

# ***Future cooperation for better water of life***

**ASEAN Academic Networking in Water&Disaster Management  
and Climate Change among ASEAN countries**

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**Kwansue Jung**

***ksjung@cnu.ac.kr***

**Chungnam National University**



# OUTLINE

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- I** Korea Water Resources Association (KWRA).....
- II** International Water Resources Research Institute (IWRRI).....
- III** International Commission on Large Dams (ICOLD-APG).....
- IV** Challenge and future cooperation.....





# Korea Water Resources Association (KWRA)





## Korea Water Resources Association

KWRA is open to all. Anyone interested in knowing more about Korea's water resources, in need of technical information, or wanting to participate in academic activities is welcome to join. KWRA will endeavor to become a steadfast and exemplary association that is alive and buzzing.



KOREA WATER  
RESOURCES ASSOCIATION



## Korea Water Resources Association (KWRA)

is a non-profit organization with more than 2,000 members from practicing hydro engineers



**KWRA** was founded in 1967 to contribute to the academic developments and public welfares regarding the earth waters.



**Interested areas of KWRA** include

- the **securement** of abundant water resources to mitigate water scarcity
- the implementation of **comprehensive measures** for water management
- the **restoration** of aquatic ecosystems.

Techonology

+

Research  
Experience

+

Knowledge

+

Work  
Experience



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KOREA WATER  
RESOURCES ASSOCIATION



## MISSION

To contribute academic development regarding the earth water and to public welfare



## OPERATION FIELDS

- Guide researches and educations.
- Promote symposia, workshops, lectures, field trips and inspection tours for special issues.
- Host and participate in academy meetings home and abroad.
- Grant reward and scholarship



## PUBLISHING

- Magazine of KWRA 「Water for Future」: monthly
- Journal of KWRA : monthly
- Proceeding of annual conference
- Books on related water resources engineering
- Research papers
- Investigation reports



## ORGANIZE EVENTS

- KWRA annual conferences
- Water engineering Workshop
- Committee's Annual Report Presentation
- IHP(International Hydrological Program) Research
- Symposia and seminars

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KOREA WATER  
RESOURCES ASSOCIATION

### The major activities of KWRA are follows;



**Research and investigation** on water resources and hydrological technology



**Collection and communication** of the data, information and knowledge on water resources and hydrological technology



**Education and enlightenment** on water resources



**Development of hydrological technology**



**Participation in international organizations** related to water issues



**Technological exchange and cooperation** with external and abroad organization

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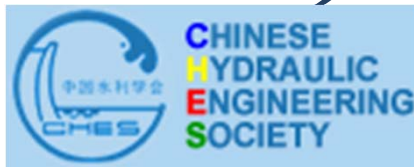
KOREA WATER  
RESOURCES ASSOCIATION



JAPAN SOCIETY OF HYDROLOGY AND WATER RESOURCES

水文・水資源学会

Japan Society of Hydrology and Water Resources (JSHWR)



Chinese Hydraulic Engineering Society (CHES)



IHP 국제수문학프로그램  
International Hydrological Program

International Hydrological Program (IHP)



World Water Council



International  
Cooperation



World Meteorological Organization (WMO)



AWRA  
Community, Conversation, Connections

America Water Resources Association (AWRA)



New Zealand Hydrological Society (NZHS)



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KOREA WATER  
RESOURCES ASSOCIATION



# KWRA website

<http://www.kwra.or.kr/eng/main/>



KOREA WATER  
RESOURCES ASSOCIATION

▣ KOREAN ▣ CONTACT US

About KWRA | Membership | Committee | Publication | Water Resources in Korea | Link

Welcome to

**Korea Water Resources Association**

### KWRA Magazine

Period of publication  
: Jan, Mar, May, Jul, Aug, Nov  
Notice on contribution of papers  
: Method of contribution form for  
contribution

### Membership application

Application form with English  
specifications, downloadable,  
or Internet application module.

Submission of application form.

### Water Engineering Research



## Welcome to the KWRA homepage

Korea Water Resources Association (KWRA) is a non-profit organization with more than 2,000 members from practicing hydro engineers as well as academicians in Korea.

KWRA was founded in 1967 to contribute to the academic developments and public welfares regarding the earth waters. Its mission is to explore various countermeasures for a sustainable balance between structural and non-structural approaches toward the efficient water resources managements in Korea.

Interested areas of KWRA include the securement of abundant water resources to mitigate water scarcity, the implementation of comprehensive measures for water management and the restoration of aquatic ecosystems.

KWRA expects to address various approaches and methods used for the prediction and management of water resources, to exchange advanced experiences in the areas of integrated watershed managements and to share new innovative developments for the scientific managements of water resources.

