



UNESCO CHAIR AND NETWORK
For the Sustainable Management of Water and Conflict
Resolution

**THE INTERNATIONAL NETWORK OF WATER-
ENVIRONMENT CENTRES FOR THE BALKANS**
INWEB

ACTIVITY REPORT

2006

December 2006

UNITWIN/UNESCO Chairs Programme Progress report

Period of activity:	January 2006 – December 2006
Title of the UNESCO Chair and Network:	International Network of Water Environment Centres for the Balkans (INWEB)
Institution/Country:	Aristotle University of Thessaloniki/Greece
Report established by:	Jacques Ganoulis
Function / Title:	Chair holder and Coordinator / Professor

To be sent by electronic mail to: w.gordon@unesco.org / i.nichanian@unesco.org

or to UNESCO, Division of Higher Education
7, place Fontenoy – 75352 Paris 07 SP
Fax: 33 1 45 68 56 26/27/28

Summary

The principal objective of INWEB and its related cooperation programmes is to promote and ensure a “Sustainable Management of Water and Conflict Resolution”, with special attention to applications in South Eastern Europe (SEE, the Balkans). INWEB is an active network, composed of main partners from all the 10 Balkan countries. The principal results obtained in 2006 may be summarised as follows:

1. UNESCO IHP, UNESCO BRESCE (ROSTE), ECE and ESCWA Research, Capacity Building and Training Programmes, meetings, conferences and workshops.

- 1.1 Updating inventories of transboundary surface waters in SEE, in cooperation with UNESCO Regional Bureau for Science and Culture in Europe (BRESCE), the German Federal Ministry of Environment and Nuclear Safety and The Global Water Partnership-Mediterranean (GWP-Med).
- 1.2 Updating inventories of transboundary groundwaters in the Balkans in the frame of UNESCO Internationally Shared Aquifers Resources Management (ISARM) programme and The United Nations Economic Commission for Europe (UNECE) activities.
- 1.3 UNESCO/BRESCE TRANSKARSTBA project on managing transboundary karst aquifers in SEE, as a follow up of the UNESCO/BRESCE TRANSRISKBA project dealing with water related transboundary risks.
- 1.4 Active participation in preparation of GEF DiKTAS project: Sound Management of the Dinaric Karst Transboundary Aquifer System.
- 1.5 Promoting the UNESCO Hydrology for Environment, Life and Policy (HELP) programme by including the Nestos/Mesta River Basin as demonstration member of the international UNESCO/HELP network.
- 1.6 Partner in the inter-regional United Nations Economic and Social Commission for Western Asia (UN-ESCWA) project on “Capacity building for the sustainable modelling, management and protection of internationally shared groundwater in the Mediterranean region”. The project aims at strengthening the capacity of water

