

THE ROLE OF REGIONAL ACADEMIC AND NGO PARTNERSHIPS IN PROMOTING WATER/ENVIRONMENT SUSTAINABILITY

J. GANOULIS, L. SALAME * AND K. QUARTANO

UNESCO Chair and Network:

The International Network of Water-Environment Centres for the Balkans (INWEB)

Department of Civil Engineering, Aristotle University of Thessaloniki AUTH

54124 Thessaloniki, Greece, iganouli@civil.auth.gr

*UNESCO International Hydrological Programme (IHP):

1 rue Miollis, 75732 Paris, France, [L. Salame@unesco.org](mailto:L.Salame@unesco.org)

Professional biographies

Jacques Ganoulis is a Professor and Director of the Hydraulics and Environmental Engineering Laboratory, and the coordinator of the UNESCO Chair and Network INWEB at AUTH. His research interests include engineering risk analysis, fuzzy ecological modelling, floodplain management and propagation of flood waves, marine pollution and coastal circulation, and decision support systems.

Lena Salame, a jurist and mediator, coordinates UNESCO's PCCP programme, which is one of the Organisation's contributions to the UN-World Water Assessment Programme. She lectures on water conflict resolution at various international events, and in different training institutions including the Roma Tre University and UNESCO-IHE Institute for Water Education.

Katie Quartano has an international background in business administration and tourism. As secretary general of the UNESCO Chair and Network INWEB since its conception, she is responsible for the administration of the Chair and the logistics of its networking activities in promoting water/environment sustainability.

Abstract

This paper describes educational, training and networking activities developed by UNESCO Chair and Network INWEB aiming to promote water and environmental sustainability in South East Europe (SEE) or the Balkans. After a brief description of INWEB's structure, aims and objectives two recent projects are presented. Firstly the implementation of UNESCO's PCCP (From Potential Conflict to Cooperation Potential) programme in SEE and secondly the development of this to a one year MSc programme on water/environmental sustainability. The MSc is to be implemented by the Balkan University Network (BUN) and will train future managers and decision makers in sustainable water/environmental management.

1. Introduction

Academic and NGO partnerships can play an important role in facing the new challenges of Higher Education for Sustainable Development (HESD) from a regional or even global perspective. In a constantly changing world, regional partnerships and civil society take on an important role in the production and transfer of new knowledge. This requires inter- and trans-disciplinary teaching and research methods, use of new Information and Communication Technologies (ICTs) alongside a search for new strategies and alliances between academic and non-academic cooperation partners. The changes in structures are so great and so widely accepted that we may say that this transformation is a new paradigm, in the sense of T. Kuhn (1962).

The UNESCO Chair and regional Network INWEB focuses on problems related to internationally shared surface and groundwater resources and environmental management. Transboundary water resources are of particular interest, because they incorporate environmental, technical economical and political issues at national, regional, international and multi-cultural scales, and require multi-disciplinary and integrated approaches (Ganoulis, 2001).

The concept of water and environmental sustainability was first mentioned in Stockholm in 1972, during the United Nations World Conference and then at the Rio summit in 1992 with Agenda 21 and the formulation of the Millennium Development Goals (MDGs). The seventh MDG aims in particular to:

- Integrate the principles of sustainable development into country policies and programmes; and reverse the loss of environmental resources
- Reduce by half the proportion of people without sustainable access to safe drinking water

- Achieve significant improvement in the lives of at least 100 million slum dwellers by 2020.

For water resources “sustainability” and “sustainable water management” may be defined as using water for different needs without compromising its hydrologic, qualitative and ecological integrity. Water resources sustainability and sustainable water management are the main concerns of the regional network and UNESCO Chair INWEB.

2. INWEB’s mission and main activities

The UNESCO Chair and Network INWEB on “**sustainable management of water and conflict resolution**” was established in July 2003 at the Aristotle University of Thessaloniki (AUTH) (see <http://www.inweb.gr/>). It is an NGO created by and composed of a team of experts representing all the ten Balkan countries. Its main mission is to implement global sustainability principles to local problems of environmental protection. More specifically it aims to:

- Facilitate the exchange of information in the fields of water and environment by establishing an international, open network in the Balkan region
- Raise public awareness in the fields of water resources and environmental protection
- Promote training and professional development in the Balkan region by providing distance learning
- Develop databases and inventories of existing transboundary water bodies.