As a member of World Water Council and IHP (International

### Water Resources in Korea



- ▣ Basic features of water resources in Korea.
- ▣ Progress of water resources planning and development.
- ▣ A Framework for improving water resources management.

| + MORE

CONTACT US



# International Water Resources Research Institute (IWRRI)





# International Water Resources Research Institute



Where we work: Chungnam National University, Korea



**Established :** 1952  
**Key management policy :** 3S  
*Smart + Stable + Sustainable*  
**Academic program :**  
- Undergraduate  
- Graduate  
- Specialized Graduate school



## IWRRI Overview

**Established :** April 2011

**Personnel :** 25 researchers

**Location :**

Room 131-2, Engineering building(E2),  
Chungnam National University, Daejeon,  
South Korea





# Vision and Goals

## Excellent Water Resources Services Provider

- Serving as a **center of experts** in the water resources field.
- **Solving water resource problems**, and providing better education, research, planning and community services.
- **Assisting public and private interests** in the context of conservation, development , and use of water resources.

## Professional Training and collaboration



Education



Research



Planning



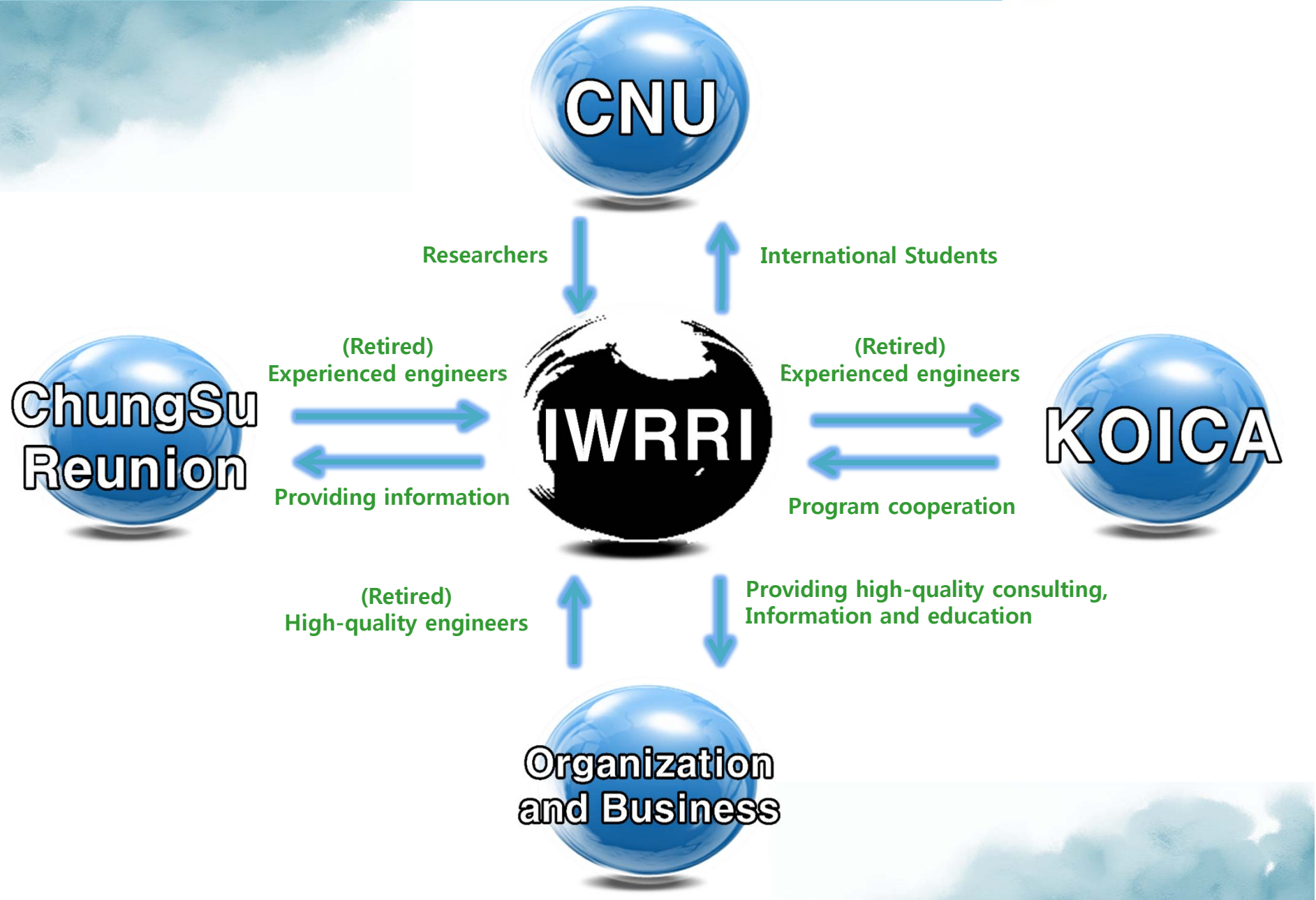
Community Service

# Roles of IWRRI

International Water Resources Research Institute