- management institutions in the Mediterranean region to implement sustainable forms of use, management and protection of transboundary groundwater resources.
- 1.7 Completion of UNESCO From Potential Conflict to Cooperation Potential (PCCP) - SEE project.
 - 1.8 Preparation of the UNESCO/BRESCE GO-TRANSKARSTBA project on improving governance for managing transboundary karst aquifers in the Balkans. This is the follow up of the TRANSKARSTBA project, funded in 2006 by UNESCO-BRESCE and based on the results obtained by the TRANSRISKBA project, which was implemented in 2004. It is supported by the UNESCO-ISARM-Balkans initiative as part of UNESCO's International Hydrological Programme (IHP) biennial work plan (2006-2008). It will also serve the implementation of the GEF project on Dinaric Karst Transboundary Aquifer System (DiKTAS).
 - 1.9 Participation at a workshop, organised by the United Nations Economic and Social Council for Western Asia (ESCWA), from 24th-25th April, 2006, Beirut, Lebanon, which aimed to contribute to building the capacity of the technical staff, decision makers and scientists/researchers involved in the development/management of shared water resources in the Mediterranean region. It was specifically aimed at enhancing their knowledge on policy framework for supporting the establishment of mechanisms for inter-state cooperation on shared groundwater aquifers.
 - 1.10 UNESCO Chair INWEB co-hosted a celebratory event at the Aristotle University of Thessaloniki, 19th May 2006, to commemorate UNESCO's 60th anniversary and its contribution to education, science and culture. An exhibition of UNESCO posters entitled "60 posters – 60 years" was held in parallel.
 - 1.11 UNESCO Chair INWEB's coordinator was a guest speaker at celebrations organised by the UNESCO Chair in intercultural policy for an active citizenship and solidarity and held at the University of Macedonia, Thessaloniki Greece, to commemorate 60 years since UNESCO was founded.
 - 1.12 UNESCO Chair INWEB's coordinator was a key speaker at the III International Symposium on Transboundary Waters management from 30th May – 2nd June 2006, held in Ciudad Real, Spain, and co-organised by UNESCO and SAHRA. The symposium focused on the analysis of all "Water Management Boundaries" which impose conditions for water management.
 - 1.13 As a HELP basin representative, UNESCO Chair INWEB gave a presentation on current research and projects in the Nestos-Mesta river basin at the "International Symposium on Integrated Water Management in Mountainous Environments, held from 20th-22nd September 2006 in Megeve France. The event was co-organised by UNESCO, the Office International de l'Eau, the European Observatory of Mountain Forests, the Societe d'Economie Alpestre and the Societe d'Equipement du Departement de Haute Savoie, and held four different water-related events: The Congress on "Water in Mountains", The Euro_INBO General Assembly, a meeting of representatives from Mountain Regions, and side events geared towards schools and the general public on the theme of water.
 - 1.14 The UNESCO-HELP Programme, in collaboration with the Environment Agency of England and Wales and the CHASM team held a workshop from 4th-6th September 2006 hosted by the Newcastle University on the "Future of rural land and water management; Research strategies to underpin integrated decision making". UNESCO Chair INWEB's coordinator, Prof. Ganoulis, presented INWEB's work on the Nestos-Mesta River HELP basin as a case study to illustrate the issues and lessons learned in this sensitive field.
 - 1.15 UNESCO Chair INWEB was represented by Prof. J. Ganoulis and K. Quartano at a meeting of UNESCO National Commissions from SE Europe in Thessaloniki from 19th-22nd January 2006 co-organised by UNESCO Regional Bureau for Science in Europe (BRESCE) and UNESCO Hellenic National Commission.
 - 1.16 Lecture on "Water and Culture" delivered by UNESCO Chair INWEB on the occasion of World Water Day, 22nd March 2006.

2. EU Research, Cooperation and Policy Programmes

INWEB is a partner in 4 current EU research and cooperation projects:

- 2.1 RIVERTWIN – A Regional Model for Integrated Water Management in Twinned River Basins (www.rivertwin.org)
- 2.2 CABRI- Cooperation Along a Big River: the case of the Volga (www.cabri-volga.org)
- 2.3 TB^{XN} - TwinBasin XN (www.twinbasin.org).
- 2.4 SPI-WATER - Science-Policy Interfacing in support of the Water Framework Directive implementation ([Internet site under construction](#))

3. NATO programmes

- 3.1 Preparation of a NATO Science for Peace proposal entitled "Ecologically Sound and Sustainable Water Resources Management in the Transboundary Jordan River Basin".
- 3.2 Participation at a NATO ARW Risk Management Tools for Port Security, Critical Infrastructure and Sustainability, 16-19 March 2006, Venice, Italy.
- 3.3 UNESCO Chair INWEB's coordinator spoke at the Advanced Research Workshop (ARW) on Computational Models of Risks to Infrastructure held in Primosten, Croatia from 9th-13th May 2006. The workshop aimed to help to meet the need for improved security, stability, and coordination in NATO member and partner countries, by exploring simulation technology and its application to the assessment of risks to infrastructure grids.
- 3.4 UNESCO Chair INWEB's coordinator delivered two lectures at NATO's ASI on "Overexploitation and Contamination of Shared Groundwater Resources: Management, (Bio)Technological, and Political Approaches to Avoid Conflicts" held in Varna, Bulgaria from 1-12th October 2006. Using a combination of lectures and case studies, this ASI acquainted participants with an integrated approach for the monitoring and management of shared groundwater resources, and provided tools for stakeholders to reach decisions on groundwater use that are both economically and socially sustainable.

