



# COURSE FOR SUSTAINABILITY

STRATEGIES, METHODOLOGIES, POLICIES AND ACTIONS FOR CENTRAL AND EASTERN EUROPE

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## Session 4

# Water

April 17- 30 2005

Location: Venice International University, San Servolo Island, Italy

## **Module Four: Water**

### **Objectives:**

- Illustrate the global water challenge in relation to the millennium goals and provide an overview of the Water Framework Directive and its applications;
- Examine the different aspects of Integrated Water Management, from decision making to implementation;
- Analyze general issues and case studies in water pollution and water treatment, in relation to public health;
- Investigate the economic and political aspects of water management, particularly in an environment of market liberalisation;
- Provide an overview on water management and water use at the local and regional level (focusing on the Venice Lagoon and its watershed as a case study) ;
- Outline water management problems and solutions adopted in agriculture, tourism and nature protection; and
- Compare different approaches to the management of transboundary waters.

### **Outputs:**

- Participants will understand how the European Community is facing the water challenge, in relation to the global water crisis and the Millennium Development Goals set in Johannesburg in 2002.
- Participants will become familiar with a framework for community action in the field of water policy and with the state of play in its implementation.
- Participants will be introduced to current issues relating to the integrated water resources management approach and will have the chance to analyse it in its different aspects, including public participation, water treatment, and water pollution and public health concerns.
- Participants will be introduced to water management systems and approaches in sensitive and complicate areas, such as the Venice Lagoon.
- Participants will become more familiar with the different aspects of water use (e.g. in tourism, agriculture and energy production) and will become more aware of different approaches to the management of transboundary waters.

# Course Agenda

## **Theme: The Water Challenge**

Lecture: Sustainable and Integrated Water Resources Management - the Global Challenge (Janusz Kindler, Technical University of Warsaw)

Lecture: General Approach to Integrated Water Management (Carlo Giupponi, University of Milan)

## **Theme: The Water Framework Directive - A Tool for Integrated Water Management**

Lecture: EU Water Framework Directive: Establishing a Framework for Community Action in the Field of Water Policy (Edward Bellinger, Central European University)

Lecture: EU Water Framework Directive: State of Play of Implementation and Way Forward (Jorge Rodriguez Romero, Protection of Water and Marine Environment, DG Environment)

Lecture: The Water Framework Directive: Opportunities for Public Participation in Integrated River Basin Management (Magda Toth Nagy, REC)

Discussion: Challenges in the Implementation of the Water Framework Directive and Integrated Water Management, and Their Solutions (Edward Bellinger, Central European University and Magda Toth Nagy, REC)

## **Theme: Water Pollution and Treatment**

Lecture: General Issues in Water Pollution (Edward Bellinger, Central European University)

Lecture: General Aspects of Wastewater Treatment (Edward Bellinger, Central European University)

Lecture: Water and Public Health (Roger Aertgeerts, World Health Organization)

## **Study Trip: Integrated Water Management in Practice**

Lecturing Session at Ghirada Center

Site Visit to the Integrated Water Treatment Plant in Treviso (Franco Cecchi, University of Venice)

Site Visit to the Catchments Area in Quinto di Treviso (VESTA)

Site Visit to the Water Potabilisation Plant in Ca' Solaro, Venice (VESTA)

## **Theme: Economics of Water and Water Policy**

Lecture: Economics of Water Resources and Water Services (Antonio Massarutto, University of Udine)

Workshop: Market Liberalisation in Water Management (Antonio Massarutto, University of Udine)

Lecture: The Reform of Water Services in Italy (Gilberto Muraro, University of Padua)

**Theme: Water Policy and Systems Thinking**

Lecture: Sustainability and Decision Making in the Water Service Sector (Judit Péter, Technical Faculty, Eötvös József College, and the Postgraduate Training Institute, Catholic University)

Workshop: Using Systems Thinking for Transformational Change (Janos Zlinszky, the REC, and Andrea Deri, LEAD)

**Theme: Water Management in the Venice Lagoon**

Lecture: Wetland's Management: The Venice Lagoon (Giovanni Cecconi, Consorzio Venezia Nuova)

Lecture: Water Pollution in the Venice Lagoon (Alberto Giulio Bernstein, Consorzio Venezia Nuova)

Site Visit: The Venice Lagoon (Marco Favaro, Osservatorio della Laguna)

**Theme: Integrated Watershed Management and Trans-Boundary Issues**

Lecture: Reflecting on the Lessons of the Game (Janos Zlinszky, the REC)

Lecture: Elements of Sustainable Management of Transboundary Water Resources in Europe (Slavko Bogdanovic, LL.D, Professor, the Business Academy of Novi Sad)

Lecture: Integrated Watershed Management (Francesco Baruffi, River Authority of the North Adriatic Sea - Autorità di Bacino dell'Alto Adriatico)

**Study trip: Energy and Water - Site Visit to the Piave River and its Basin (the Vajont Dam and the ENEL Power Station)**

Site Visit to the Vajont Dam

**Theme: Aspects of Water Use**

Lecture: Water and Agriculture (Marco Acutis, University of Milan)

Lecture: Efficient Water Use at The Local Level (Renato Drusiani, Federgasacqua)

Closing Discussion (Renato Drusiani, Federgasacqua)