Feature

Adaptive management: learning to manage by managing to learn in Peyresq, France

Caroline van Bers, Institute of Environmental Systems Research

At the end of September this year, 25 young researchers primarily from Europe, but also from as far away as South Africa, Sri Lanka and Australia, traveled to the remote village of Peyresq in the French Alps to learn more about adaptive river basin management. The Autumn School was sponsored by the EU-funded NeWater project (New Approaches to Uncertainty in Water Management) and co-hosted by the Global Water System Project (GWSP’s goal is to improve understanding of the global water system and inform policy about present and emerging challenges). The programme was developed for an audience of mostly PhD students and postdoctoral researchers working in a variety of fields related to adaptive water management for a range of international institutes and universities. They participated in nine intensive days of lectures, discussion, and exercises under the guidance of instructors from the NeWater and GWSP partnerships representing expertise in a wide range of disciplines and a diversity of organizations.

The premise underlying the NeWater project is that sustainable management of water resources cannot be realized unless current water management regimes undergo a transition towards more adaptive water management. To cope with uncertainties, adaptive management is needed involving a systematic process for improving management policies and practices by learning from the outcomes of implemented management strategies. One of the more specific aims of the project is the training of practitioners and young researchers in concepts and state-of-the-art approaches and methods for adaptive management and integrated water resources management, using the expertise and research results available in the NeWater project and the complementary GWSP.

The autumn school programme set out to facilitate an understanding of the following:

- What is adaptive management and how can adaptation in resource management take place?
- What is Integrated Water Resources Management (IWRM) and how is it practiced?
- What is the role of Adaptive Management in IWRM?
- What are the potential performance indicators for adaptive water management?
- How can we make a transition to adaptive river basin management

Participants were introduced to the concepts followed by immersion in a variety of methods and tools contributing to adaptive water management. Topics included: resilience and adaptive capacity; water policy mechanisms for adaptive management; uncertainty analysis; vulnerability assessment; governance regimes; participation methods and social learning; group model building; information gathering and monitoring systems; and integrating economics into IWRM. The programme was rounded off with an introduction to transitions management which is the theme of next year’s summer school. The topics were addressed with extensive reference to NeWater case studies including the Orange, Nile, Rhine, Elbe, Guadiana, Tisza, and Amudarya river basins. An important element of the learning process for the participants was the application of the concepts and methods to a case study. For this, they formed four case study groups – one for each of four river basins – and carried out an assessment of the performance of the water management regime in the basin in order to cope with water management challenges as a base for planning purposes. The Autumn School programme and session presentations are available at www.newater.info/everyone/2153.

This year’s summer school has formed the foundation for two
subsequent summer schools in this series, which TIAS will also join as a co-host. The 2007 summer school to be held in the Black Forest of Germany will focus on making the transition to adaptive management regimes, with topics including, among others, barriers to change, learning processes to facilitate change, transitions management theory and strategies, and the role the European Water Framework Directive in transitions management. The final summer school in 2008 will present the results of the NeWater project including:

- A conceptual framework for understanding water systems and management regimes
- A methodology for analysing and assessing vulnerability, adaptive capacity, management strategies
- A conceptual framework for understanding the transition to adaptive management regimes
- A methodology for the participatory assessment and the implementation of transformation processes

Furthermore, the course materials generated by the NeWater-GWSP summer schools contribute to a new curriculum in Adaptive River Basin Management to be made available as downloadable modules to interested university instructors. More information about the NeWater project can be found www.newater.info and the Global Water System Project at www.gwsp.org.

News

Global Environmental Assessments: Information and Influence

In the context of the TIAS-GWSP Workshop on Global Assessments next May in Washington, the editors wish to share a summary of this newly released book reprinted from MIT Press website: http://mitpress.mit.edu

A comparative analysis of global environmental assessments shows the importance of policy salience, scientific credibility, and social and political legitimacy in determining the influence of scientific assessments on global environmental policy. Knowledge about environmental problems has expanded rapidly in recent decades, as have the number and variety of processes for making large-scale scientific assessments of those problems and their possible solutions. Yet too often scientific information has not been transformed into effective and appropriate policies to protect the global environment. In this book, scholars use a comparative analytic framework and supporting case studies to evaluate the impact of environmental assessments, looking at how, and under what conditions, global environmental assessments influence political and economic decision makers. They find that global environmental assessments are more likely to be influential if the process is perceived not only as scientifically credible but also as salient to policy concerns and as generated through legitimate means. The studies show that although the content of the assessment clearly matters, its influence is often determined more by the process that generated it and by external factors affecting the receptiveness of different audiences. Assessments that involve ongoing interactions among scientists, stakeholders, and policymakers prove particularly likely to influence behaviors. The diverse case studies — ranging from global assessments of climate change and acid precipitation to assessments of sea-level rise in Maine and Hawaii and climate forecasting in Zimbabwe — embed their findings in contemporary theoretical frameworks while remaining informed by pragmatic policy considerations.