4. Dissemination of Knowledge, Results and Achievements

- 4.1 Developing and distributing data bases on transboundary rivers and aquifers in the Balkans.
- 4.2 INWEB is a core partner in the GEF International Waters Learning Exchange and Resource Network (IW-LEARN) to test and evaluate new approaches and information and communications technology tools to meet international waters stakeholder needs in SEE and the Mediterranean. The project organises capacity building workshops for senior officials, decision-makers and experts and facilitate an internet-based information network establishing a community of practice on transboundary water resources management in SEE. The 3rd coordination meeting for the IW Learn Activity D2 on face-to-face and virtual training, knowledge sharing and capacity building cooperation between stakeholders in SEE and the Mediterranean sub-region was attended by core partner UNESCO Chair INWEB, represented by Katie Quartano.
- 4.3 A Conference of the Water Directors of the Euro-Mediterranean and SEE countries was held from 6-7 November 2006 in Athens, Greece. This Conference was organised by Greece (Hellenic Ministry for the Environment, Physical Planning and Public Works and Hellenic Ministry of Foreign Affairs), in cooperation with the European Commission, the 'Euro-Mediterranean Information System on Know-How in the Water Sector' (EMWIS) and the 'Regional Monitoring and Support Unit' (RMSU) of the MEDA-Water Programme of the EC. The Conference was technically supported by the MED EUWI Secretariat, and facilitated by the Global Water Partnership - Mediterranean. The Conference reviewed and discussed priority issues of the Mediterranean water agenda, with an emphasis on recent developments, and also addressed issues concerning the potential building up of a regional water observation mechanism and the implementation of national water policies. UNESCO Chair INWEB coordinator Prof. J. Ganoulis was present.

I. Address and Contact

	Address of the Host Institution	Address of the Chair holder and coordinator
Name	<p>Aristotle University of Thessaloniki (AUTH)</p> <p>University Campus</p> <p>54124</p> <p>Thessaloniki</p> <p>Macedonia</p> <p>Greece</p> <p>iganouli@civil.auth.gr</p> <p>www.auth.gr</p>	Jacques GANOULIS
Function/Title		Coordinator / Professor
University/Institution		Aristotle University of Thessaloniki
Faculty/Department/Centre		Department of Civil Engineering, Division of Hydraulics and Environmental Engineering
P.O.Box		University Campus
Street		54124
Postal Code		Thessaloniki
City		Macedonia
Province		Greece
Country		(+30) (2310) 99 56 82
Phone		(+30) (2310) 99 56 81
Fax		iganouli@civil.auth.gr
E-mail		www.inweb.gr
Website of UNESCO Chair and UNITWIN Network		
Website of Host Institution	www.auth.gr	

II. Available resources

III.

1. Human resources

Provided by Host Institution Aristotle University of Thessaloniki (AUTH)

- Status of the Chair in the organisational structure of the Institution (number of posts contributing to the Chair)
UNESCO Chair & Network hosted by AUTH
1 full Prof., 1 Secretary, 1 Technical Assistant
- Number of academic staff (part time), full professors, researchers, lecturers
2 full Prof., 3 assistant. Prof., 3 researchers
- Number of visiting staff
Variable (one or two)
- If there are other staff or groups contributing to the Chair or Network, please indicate their number and status (postgraduate students, advisors, consultants, experts, NGOs, etc)
All 10 active members of INWEB
3 graduate students, 3 experts, 1 Non-Governmental Organisation (NGO)
- Number of administrative staff
2 part time

