



Newsletter on the Human Dimension in Water Management



April 2003

Supported by the European Commission

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1 What is the Cluster on the Human Dimension in Water Management (HDWM)?

The Cluster on the Human Dimension in Water Management is a network of projects that deal with relevant issues in a variety of ways and are funded under the key action water in the 5th framework programme of the EU.

A group of people who are working on these projects see the establishment of this cluster as an opportunity to link expertise and competence from a wide range of fields comprising sociology, economics, psychology, political sciences, participatory

integrated assessment and others. Many issues, such as new approaches to governance for sustainable water management, can only be tackled by an interdisciplinary approach within the social sciences.

2 Why a Cluster and a Newsletter on the HDWM?

In recent years the awareness for the importance of the human dimension has increased dramatically in all areas of environmental research.

However, the demand for social science know-how related to water management is not being met. A shortage of researchers from the social sciences capable and experienced of dealing with the issues and a lack of exchange among the various research groups are two contributing factors. The cluster will facilitate the exchange of know-how among the various groups. It should help to attract more researchers to this challenging area of research. Joint activities such as workshops, conferences or guidance documents on water management issues will provide the context for the integration of different perspectives.

Public authorities and management agencies may not be aware of latest developments and their practical usefulness. Hence the cluster aims to give the "Human dimensions in water management" a tangible shape and provide information about the most recent scientific findings and their practical applicability. Given the increasing interest in the theme, we expect a fast growing readership.

3 Who are the expected Readers of the Newsletter?

Water managers and representatives from authorities will receive insights into research and its potential applications. Scientists from similar fields will find references to current publications and latest research results. Scientists from fields interested in

cooperation (water management, engineering, the natural sciences etc) will receive an overview of various issues designed to facilitate the inclusion of human dimension aspects into integrated projects.

4 What are the Human Dimensions in Water Management?

The Human Dimensions in Water Management comprise a wide area of research topics and policy domains. Management concepts often have to cross disciplinary boundaries within the social sciences to combine insights from (for example) economics, sociology, and psychology, and to develop new interdisciplinary approaches dealing with complex water management problems.

The main objective of water management must be to manage the resource in a sustainable way so that goals of economic, environmental and social sustainability are achieved. This requires not only the definition of indicators for the different goals of sustainability, water related goods and services. In particular the design of mechanisms that guide individual human behaviour and the interaction among different actors in such a way that the whole

system is managed in a sustainable way is necessary.

"The realization that institutional problems in water resources development and management are more prominent, persistent, and perplexing than technical, physical, or even economic problems has fostered as much frustration as insight among analysts

and planners in water resources agencies” (Ingram et al. 1984: 323).“

This early insight is still valid these days despite of the fact that much research and attention has been devoted to that theme (e.g. Bressers and Kuks, 2003; Moss, 2003; Pahl-Wostl, 2002). Institutions can be defined as rule systems governing the behaviour of human actors. The market is a formal rule system where the information about an environmental good is only inherent in its price. However, institutional resource regimes are more complex and cannot be reduced to market mechanisms. Major research issues are institutional change and the combination of different instruments to achieve more sustainable resource management regimes.

Another issue of major importance is the inclusion of stakeholder groups and the public at large in the development and implementation of water resource

management schemes. This issue has received increasing importance with the European water framework directive which explicitly requires the involvement of the public in the development of a river basin management plan. Current research aims at an improved understanding of the role of participation, the production and role of different types of knowledge during the various stages of tackling water resource management issues.

The importance of economic instruments increased considerably, in particular for the valuation of environmental goods and services and the development of pricing schemes. The WFD implements the polluter-pays principle and requires full-cost recovery. Currently, valuation schemes and specific tools are explored that combine factual knowledge and subjective stakeholder perceptions. These and other issues will be presented in more detail in future editions of the newsletter.

References

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(<http://www.birkhauser.ch/journals/2700/tocs/t2064004.htm>)

5 What do we intend to achieve with the first Newsletter?

The first issue of the newsletter introduces the cluster and the idea of a newsletter in order to facilitate exchange and get some feedback on expectations from the potential readership. Hence readers are encouraged to

send their comments and subscribe to receive the newsletter regularly.

6 Regular Columns

- Short Research News, Articles
Review articles about topics, themes and information about latest research findings.
- Reports from Meetings
Reports from meetings and conferences of relevance to the theme of the HDWM and those organized by the members of the cluster.
- Announcements of Conferences and Meetings
Announcement of conferences and workshops on the theme. Readers are encouraged to provide information about relevant meetings.
- European Water Policy - WFD
Information about latest developments in European Water Policy and the implementation process of the European Water Framework Directive.
- Job Vacancies

7 List of Projects in the HDWM Cluster



HarmoniCA – Harmonizing Modelling Tools at Catchment Scale

<http://www.harmoni-ca.info>

The concerted action HarmoniCA will provide guidance on management concepts and ICT tools for river basin management and the implementation of the WFD. Of specific interest for the HDWM cluster is the work package on “Integrated Assessment and the Science Policy Interface” that deals specifically with the involvement of stakeholders in the development of river basin management plans and the representation of socio-economic aspects in river basin management models.



