

Jordan / Jordanie

UNITWIN/ UNESCO Chairs Programme

(416)

Progress Report

Period of activity: January-December 2009

UNESCO Chair in Wadi Hydrology

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I. Activities

1. Education/ Training/ Research

In 2009, the UNESCO Chair conducted the following activities:

a) Mainstreaming Gender Dimension into Water resources Development and Management in the Mediterranean Region (GEWAMED)

Objective: to contribute to the mainstreaming of gender dimensions in the Integrated Water Resources Management (IWRM) in the Mediterranean Region by establishing regional and national information networks and coordination structures to promote both dialogue and the adoption of gender- sensitive policies.

Target groups: women in rural areas, decision and policy makers, executive female engineers in the water sector, the media.

Geographic Coverage: the Mediterranean region

Expected results:

- To build a national and regional shared knowledge-base on gender issues, policies, actions and measures to support gender mainstreaming in all processes related to sustainable water resources development and management.
- To enhance the cooperation and dialogue among Mediterranean countries but also within each country by promoting the exchange of information and its dissemination among

national governmental agencies, NGOs, research institutions, international organizations, the private sector, the media and the water sector.

- To promote the adoption of national policies and other related instruments (strategies, approaches, guidelines, incentives and legislation) by involving decision makers and politicians in the processes of mainstreaming gender dimensions in the planning, development and management of water resources.
- To improve the institutional capacity-building and the understanding of gender issues of all stakeholders involved in the processes of Integrated Water Resources Management (IWRM).

b) Mediterranean Dialogue on Integrated Water Management (MELIA)

Objective: to contribute to the achievement of an effective regional water management under scarcity condition to enhance sustainable development in the Mediterranean region, particularly through the improvement of dialogue and communication, to build-up and share a common knowledge and awareness that would contribute to the sustainable management of limited water resources in the region.

Target groups: decision and policy makers, executives in the water sector, the media, farmers.

Geographic Coverage: Mediterranean region.

Expected results:

- To build a knowledge base for integrated water management planning.
- To develop a Mediterranean-wide awareness of social (cultural and participatory), economic and technological issues related to water management.
- To suggest participatory mechanisms and prevention tools to avoid conflicts between the regions, the States and the different water users.
- To provide legislative and administrative bodies with criteria and arguments to support sustainable water policies and economy.

c) Network for the Exchange of Methodologies and Expertise on Sustainable Water and Land Management in the Mediterranean (SOWAMED)

Objective: The research results produced in the framework of INCO-MED over the past ten years take the practical form of processed data banks, GIS, and/or DSS based on various modeling works and simulation. The collection of these results and particularly their comparison, or further the choice of factors behind their applicability, has not yet been attempted. The goal of this SSA project is to make available to all users the range of methods and available tools for suggesting solutions to questions of sustainable water and land management.

Target groups: decision and policy makers, executives in the water sector, the Media, farmers.

Geographic Coverage: Mediterranean region.

Expected results:

- To establish the network in order to make inventory, assemble, and organize the results from the different INCO-MED projects related to SOWAMED.
- To set up a reference database, GIS and DSS, as well as modeling tools developed through the projects.
- To exchange methodology to compare the initial objectives of the projects and the contexts in which their results were obtained in order to choose the best adapted method(s) to transpose the results to new situations.
- To enhance training and capacities of expertise of young researchers and post-doctoral fellows as well as for decision makers in services and development agencies.
- To disseminate and valorize the research results through the development of regional workshops and training sessions and the publication of related documents.

d) Seminars

- "Global Climate Changes and Vulnerability of Water Resources", February 2009, University of Jordan, 25 participants.

e) Other activities

The UNESCO Chairholder also acts as a member of the IHP national committee, the governing board of the Arab World Council, the Wadi Hydrology Network and Ground Water Protection Network of the Arab States, the Editorial Board of the Journal of River Basin Management (JRBM), the Editorial Board of Water International Journal, the Arab Journal for Water and the Editorial Board of the Jordanian Journal of Agricultural Science.