2. Other resources

- Financial contributions (indicate amount, source and purpose)
Amount is variable, depending on specific projects.
Provided by various institutions financing specific projects.
Projects have specific objectives.
- Material resources (indicate their nature and use)
Provided by AUTH:
Telephone, fax, stationery, heating, lighting, electricity.
Internet connection, office equipment.
All used for running the UNESCO Chair and Network INWEB.
- Space placed at the disposal of the Chair and Network
Provided by AUTH:
Office space (approx 20m²).
Meeting room (up to 150 persons).
Reception area (approx 50 m²)
All shared with other functions of the Aristotle University of Thessaloniki.

III. Activities

1. Academic activities

1.1 Education (leading to certification) 2006

1.1.1 Title: Environmental Protection and Sustainable Development

Duration: 1 Semester

Target groups: Graduate students, 10 male, 15 female (variable)

Geographical coverage for partners and participants: National

(The course is run in cooperation with the Division of Hydraulics and Environmental Protection, Department of Civil Engineering, AUTh).

Expected results: Enhanced knowledge on environmental protection and sustainable development.

1.1.2 Title: Decision Theory and Risk Analysis

Duration: 1 Semester

Target groups: Graduate students, 10 male, 15 female (variable)

Geographical coverage for partners and participants: National

(The course is run in cooperation with the Division of Management and Regional Development, Department of Civil Engineering, AUTh).

Expected results: Enhanced knowledge on decision support and risk management in planning and operation of civil and environmental engineering activities.

1.1.3 Image processing applied to remote sensing, Thessaloniki and Xanthi, Greece, 21st-27th May 2006,

This course was held within the cooperative programme in Higher and Vocational Education and Training between the EU and the USA. The course addressed problems generated by the quantity of observation data, explained the many faces of image processing and provided hands on practice with remote sensing software data processing. There was also a field visit to the Nestos watershed. Lecturers included UNESCO Chair INWEB coordinator Prof. J. Ganoulis.

1.1.4 Geointelligence for Natural Resources Evaluation and Sustainable Management, 20-24 November 2006, Paris, France

This course aimed to open the minds of participants to the many facets of geo-data processing using the wealth of information available on the Internet with particular focus on Earth observation from space; developing a practical experience in ways of extracting useful knowledge regarding natural resources management using on-line software collaborative techniques; understanding the complexity of resources evaluation and ways of mediating the various conflicting management objectives and risks using multicriteria decision analysis. The course offered a clear understanding of the multidisciplinary issues involving the coupling between geo-imaging methods, the modelling of natural processes and the economic evaluation of resources. INWEB coordinator Prof. J. Ganoulis delivered lectures on “International efforts in sustainable water management. The case of the Balkans”, “Multicriteria decision analysis approach and its application to water management” and “Risks mediation in the Temenos dam project – Electre MCDA practice.

1.2 Training

1.2.1 Title: Cooperation and Prevention of Conflicts in the Management of Transboundary Waters in South East Europe.

Duration: 16th-21st October 2006 (5 ½ days)

Target groups: The final course will be addressed to young diplomats and decision makers from different SEE countries. The pilot course was addressed to professionals, able to constructively evaluate the course, provide revisions and feedback, suggest improvements and possibly contribute to ameliorating the contents at a later stage.

Geographical coverage for partners and participants: Partners: France, Israel, countries in SE Europe. Participants: SE Europe.

Expected results:

- To enhance communication and contribute to harmonisation of relations between water users and water users groups in general, and countries as water users in international river basins in particular, through capacity building.
- To create awareness and enlarge the knowledge base among diplomats, decision makers and experts on major triggers of tension and water related conflicts, as well as on major strategies that may defuse them and that may unlock potential for cooperation.
- To create a new generation of professionals with a shared experience, with a common language and definition set and with respect and appreciation for each others' culture and identity.
- To assist in levelling the playing field as a condition for building agreements and for institutional sustainability through capacity building.
- To provide management tools in the grey area between political and technical fields based on thorough reviews of approaches that develop and promote conflict prevention and tension mitigation.

