webcasted to some universities in Asia via the UNESCO Office Jakarta and with other technology through DPRI facilities. The slide materials will be distributed to the participants from the Net in advance. Some materials may be excluded from web broadcasting when copyrights apply.

Contact

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