2. Conferences and Meetings

Title: *12th International Training Workshop on Wadi Hydrology on "Integrated Watershed Management in Wadi Systems Using DSS"*

Date and place: 2-6 August 2009, University of Jordan

Participants: 22 from Syria, Egypt, Sudan, Libya, Palestine, Saudi Arabia, Yemen, Lebanon, Kuwait, Morocco, Oman, Tunisia, United Arab Emirate and Jordan.

Title: *World Political Forum on "Peace with Water"*

Date and place: 11-14 February 2009, Brussels

Title: *Fifth World Water Forum (WWF5)*

Date and place: 16-23 March 2009

Title: *SOWAMED project meeting*

Date and place: 1-4 June 2009

Title: *2nd International Conference on Water Economics, Statistics & Finance*

Date and place: 3-5 July 2009, Alexandroupolis, Greece

Title: *Steering committee meeting of the MELIA Project*

Date and place: 26-30 September 2009, Brussels

Title: *Meeting of the Arab Water Council*

Date and place: 16-19 December 2009

3. Publications/ Interuniversity exchanges/ Partnerships

Website

The UNESCO Chair constantly updates its website on its activities and research projects: <http://unescochair.ju.edu.jo> or <http://www.ju.edu.jo/Unesco/index.htm>.

Partnerships

- Ministry of Water and Irrigation (Jordan)
- Ministry of Agriculture (Jordan)
- Ministry of Environment (Jordan)
- Badia Research and Development Center
- Japan Science and Technology Agency (Japan)
- Japan International Cooperation Agency (Japan)
- National Center for Agricultural Research and Extension (Jordan)
- Kitami Institute of Technology (Japan)
- Kochi University of Technology (Japan)
- Jordan Valley Farmer Associate (Jordan)
- Arab League Educational, Cultural and Scientific Organization (ALECSO)
- ACSAD
- Islamic Educational, Scientific and Cultural Organization (ISESCO)

II. Outcomes

The main objective of the UNESCO Chair is the advancement of scientific knowledge related to the Wadi system in the Arab States through scientific research and training.

Other objectives are to raise awareness among public water planners and decision makers on the importance of managing scarce water resources in arid areas and utilizing and managing flood water of Wadi systems for beneficial use.

The UNESCO Chair has attracted several projects related to water resources management and optimization, irrigation management and gender role in water and irrigation management. The implementation of these projects in Jordan and in other Arab States would be a good forum for water resources specialists from Arab and European countries to exchange their knowledge and experiences. This would have a significant impact on both sides of the Mediterranean basin. This kind of collaborative research activities will also ease the flow of knowledge and technology across the Mediterranean.

In addition, the involvement of the UNESCO Chairholder in the establishment of the newly-founded Arab Water Council (AWC) will create awareness among Arab States in sharing knowledge and experience. The UNESCO Chair will be chief editor of the Scientific Journal of the AWC. This will help disseminating knowledge and activities in water resources policy formulation and implementation in the Arab Region.

Furthermore, the UNESCO Chair's participation in various regional and international water conferences has strengthened the knowledge and experience of the Jordanian scientists in the field of Wadi Hydrology and has been a good forum to present Jordan's experience in water resources management.

Indeed, the UNESCO Chair has been active, among other themes, in the field of climate change through the seminar "Global Climate Changes and Vulnerability of Water Resources", for instance, or through the new project "Water Availability and Security in Southern Europe and in the Mediterranean" (WASSERMED), which focuses on the study of the Jordan River Basin and was recently awarded by the European Commission. This project will simulate the effect of climate change on different case studies until 2050 by using modern tools of climate forecasting and simulation.

III. Forthcoming activities

For the coming years, the UNESCO Chair has planned to:

- organize the 13th International Training Workshop in Wadi Hydrology;
- organize the international conference of the GEWAMED project on "Integration of Gender Dimensions in Water Management" (Amman, Jordan, 21-26 March 2010);
- supervise two Ph.D. students and one M.Sc student working in the areas of irrigated agriculture and optimization;
- prepare a new project entitled "Farm Advisory Tools and Other Water Saving Solutions in the Mediterranean Agriculture" (FATIMA). The approach will be based on innovative cost-effective tools at farm irrigation scheme level;
- continue working on the ongoing EU funded projects of GEWAMED, MELIA and WASSERMED;
- update and maintain the UNESCO Chair's website.