(The course was run in cooperation with UNESCO Potential Conflict to Cooperation Potential (PCCP).

1.2.2 UNESCO Think Tank meeting, 13-14 November 2006, Paris, France

INWEB was present at the UNESCO Think Tank workshop related to the training programme in transboundary groundwater management, which concluded the preliminary phase of the project "Development of a training programme in transboundary groundwater management". The meeting aimed to adopt a draft rationale of the programme, and adopt a draft of the contents of a course intended for university graduates and the guidelines for more specific professional training courses.

1.3 EU Research Projects 2006

1.3.1 Title: A Regional Model for Integrated Water Management in Twinned River Basins (RIVERTWIN).

Duration: 2004-2006 (3 years)

Target groups: Public institutions and administrators, all citizens

Geographical coverage for partners and participants: Europe, Africa, and Asia

Intended use of results:

- Transfer of knowledge and technology to developing countries
- Results may be used as tools for sustainable water resources management at river catchment scale.
- Implementation of EU Water Framework Directive

1.3.2 Title: Cooperation Along a Big River: the case of Volga River (Russia) (CABRI – Volga).

Duration: 2004-2007 (2 years and 3 months)

Target groups: Public institutions and administrators, all citizens

Geographical coverage for partners and participants: Europe, and Asia

Intended use of results:

CABRI-Volga is an international coordination action to facilitate cooperation and to coordinate research in environmental risk management in large river basins in the EU, Russia & the New Independent States (NIS).

Results will contribute to enhance existing initiatives on the development of coordination mechanisms along the basin, such as the establishment of the Volga Basin Council

- the establishment of a State Fund for the Protection of Small Rivers in the Volga Basin
- the establishment of a national committee for the International Human Dimension Programme on Global Environmental Change

1.3.3 Title: Science-Policy Interfacing in support of the Water Framework Directive implementation (SPI-Water). This project was under preparation during 2005.

Duration: (2006-2008) 2 years

Target groups: Scientists, policy makers, public institutions and administrators.

Geographical coverage for partners and participants: Belgium, Italy, Netherlands, Spain, UK, Cyprus, Belgium, Greece, Belgium, Germany, France, Lebanon, Morocco.

Intended use of results: The results will provide a mechanism allowing operational links between research scientists and policy makers, which will enhance progress with respect to the implementation of the EU Water Framework Directive with an impact on the European Water Initiative.

1.3.4 Title: TwinBasinXN (TB^{XN})

Duration 2003 – 2007 (4 years)

Target groups: River basin organisations, Integrated Water Resources Management (IWRM) specialists, NGOs, companies, stakeholders in water uses

Geographical coverage for partners and participants: Worldwide

Intended use of results: To enhance human resources capacities and disseminate shared knowledge regarding administrative, technical, institutional aspects of managing river basins in different geographical, political or economic contexts.

1.4 UNESCO Research Projects

1.4.1 Title: UNESCO Internationally Shared Aquifer Resources Management (ISARM) (coordinated by UNESCO International Hydrological Programme (IHP). UNESCO Chair INWEB is responsible for the UNESCO ISARM BALKANS programme covering all countries in SE Europe.

Duration: The UNESCO ISARM project is included in the UNESCO 2004-2007 programme.

Target groups: Scientists, policy makers, diplomats, public institutions and administrators.

Geographical coverage for partners and participants: UNESCO-ISARM is currently active in Africa, Latin America, the Mediterranean and SE Europe. UNESCO ISARM BALKANS covers Greece, Albania, Bulgaria, FYR of Macedonia, Romania, Slovenia, Croatia, Serbia, Bosnia & Herzegovina and Turkey.

Intended use of results: UNESCO-ISARM-BALKANS will develop and review an inventory of the existing internationally shared groundwater aquifers located in the region and then taking these results into consideration, detail pilot projects and formulate specific actions.

