



SEPTEMBER 14 - 18, 2009  
UNESCO-IHE  
DELFT, THE NETHERLANDS



3<sup>rd</sup> SHORT COURSE ON

# WORLD HISTORY OF WATER MANAGEMENT

UNESCO-IHE  
Institute for Water Education



# 'One who doesn't know the history is unable to plan the future'

*An old Chinese proverb*

Aerial photograph of the Kinderdijk area (The Netherlands) with windmills (on the World Heritage List of UNESCO) draining the excess water from the Alblasserwaard polders – situated below sea-level

**The 21st Century is witnessing the emergence of many approaches to the management of water resources. This makes it necessary to reflect upon the long-term viability of some of the approaches advocated. Although many developments may appear novel, they are often grounded in historical antecedents, have historical parallels, and are cast within scientific, social, cultural and intellectual traditions of various historical depths.**

Water management has a long history, going back to the attempts in prehistoric times in response to seasonal changes in water availability. Water management was crucial during the transition from hunting-gathering to farming, and became yet more important with the emergence of cities, industrial towns, and administrative centres. Water management has never solely been a matter of technical intervention. It is embedded within a great diversity of cultural, social and political arrangements. Water management was important to ensure water supply to the places where water was needed when it was needed, as well as getting rid of excess water or polluted water. Water management was involved in protecting fields, cities and sacred places, as much as being involved in catering to domestic, agricultural, industrial and cultural needs.

Collecting and writing down the history of different kinds of water management and flood protection activities in various ecological settings and river basins of the world and recording good and bad experiences in the different domains of water management is essential for a proper assessment of our current endeavours. Being acquainted with a variety of practices and reflecting upon their consequences can be very useful for future planning and strategic thinking. It will also help us in developing a vision to inspire our current and future activities.

History has often been the domain of specialized historians, but water history touches upon many technical and specialised fields. Accordingly, historical case studies can be approached from different points of view by experts and scholars from different disciplines. Working together, engineers, anthropologists, sociologists, psychologists, and philosophers, among others, can illuminate the past from different directions bringing out details and aspects that otherwise would escape someone from a different background.

In addition to acquiring an understanding of scientific discoveries and technological innovations, it is equally important to shed light on the social and cultural matrix of technical knowledge – namely the relation between a certain type of technology and the paradigm on which a civilisation is based, or the way a certain population considers its relation with nature and natural resources. It is also of paramount importance to begin to appreciate the cultural, legal and ethical aspects of water management within communities, between neighbouring communities, and among countries that share the same river basin or groundwater aquifer, from a more comprehensive perspective.

A historical approach is thus likely not only to inform us of the range of possibilities in water management, but also in developing norms and institutions, as well as paradigms of water management for sustainable development that take into account ecological parameters, cultural considerations, technical aptitudes and potentialities.

## **BACKGROUND**

World History of Water Management is a fascinating subject, which is of critical importance for all water experts of hydraulic engineering, water management and environmental studies. This subject has recently benefited from the efforts by The International Water History Association (IWHA) and other international professional associations, such as The International Commission on Irrigation and Drainage (ICID). The contributions from IWHA presented in five international meetings have attracted the interest of a broad spectrum of experts from hydrologists to art historians. The activities of IWHA are supported, in part, by UNESCO's International Hydrological Programme (IHP), which conducts various projects related to water history, cultural diversity and education, and is planning to publish a seven volume reference series on the 'History of Water and Civilization' (HWC).

The 5-day short course was offered for the first time in September 2007, drawing upon historical experiences from different parts of the world and all continents, and experts from IWHA – many of them involved in the UNESCO HWC project, – within the framework of cooperation among the International Water History Association, UNESCO-IHP, and UNESCO-IHE.

## OBJECTIVES

The course aims at providing a comprehensive overview of archaeological and historical developments in water management including water harvesting, water supply, transportation, delivery, treatment, hydraulic engineering and allocation (with contributions including the physical sciences, technology, ecology, engineering, organisation, politics, law and governance) in different parts of the world and various cultural contexts; developing an appreciation of the role of cultural dynamics involved in managing water resources, especially at times of perceived water scarcity; and comprehending the historical antecedents of our current paradigm of water management and what can be learned from historical case studies on the basis of the knowledge and experience of several scholars from different countries and from the exchange of experiences to be generated between the participants of the course and the experts.