국제수자원연구소  
Internatioanl Water Resources Research Institute



# Organization of IWRRRI

International Water Resources Research Institute



국제수자원연구소  
International Water Resources Research Institute

**Director**

**Professor Kwansue Jung**  
Chungnam National University

**Steering  
Committee**

**Consultative  
Committee**

**Audit**

**Vice-Director**



**Assistance Professor Minwoo Son**  
Chungnam National University

**Research  
Division**

**Management  
Division**

**International  
Relationship  
Division**

**Public  
Relationship  
Division**



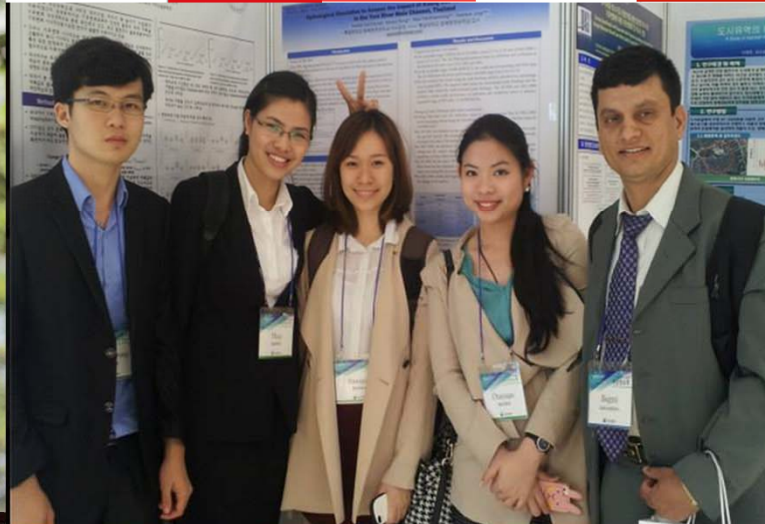
# Students and Researchers

International Water Resources Research Institute



국제수자원연구소  
International Water Resources Research Institute

10 International and 15 Korean researchers



Endless friendship





# International Collaboration

International Water Resources Research Institute



국제수자원연구소  
International Water Resources Research Institute



More than 14 world leading institutes from 12 countries



# Our highlighted works

International Water Resources Research Institute



국제수자원연구소  
International Water Resources Research Institute







## **International Commission On Large Dam (ICOLD-Asia Pacific Group)**

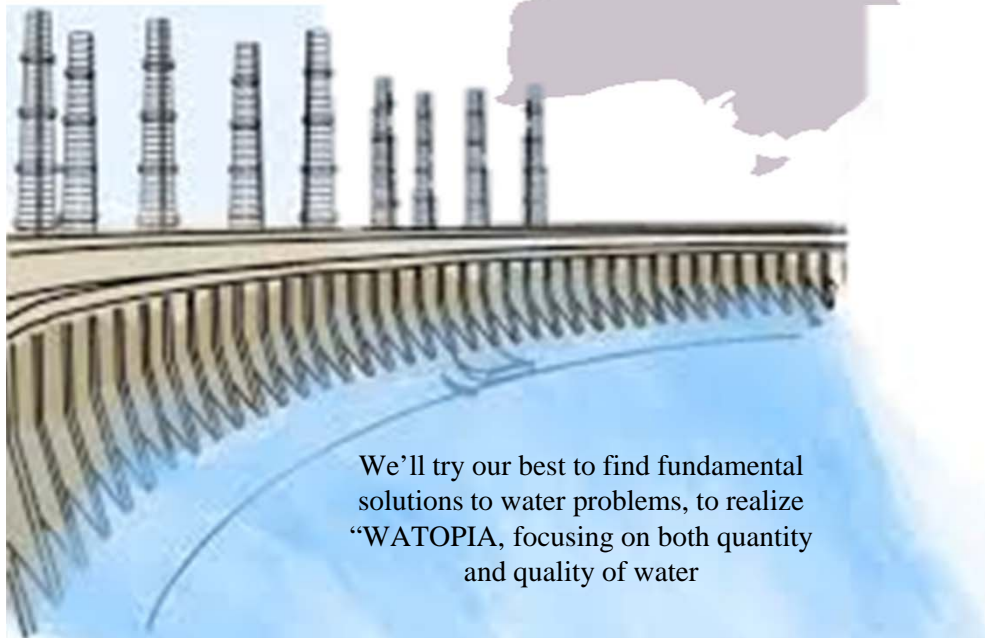
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**International Commission On Large Dams (ICOLD)**  
www.icold-cigb.org