1.4.2 Title: Capacity building for sustainable utilisation, management and protection of internationally shared groundwater in the Mediterranean region

Duration: (2004-2007) 3 years

Target groups: Representatives of water management institutions in selected MEDA countries and European Union Member States in the region.

Geographical coverage for partners and participants: Africa, Europe, Asia

Intended use of results: It is expected that these activities will result in increased awareness and strengthened capacity of targeted beneficiaries to plan and management groundwater resources in the Mediterranean region.

(The project will be implemented by ESCWA in collaboration with UN-ECA, UN-ECE, UNESCO, UN-DESA and non-United Nations entities).

1.4.3 Title: Hydrology for the Environment, Life and Policy (HELP) Programme: The case of the Mesta/Nestos River:

Duration: 2004-

Target groups: Public institutions and administrators, all citizens

Geographical coverage for partners and participants: Europe, Africa, and Asia

Intended use of results:

- Developing tools for IWRM
- Application to the transboundary Mesta/Nestos River Catchment (Greece-Bulgaria).
- Implementation of EU Water Framework Directive

1.4.4 Title: Sound Management of the Dinaric Karst Transboundary Aquifer System (DiKTAS). This project was under preparation during 2006.

Duration: (2006-2008) 2 years

Target groups: Scientists, policy makers, diplomats, public institutions and administrators.

Geographical coverage for partners and participants: Croatia, Serbia, Montenegro, Bosnia & Herzegovina, Albania, FYR Macedonia (with Slovenia, Italy, Greece).

Intended use of results:

- reduced environmental stress derived from the disintegrated management of its water and land resources and the means to link these towards the preservation of the unique aquatic habitats that depend on the Dinaric Karst waters.
- a sound foundation, in terms of political agreements, drawing on scientific hydrogeological analyses, to identify the issues that are significant for Karst aquifers in terms of transboundary impacts
- a strengthened regional and national capacity to address the risks emanating from transboundary impacts of land use on the Karst Aquifer and to its ecosystems and biodiversity, based on regular data exchange
- demonstration of the viability of innovative solutions and approaches to manage and mitigate the risks in priority regions where urgent actions are deemed to be necessary.

1.4.5 Title: Managing Transboundary Karst Aquifers in the Balkans (TRANSKARSTBA).

Duration: (2006)1 year

Target groups: Scientists, policy makers, diplomats, public institutions and administrators.

Geographical coverage for partners and participants: Greece, Albania, Bulgaria, FYR of Macedonia, Romania, Slovenia, Croatia, Serbia, Bosnia & Herzegovina, Turkey.

Intended use of results:

- Review and publication of inventories on internationally shared surface and ground-waters in SEE
- Development on the WEB of a special site on transboundary karst in SEE including common databases.
- Setting of priorities for local cooperative studies and formulation of a project on transboundary karst

1.4.6 Title: Improving Governance for Managing Transboundary Karst Aquifers in the Balkans (GO-TRANSKARSTBA)

Duration: (2007) 1 year

Target groups: Scientists, policy makers, diplomats, public institutions and administrators

Geographical coverage for partners and participants: Greece, Albania, Bulgaria, FYR of Macedonia, Romania, Slovenia, Croatia, Serbia, Bosnia & Herzegovina, Turkey.

Intended use of results:

1. Organise consultations with experts from the Balkans and select information on national governance of transboundary karst aquifers

2. Develop a transboundary karst aquifer knowledge base for SEE, and make it available on the WEB in GIS form.

3. Organise a workshop in Thessaloniki, Greece, in October 2007, in order to formulate recommendations and an action plan for long term sustainable management of transboundary karst aquifers in the region.