HarmoniCOP – Harmonizing Collaborative Planning

<http://www.harmoniCOP.info>

The project HarmoniCOP explores stakeholder and public participation and the role of ICT tools in river basin management planning using a social learning perspective. HarmoniCOP aims at improving the conceptual base for stakeholder and public participation and provide practical guidance for the implementation of the European Water Framework Directive.

GOUVERNe

GOUVERNe

<http://www.c3ed.uvsq.fr/c3ed/Gouverne/PresGOa n.html>

The project responded to the requirement for integrated systems of information permitting coherent policy and resource management decisions covering water uses in Europe. The project developed and implemented in pilot studies a user-based and scientifically validated Decision Support System (DSS) for the improved management of underground water resources at the catchment and sub-catchment levels.



SLIM - Social Learning for the Integrated Management and Sustainable Use of Water at Catchment Scale

<http://slim.open.ac.uk>

This project develops strategic planning methodologies and social tools for the integrated management of water at catchment or river-basin scale and other "bundles" of natural resources. It emphasizes the importance of processes of social learning for integrated resource management.

AQUALIBRIUM

<http://www.aqualibrium.de>

This project investigates the implications of the increasing deregulation of national water markets, and the fact that more and more private companies are involved in the water market. It aims at giving an overview on the current debates and analyses the various models of involvement and co-operation between the public and the private sector in the EU member states.



FIRMA – Freshwater Integrated Resource Management with Agents

<http://firma.cfpm.org/>

This project explored new approaches to improve water resource planning by developing and applying agent-based modelling to integrate physical, hydrological, social and economic aspects of water resource management. Specific emphasis was given to stakeholder participation and participatory model building and scenario development.



Intermediaries - New intermediary services and the transformation of urban water supply and wastewater disposal systems in Europe

<http://www.irs-net.de/intermediaries>

This project maps the development of intermediary services and organisations in the water and wastewater sectors, examines how they facilitate the application of new resource-saving technologies and social practices and assesses their impact on the

environment, economic efficiency and network management.

EUROMARKET - Water liberalisation scenarios: An empirical analysis of the evolution of the European Water Supply and Sanitation sectors

<http://www.epfl.ch/mir/euromarket>

This project studies the likelihood, nature, and forms water liberalisation may take in Europe in the foreseeable future. This is done by analysing different liberalisation scenarios, depending upon the evolving water markets, the different enterprises' strategies, and the existing legislation/regulation both at the national and at the European levels.



MULINO – Multi-sectoral, Integrated and Operational decision support system for sustainable use of water resources at catchment scale

<http://www.feem.it/web/loc/mulino/index.html>

This project is developing a Decision Support System for the integrated management of water resources. The system includes a decision software based on multi criteria analysis procedures. This software is being developed in collaboration with representatives from water authorities in Italy, Romania, the UK, Belgium and Portugal, and through these relationships is exploring ways to include stakeholders' preferences in the assessment of a decision problem.



EUWARENESS

<http://www.euawareness.nl>

This project systematically studied the generation and results of diverse and innovative institutional resource regimes at a water basin scale. It investigated the dynamic relationships between various uses of water resources, the regimes under which these uses of water resources are managed, and factors in the political context generating regime shifts.

ADVISOR

<http://ecomana.dcea.fct.unl.pt/projects/advisor>

ADVISOR aims at the delivery of a set of guidelines to river basin authorities and related EU agencies for

the execution of integrated evaluation of projects. The theoretical platform thereby established will support the development of new integrated evaluation methodologies and tools, which will incorporate the state of the art of the latest scientific thinking and assessment tools together with modern participatory, multi-stakeholder decision making processes.

MERIT -Management of the Environment and Resources using Integrated Techniques.

<http://www.merit-eu.net>

The aim of MERIT is to develop a water resource management methodology to help engage the stakeholder in the decision making process. Bayesian networks are being used as tool to help the decision maker by using input from stakeholders to design and construct the networks. A range of participatory techniques are being developed to facilitate the engagement process.



PRINWASS - Barriers and Conditions for the Involvement of Private Capital and Enterprise in Water Supply and Sanitation in Latin America and Africa: Seeking Economic, Social, and Environmental Sustainability

<http://www.geog.ox.ac.uk/~prinwass/>

The project develops an indicative framework of strategy and processes, expressed by relevant guidelines, for sustainable water supply and sanitation services in developing countries, taking into account the roles of the state (national, regional, and local government levels), civil society (users associations, citizen movements, etc.), market forces (privatized water utilities), and their interrelations (e.g. public-private partnerships, other forms of private sector involvement in WSS, etc.)

MEIF - Evaluation Methods for investments in the water sector- Forward-looking financial strategies and water pricing

<http://www.meif.org>

The project will draw-up an inventory of the current situation on the principles for investment needs modelling in the context of the European enlargement process.

Editors

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