# Asian Regional Club (ICOLD-APG)



We'll try our best to find fundamental solutions to water problems, to realize "WATOPIA, focusing on both quantity and quality of water

## Objectives

- Encouraging **cooperation and exchanging information, experience and opinion** concerning dam related subjects
- **Activating the Asia-Pacific Working Groups**, Creating agendas on dams and related issues

**YOUNG ENGINEERS FORUM**



- Provide **opportunities for young engineers**
- **Encourage and mentor the younger generation**

## KNCOLD

Pursue **eco-friendly water policies and new technologies**; a paradigm shift towards a new water policy of environmentally sound and **sustainable development, and an integrated management of water resources.**

<http://www.kncold.or.kr/eng/>





**International Commission On Large Dams (ICOLD)**  
www.icold-cigb.org

**Asian Regional Club  
(ICOLD-APG)**

## Active Activities

### 7<sup>th</sup> World Water Forum



**7<sup>th</sup> World Water Forum 2015**  
Daegu & Gyeongbuk, Rep. of Korea

**Date:** April 12-17, 2015

**Venue:** Daegu, Korea

**Theme:** Adoptable Managing Strategies for  
Aging of Water Infrastructures



### East Asian Area Dam Conference (EADC)

#### ➔ 8<sup>th</sup> East Asian Area Dam Conference (EADC)

**Date:** October 20-23, 2014

**Theme:** Rehabilitation of Aging dams

**Revised Agreement of the EADC:**

- o The 9<sup>th</sup> EADC host: Japan in 2016
- o **Expansion of hosting countries to the East Asian areas** including Korea, Japan and China
- ※ Korea, China, Japan and Mongolia, Philippines, Malaysia, East Timor, Indonesia, Brunei, Singapore, Cambodia, Laos, Myanmar (Burma), Thailand, and Vietnam



*Mobilizes creativity,  
innovation, and know-how  
around water*





## Objective of Hydro-Asia

To promote, in a **global Asian vision**, the key concepts, methodologies, tools and good practices which are essential for a sustainable water management.

## HydroAsia 2014

**Objectives:** Providing measures to resolve water issues in relation to climate change, the recent global issue, and the opportunity to share scientific techniques and knowledge regarding water control  
**Date :** July 21 – 26, 2014  
**Venue:** K-water Academy



Hydraulics  
& Hydrology

Water  
Quality

Water  
Policy





# **IV Challenge and future cooperation...**



# Challenge and future cooperation

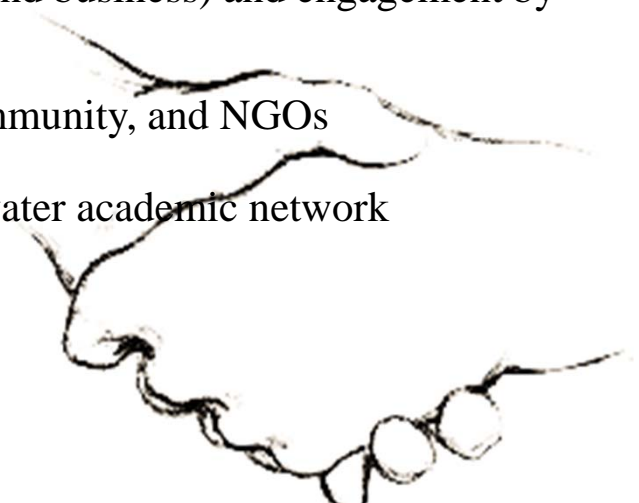


## Active IWRM group for water security in this region

- Most of Asian countries have a long history of managing water in order to overcome water resources challenges. However, demand for water is increasing as populations and economies grow and natural disasters such as flood and drought is getting bigger and deeper due to climate change, so **IWRM** could be applied in order to increase water security in this region.
- **Hydrologic and hydraulic modeling group, Ground observation and monitoring group, Smart water grid group**

## Set up academic network with ASEAN and outside ASEAN

- ~ Exchange personnel, basic data, research result, and transfer knowledge among institutes
- ~ Innovations through international partnerships (include industry and business) and engagement by starting collaborative projects
- ~ Launch program to encourage relationship between engineer, community, and NGOs
- ~ Establish action group combining diverse international groups of water academic network





thank you!



국제수자원연구소  
Internatioanl Water Resources Research Institute