2. Conferences / Meetings

- Title for each conference, meeting organised by the Chair/Network
- Dates and place
- Participants (number and geographical coverage)

2.1 Title: Preparatory meeting for the implementation of the PCCP Courses in South East Europe

Date: 3rd-5th May 2006

Place: Thessaloniki, Greece

Participants: 7 (Greece, Serbia, Croatia, France)

2.2 Title: UNESCO: 60 Years Contribution to Education, Science and Culture.

Date: 19th May 2006

Place: Thessaloniki, Greece

Participants: 100 (Greece, Cyprus)

2.3 Title: 2nd UNESCO PCCP SEE Meeting for the Implementation of the PCCP Courses in South East Europe

Date: 30-31 August 2006

Place: Novi Sad, Serbia

Participants: 7 (Greece, Serbia, Croatia, France, Israel)

2.4. INWEB Board of Management meeting

7th February 2006, Thessaloniki, Greece

Participants: Total (8)

Greece (6), Slovenia (1), Croatia (1)

2.5 INWEB General Assembly

10th January 2006, Thessaloniki, Greece

Participants: Total (10)

Greece (10)

3. Interuniversity Exchanges/ Partnerships

(Please specify:

Name and institutions involved in the exchange and partnership, number of persons- staff and students received, staff and students sent on exchange)

EU Socrates Programme. 2-5 student exchanges per year between France, Germany, Austria and Greece.

4. Publication and multimedia materials (2006)

(Please estimate costs of publications and expected revenues from their sale)

Papers

Ganoulis J. Decision Support Modelling in Transboundary Water Resources Management: The Case of the Mesta/Nestos River In: Proc. III International Symposium on Transboundary Waters Management, University of Castilla-La Mancha, Spain, May 30th to June 2nd, 2006 (in print)

Ganoulis Multicriterion Decision Analysis for Conflict Resolution in Sharing Groundwater Resources In: *Darnault C. et al. (eds.) Overexploitation and Contamination of Shared Groundwater Resources NATO ASI Series, Ch. 22, Varna, Oct. 1-12, 2006 (in print)*

Ganoulis J. A Risk-Based Integrated Approach for Managing Transboundary Groundwater Resources In: *Darnault C. et al. (eds.) Overexploitation and Contamination of Shared Groundwater Resources NATO ASI Series, Ch. 12, Varna, Oct. 1-12, 2006 (in print)*

Ganoulis J. Water Resources Management and Environmental Security in Mediterranean Transboundary River Basins, In: B. Morel and I. Linkov (eds.), *Environmental Security and Environmental Management: The Role of Risk Assessment*, pp. 49-58, Springer, 2006

Ganoulis J. and L. Simpson: Environmental Risk Assessment and Management: Promoting Security in the Middle East and the Mediterranean Region In: B. Morel and I. Linkov (eds.), *Environmental Security and Environmental Management: The Role of Risk Assessment*, pp. 245-254, Springer, 2006

Zaidi, M. and Ganoulis. J. Cooperative Networks for Environmental Risk Analysis Studies: The Case of the Middle East Region, In: B. Morel and I. Linkov (eds.), *Environmental Security and Environmental Management: The Role of Risk Assessment*, pp. 315-320, Springer, 2006

Teaching/learning material

Title: Co-operation and Prevention of Conflicts in the Management of Transboundary Waters in South East Europe: Course Book, Reader General, Reader Legal, Handouts

Authors: J. Ganoulis, S. Bogdanovic, M. Zizanovic, El. Kolokytha, Y. Mylopoulos, Y. Shamir

Publisher: UNESCO IHP

Year: 2006

Language: English

Number of pages: 294+396+193+61=944p.

IV. Outcomes

Please describe shortly (up to 500 words) the major outcomes of the Chair/Network with special reference to their impact on the human, social, economical and cultural development at local, national, regional or international level. Whenever applicable indicate the impact of activities on promoting gender equality, rural development, attaining the Millennium Development Goals, Education For All and Sustainable development etc.

The UNESCO Chair/INWEB is a network of academic and non-academic institutions. Each of the 10 Balkan member countries has a focal point for its own country's members. Concentrating on transboundary issues, the UNESCO Chair/INWEB promotes a multi-disciplinary approach to water resources management issues, involving scientists, engineers, economists, legal experts and sociologists. It encourages initiatives from the bottom up, and promotes joint training projects and the sharing of expertise.