To date INWEB has organised many international workshops on transboundary water resources issues, established water databases on the internet, and drawn up inventories of transboundary surface and ground waters in the Balkans. INWEB cooperates closely with UNESCO’s International Hydrological Programme (UNESCO IHP) (Paris) and UNESCO’s Regional Office for Science in Europe (UNESCO BRESCE) (Venice), as well as other major international organisations such as the United Nations Economic Commission for Europe (UNECE), The Economic and Social Commission for W. Asia (ESCWA) and the Food and Agriculture Organisation of the United Nations (FAO).

One of INWEB’s major achievements has been the adaptation of UNESCO’s “Potential Conflict to Cooperation Potential” (PCCP) programme to the Balkans. This programme is a fine example of how education and training can directly contribute to water/environment sustainability.

3. The PCCP/Balkans educational programme

PCCP is a programme component within UNESCO's World Water Assessment Programme that was conceived to respond to the 7 key challenges formulated in the Declaration of the Ministerial Conference held in The Hague during the 2nd World Water Forum in March 2000. One of the key challenges identified was "Shared Water Resources Management." Within WWAP, UNESCO was given the task of elaborating the response to this challenge. The objectives of PCCP, moreover, are consistent with achieving the Millennium Development Goals (MDGs) agreed at the World Summit in Johannesburg in 2002, since PCCP aims at strengthening man's ability to cope with water related problems and to govern wisely in water related issues. This is vital if increased water security is to be achieved, extreme poverty to be eradicated and environmental sustainability to be ensured.

PCCP aims to foster co-operation between stakeholders in the management of shared water resources, while helping to ensure that potential conflicts do not turn into real ones. The project focuses on the development of tools for the anticipation, prevention and resolution of water conflicts.

The most durable output of any process of transition from potential conflict to cooperation potential is to create a new generation of decision makers, experts and trainers who will adopt the PCCP concept, adapt it to their context, implement it and further refine it.

A short pilot course (5½ days) on **Cooperation and Prevention of Conflicts in the Management of Transboundary Waters in South East Europe** was held from 16th–21st October 2006 in Thessaloniki, Greece. The course was designed by key resource persons, who provided academic inputs and ensured good scientific standards. The majority of trainers were from Balkans countries, which ensured regional ownership of the course. On the basis of existing PCCP material, the trainers created a pilot multi-disciplinary short course on water, conflicts and cooperation, intended to be ultimately addressed to high level professionals from the Balkans.

4. The MSc Course for Water/Environmental Sustainability

INWEB is currently extending this pilot course to a MSc in Cooperation and Prevention of Conflicts in the Management of Transboundary Waters in SEE. This programme will be implemented by the Balkans University Network (BUN).

BUN was established in 2006 by 11 universities in the region, and aims to undertake initiatives that will bring universities in the region together, joining their expertise in a collaboration that will ultimately lead to the scientific, economic and cultural growth of the area. BUN's aims are to:

- facilitate cross-border academic and scientific cooperation
- promote good neighbourly relations and respect for human rights
- provide mutual support towards establishing academic quality and research "centres of excellence", which will facilitate a more competitive presence in the European Higher Education Area and the European Research Area
- establish a joint fund to support proposed research projects
- exchange information by establishing a strong regional information network
- introduce long-distance learning
- establish joint postgraduate programmes, such as the MSc in Cooperation and Prevention of Conflicts in the Management of Transboundary Waters in South East Europe, under development by INWEB.

5. Conclusion

The work of the UNESCO Chair and Network INWEB and the BUN on both the regional PCCP project and its extension to an MSc programme clearly illustrates how regional academic and NGO partnerships can promote water and environmental sustainability.

6. References

Ganoulis J. (2001): *Water Resources Management at the Turn of the Millennium : Towards a New Scientific Paradigm*, *Revue des Sciences de l'Eau*, **14/2**, 213–221

Kuhn, T.S. (1962) *The Structure of the Scientific Revolutions*, The University of Chicago Press.