## PARTICIPANT PROFILE

Participants are invited from the different involved disciplines in water management and flood protection, for example staff of the ministries in charge of water management, of water-boards, of universities and colleges, of research institutes, of consultants and contractors and of agencies. The course will be held in English.

## FEE AND REGISTRATION

The tuition fee for the short course is € 750. For members of the International Water History Association 50% discount, the fee is € 375. This amount does not include (hotel) accommodation. UNESCO-IHE student hostel accommodation might be available. Students can obtain a reduction upon request. The course can be accredited according to the standards of the European Credit Transfer System.

For further information and registration, please fill in the registration form or contact:

### Mrs. Claudia Schutter-Brakel

Admission Officer

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T ++31 (0)15-2151720,

or

### Mr. László G. Hayde, PhD, MSc

Course Coordinator

E l.hayde@unesco-ihe.org

T ++31 (0)15 2151820.

## PRELIMINARY PROGRAMME

### DAY 1: SEPTEMBER 14, 2009

- Welcome (*Bart Schultz, PhD, Professor of Land and Water Development UNESCO-IHE, Fekri Hassan, PhD, Professor of Archaeology, Former President IWHA*)
  - Welcome by UNESCO-IHP
  - Introduction (*László G. Hayde, PhD, Senior lecturer & course coordinator, UNESCO-IHE*)
- 1 A Historical Overview of the Cultural Dynamics of Water Management (*Fekri Hassan*)
  - 2 Traditional Water Harvesting Systems (*Fekri Hassan/Semsar Yazdi, Iran*)
  - 3 History of Water Politics and Food Production (*Thierry D. Ruf, IRD, France*)
  - 4 History of Water Management and Land Reclamation in the Netherlands (*Bart Schultz*)

### DAY 2: SEPTEMBER 15, 2009

- 5 Ancient Irrigation Societies. The Nile: a Case Study (*Fekri Hassan*)
- 6 History of Water Management in Urban Contexts (*Graciela Schneier-Madanes, CNRS, France*)
- 7 A Historical Overview of Water Sciences and Technologies (*Maurits W. Ertsen, TU Delft*)
- 8 Hydraulic Structures: a Historical Overview; Historical Dams (*László G. Hayde*)
- 9 Early Hydraulic Systems: a Case Study (*László G. Hayde*)
- 10 Water Politics and Food Production: a Case Study (*Thierry D. Ruf, IRD, France*)

### DAY 3: SEPTEMBER 16, 2009

Field visit to sites and structures of water management with historical background in the Netherlands

### DAY 4: SEPTEMBER 17, 2009

- 11 Water, Cultural Politics and Indigenous Water Rights (*Rutgerd Boelens, Wageningen University*)
- 12 Cultural Practices and Technologies that Affect Water Management (*Irene Klaver, University of North Texas, USA*)
- 13 Water and the City: a Case Study (*Graciela Schneier-Madanes, CNRS France*)
- 14 Water Governance and Policies (*Robert Várady, President IWHA, University of Arizona, USA*)
- 15 The Modern History of Hydraulic Management of Rivers (*Maurits W. Ertsen, TU Delft*)

### DAY 5: SEPTEMBER 18, 2009

- 16 Water and Health (*Claudine Brelet, anthropologist, France*)
- 17 Water and Art (*Dorothy J. Zeisler-Vralsted, Eastern Washington University, USA*)
- 18 History of Water and Civilization: the UNESCO Project (*Alexander Otte, UNESCO-IHP*)
- 19 Water Ethics and Religion: a Historical Perspective (*Fekri Hassan*)

The programme is subject to change, based on the availability of lecturers.