Global Environmental Accord: Strategies for Sustainability and Institutional Innovation Series
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Germany prepares to adapt to climate change
(Reprinted with permission: END Daily, Europe’s Environmental News Service, 18/10/06: http://www.endseuropedaily.com)

Germany’s environment ministry and environment agency have launched a new "competence centre" on climate change that will closely monitor its effects and support adaptation efforts.

European governments are beginning to focus more on adaptation as climate change is seen increasingly as something actually happening, not just a theoretical future problem. The European commission is due to issue a discussion paper on EU-wide adaptation priorities before the end of the year.

According to the agency, the centre will "link up all technical knowledge about climate change" while keeping decision-makers and the German public informed about its effects.

The agency also said the centre would suggest measures on how to adapt to the effects of climate change and help implement those already planned. It cited better flood protection, planting of crops and trees that can withstand higher temperatures and less precipitation, and a new health warning system for heatwaves.

The centre’s launch comes amid new predictions by climate experts that average temperatures in Germany will rise 2-3 degrees Celsius by 2100. Even an increase at the lower end of this range would entail very significant environmental changes.

“We have to start adapting to climate change now so as to not be overwhelmed by its economic and social consequences later,” observed German environment minister Sigmar Gabriel. He spoke at a workshop on Tuesday where the competence centre was unveiled.

For more information:

Events


For more information: www.stglobal.org


Deadline for session abstracts: 31 December 2006.

For more information: www.fona.de/L2L


International Institute for Applied Systems Analysis (IIASA) near Vienna, Austria, hosts a selected group of graduate students, primarily doctoral, from around the world in its Young Scientists Summer Program (YSSP). These students work closely with IIASA’s senior scientists on projects within the Institute’s three theme areas of Natural Resources & Environment, Population & Society, and Energy & Technology. IIASA and its National Member Organizations provide airfare and a modest living allowance for most applicants who are selected to participate. Applications deadline: 15 Jan. 2007. Programme Dates: 4 June-31 August 2007. More information: http://www.iiasa.ac.at/Admin/YSP/

Postdoctoral Associate and PhD Positions. A postdoctoral associate and two PhD students are sought to join an interdisciplinary team that integrates ecology and economics for studying forested landscapes. This integrated project takes a systems approach to examine ecological and economic effects of forest management on both public and private lands in a large region of Michigan’s Upper Peninsula. http://www.csis.nsu.edu/positions.htm

Courses


Websites


Openings

The European Marie-Curie Research Training Network announces 3 positions for Post-Docs from July 2007 to January 2010 in “Multi-level Governance of Natural Resources: Tools and Processes for Water and Biodiversity Governance in Europe”, in various European research institutions. www.governat.eu. Deadline for applications is 15 April 2007.

A Virtual Resource Centre on Green Accounting. UNEP-
Economics and Trade Branch. The Centre provides a searchable
database for a wide range of materials and internet links related to
integrated environmental and economic accounting. The database
includes a compilation of key documents from governments,
academic institutions, international organizations, non-
governmental organisations and individuals on selected topics
related to green accounting, environmental statistics and
indicators. For more information:
http://www.unep.ch/etb/areas/VRC_index.php

Modelkey Project: Models for Assessing and Forecasting the
Impact of Environmental Key Pollutants on Marine and Freshwater
Ecosystems and Biodiversity. http://www.modelkey.org/

New Publications
Books and Reports

Ângela Guimarães Pereira, Sofia Guedes Vaz and Sylvia Tognetti
(eds). 2006. Interfaces between Science and Society. Greenleaf
Publishing. To order: www.greenleaf-publishing.com

Ronald B. Mitchell, William C. Clark, David W. Cash, and Nancy
M. Dickson (eds). 2006. Global Environmental Assessments:
Information and Influence. Global Environmental Accord:
Strategies for Sustainability and Institutional Innovation series.
MIT Press. Cambridge. USA. (see book summary of this issue of
TIAS Quarterly)

Stern Review Report on the Economics of Climate Change may be
downloaded: http://www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/stern_review_report.cfm


Michael Lockwood, Graeme Worboys and Ashish Kothari (eds).
Publications.

and Technological Case for Renewable Energy. Earthscan
Publications.

Change: Mapping the World's Greatest Challenges. Earthscan

Operational Manual for Integrated Policymaking for Sustainable
Development. Forthcoming in Spring 2007. Prepared by UNEP-
Economics and Trade Branch, in collaboration with the Lee Kuan
Yew School of Public Policy. For more information, contact:
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