The main outcomes of INWEB in 2006 were various research, cooperation and training activities aiming to ensure a "Sustainable Management of Water and Conflict Resolution", particularly in SE Europe (the Balkans). These activities address European policies and initiatives on environment and water, and affect in particular European cooperation in the Balkans and between EU and candidate countries like Croatia, Bulgaria and Romania. INWEB's activities generate a cooperation mechanism in support of the EU Water Initiative, and help to meet the following Millennium Development Goals related to water:

- Halve, by the year 2015, the proportion of people without access to safe drinking water every day until 2015, an additional 120,000 people should have access to safe drinking water
 - Halve, by the year 2015, the proportion of people who do not have access to basic sanitation every day until 2015, an additional 240,000 people should be provided with sanitation
 - Develop integrated water resources management and efficiency plans by 2005
- These outcomes have a short and long term impact on socio-economic development and on better ways of Integrated Water Management. INWEB shares the idea proposed by different UNESCO projects like HELP (Hydrology, Environment, Life and Policy) and PCCP (from Potential Conflict to Cooperation Potential) and also the *EU Water Initiative* that state that at present the "water crisis is mainly a crisis of governance".

One of the main problems of water governance is the "paradigm lock", which is the lack of communication between scientists and professional decision makers. In order to break the "paradigm lock" and to make water governance more effective, INWEB promotes the linking of education, research and professional in the field, as well as partnerships between public, private and civil society actors.

INWEB also enhances the integration of research groups in the Balkans that are involved in integrated water resources management at the catchment scale and strengthens thereby the European Research Area by:

- developing approaches for integrated regional modelling as well as integrated scenarios
- creating links between ongoing and planned research programmes and coordinating initiatives at the national and international level

Dissemination remains a major feature of INWEB, ensuring that the practical use of project results will reach substantially beyond the immediate participants of the project. The most important dissemination channels and tools that INWEB uses are:

- a regularly updated website as the central dissemination platform and knowledge repository, containing all project documents, links to stakeholders and news (see www.inweb.gr)
- press releases and newsletters about key project events for wide circulation of project news

IV. Forthcoming activities

(Please outline the action plan for the current biennium)

The principal forthcoming activities of INWEB are foreseen as follows:

- facilitate the exchange of information in the fields of water and environment
- promote an integrated system of research, training, information and documentation activities in the fields of integrated water management, ecology, environmental sciences, economy, conflict resolution and international waters.
- provide advice and expertise to assist developing countries, particularly the Balkan countries, in:
 - establishing inter-sectoral pilot projects;
 - facilitating links between local, regional and global levels, and harmonising top-down and bottom-up approaches whilst taking into account social issues;
 - raising public awareness and contributing to public education in the fields of water and environmental protection;
 - promoting training and professional development by providing distance learning;
 - updating inventories of existing transboundary water systems;
 - creating and maintaining databases on water and the environment compatible to European Union standards and mainly related to transboundary water bodies (rivers, lakes, and coastal waters)
 - developing guidelines and protocols for the prevention of potential conflicts and the resolution of existing conflicts over water resources and values.

	ACTION PLAN 2007-2008		
		2007	2008
	TWINBASIN	X	
	SPI-WATER	X	X
	UNESCO HELP : Mesta/Nestos	X	X
	ESCWA	X	X
	GO-TRANSKARSTBA	X	
	GEF-DIKTAS	X	X
	CABRI-VOLGA	X	

VI. Development prospects

Action aimed at obtaining a stable permanent status of the Chair/Network in the structure of the Institution

Short and medium term: Research, Training and Educational programmes

Long term: Developing a Virtual School for Water/Environment in the Balkans

Expanding activities: Building a new portal on the WEB, Distance Education

Broadening partnerships: Black Sea, Middle East, Mediterranean region

Mobilisation of resources: Proposing a Mega-project to EU and GEF/World Bank