# APPLICATION FORM SHORT COURSE

UNESCO-IHE, PO BOX 3015, 2601 DA DELFT, THE NETHERLANDS

1 **Short Course on** \_\_\_\_\_

Date \_\_\_\_\_

2 **Full name** \_\_\_\_\_

male / female

Official name (as mentioned in your passport) \_\_\_\_\_

Date, place and country of birth \_\_\_\_\_

Present citizenship \_\_\_\_\_

Postal address \_\_\_\_\_

Phone \_\_\_\_\_

Fax \_\_\_\_\_

E-mail \_\_\_\_\_

Profession \_\_\_\_\_

3 **College and / or university education**

Name and place \_\_\_\_\_

From \_\_\_\_\_

to \_\_\_\_\_

Degree \_\_\_\_\_

Main studies \_\_\_\_\_

Thesis or major \_\_\_\_\_

Name and place \_\_\_\_\_

From \_\_\_\_\_

to \_\_\_\_\_

Degree \_\_\_\_\_

Main studies \_\_\_\_\_

Thesis or major \_\_\_\_\_

Professional publications (use additional sheet if necessary) \_\_\_\_\_

4 **English language proficiency** (fair F, good G, excellent E) - circle as appropriate

read F G E

write F G E

speak F G E

understand F G E

Was English the language of instruction in secondary school / university? yes / no

If not, please attach the result of your English language test (TOEFL/IELTS)

5 **Present professional employment** (use additional sheet if necessary)

Job title \_\_\_\_\_

from \_\_\_\_\_

Employer, name \_\_\_\_\_

Postal address \_\_\_\_\_

Phone \_\_\_\_\_

Fax \_\_\_\_\_

E-mail \_\_\_\_\_

Responsibilities \_\_\_\_\_

Categories: government / non-government / private / semi-government / parastatal (circle the one applicable)

*In case you are involved in the execution of a specific project:*

Project name \_\_\_\_\_

Location \_\_\_\_\_

Executing agency \_\_\_\_\_

Financing provided by \_\_\_\_\_

6 Short description of previous posts during the last 7 years

From \_\_\_\_\_ to \_\_\_\_\_ Job title \_\_\_\_\_

Duties \_\_\_\_\_

Employer, name \_\_\_\_\_

Phone \_\_\_\_\_ E-mail \_\_\_\_\_

From \_\_\_\_\_ to \_\_\_\_\_ Job title \_\_\_\_\_

Duties \_\_\_\_\_

Employer, name \_\_\_\_\_

Phone \_\_\_\_\_ E-mail \_\_\_\_\_

From \_\_\_\_\_ to \_\_\_\_\_ Job title \_\_\_\_\_

Duties \_\_\_\_\_

Employer, name \_\_\_\_\_

Phone \_\_\_\_\_ E-mail \_\_\_\_\_

7 Personal statement of why you wish to participate in this course (approximately 100 words)

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8 How were you informed of this course?

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9 How do you intend to pay for the costs of your stay and other expenses (fees, etc.) in the Netherlands?

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10 Have you received confirmation of financial support from your sponsor? yes / no

Date \_\_\_\_\_ Signature applicant \_\_\_\_\_

11 This application is supported by my employer / supervisor / head of department who will:

- cover the cost of participation in this course
- assist me in looking for funds to cover the cost of participation

Name \_\_\_\_\_ Signature employer / supervisor / head of department \_\_\_\_\_

UNESCO-IHE believes that partnerships and networks are of vital and strategic importance in improving access to, sharing and disseminating information. UNESCO-IHE acts as an interface between knowledge centres, as well as public and private sector organizations, individual scientists and professionals. The Institute aims to contribute to the achievement of synergy in the programmes and activities of existing knowledge networks.

The Institute encourages all persons involved in the water sector to participate in the dynamic network of partnerships.

UNESCO-IHE provides postgraduate education, training and research in the fields of water and the environment for mid-career and senior professionals from developing countries. Since 1957, the Institute's community of partnerships includes public and private organisations.

The UNESCO-IHE community also includes over 13,600 Alumni active in water sectors worldwide, representing an extensive network of international water professionals of yesterday, today and tomorrow.



[WWW.UNESCO-IHE.ORG/EDUCATION](http://WWW.UNESCO-IHE.ORG/EDUCATION)

PARTNERS



International Water History Association



ICID-CIID



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Educational, Scientific and  
Cultural Organization



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