



MEETING REPORT

Second meeting of UNESCO's ecohydrology demonstration project leaders
(First meeting of Demonstration Projects Task Force)

University of Algarve, Portugal (9 – 10 June 2006)

Introduction

The first meeting of the Task Force on Demonstration Projects (DPTF), which in effect was the second meeting of the demonstration project leaders, was held at the University of Algarve in June 2006. This meeting was organized as part of the joint work of UNESCO's International Hydrological Programme (IHP) and the Man and the Biosphere (MAB) Programme on "Managing Land-Water-Habitat Interactions through an Ecosystem Approach" for 2006 – 2007, in the broader context of the sixth phase of IHP (IHP-VI: 2002 – 2007). The agenda of the meeting is attached to this report (Annex I).

Mr Luis Chícharo, the Vice-President of Faculty of Marine and Environmental Sciences, University of Algarve, opened the meeting by welcoming the participants to Faro. This was followed by remarks by Ms Lisa Hiwasaki (UNESCO-IHP) on the context and structure of the meeting. Demonstration project leaders then reported on activities that took place at each site between November 2005 and June 2006 as well as future plans, which were followed by discussion among members of other TFs on how to facilitate integration of all the TFs. The second half of the meeting consisted of discussion among members of the DPTF, which focused, *inter alia*, on formulating a workplan for DPTF for the biennium 2006 – 2007.

The first half of the meeting was chaired by Ms Hiwasaki, and the second half by Mr David Harper (University of Leicester) and Mr Ramiro Sarandon (University of La Plata), who were elected as joint chairs of the DPTF. Leaders, or substitutes of the leaders, of the eight demonstration projects on ecohydrology participated by giving presentations and providing input into the discussions. In addition, seven members of the other TFs participated in the first half of the meeting. The list of participants is attached to this report (Annex II).

Meeting Conclusions

In the larger framework of UNESCO's ecohydrology activities, the following specific steps to facilitate coordinated action by the TFs were discussed:

1. Integration of social factors into the work of demonstration projects: it was proposed that the TF on Social Sciences (SSTF) would provide comments on how social factors could be emphasized at each site, followed by a position paper to guide the demonstration project leaders in their efforts to promote integration.
2. Strengthening the education & capacity-building components of the work of demonstration projects: it was proposed that the TF on Education & Capacity-building (ECBTF) would request additional information from demonstration project leaders to enable the TF to better understand educational activities taking place at each site, and to identify what the needs are.

3. Facilitating interaction among the TFs to ensure integration of the different issues that TFs address: it was reiterated that the Guadiana Estuary demonstration project site would be used as a test site to promote a truly integrated approach to demonstrating ecohydrology.

Furthermore, it was agreed that following activities will be undertaken by DPTF as a whole, in addition to activities at the site-level:

4. publish a special issue of the journal *Ecohydrology and Hydrobiology*;
5. propose a session on ecohydrology demonstration projects at the HELP symposium;
6. additional demonstration project sites to consider applying for “TWIN basin”.

Details of Discussions

In the larger framework of UNESCO’s ecohydrology activities, specific steps to facilitate the integration of all TFs—in particular SSTF and ECBTF to the work of DPTF—were discussed.

1. In order to facilitate the integration of social factors into the work of demonstration projects, the following immediate and short-term steps will be taken:
 - based on the presentations made by each demonstration project leader, the leader of SSTF will collect and provide brief comments on how social factors could be emphasized at each site (by end of June);
 - SSTF will provide a first draft of the position paper on integrating the social sciences, which would provide a general framework, to the first meeting of the reconstituted SAC on ecohydrology (to take place in September 2006). This paper could guide the demonstration project leaders in their efforts to promote integration.
2. In order to strengthen the education & capacity-building components of the work of demonstration projects, the following immediate step will be taken:
 - based on the discussions and comments made by demonstration project leaders, which provided a rough idea of the main needs at the different sites, the leader of ECBTF will request additional information from demonstration project leaders in the form of a questionnaire, which is one of the tasks of ECBTF (see meeting report of the TFs for the detailed workplan of ECBTF).
3. In order to facilitate interaction and integration among the different TFs:
 - following the discussions at the meeting of the other TFs (held 7 – 8 June), it was reiterated that the Guadiana Estuary demonstration project site would be used as a test site in order to promote a truly integrated approach to demonstrating ecohydrology;
 - although members of DPTF discussed the possibility of adding another “test site”, no leader volunteered his/her site for immediate action. However, it was emphasized by two DPTF members that integration of these factors right from the beginning is crucial for successful implementation of demonstration projects;
 - the goal in the more long term would be to include other demonstration projects, based on the experiences and lessons learned at the Guadiana site.

The following activities were agreed as those that would be undertaken by DPTF as a whole:

4. Special issue of Journal “Ecohydrology and Hydrobiology”:

- as a way for members of DPTF to jointly promote the concept of ecohydrology, it was agreed that members contribute to a special issue of the journal *Ecohydrology and Hydrobiology*, to be published in 2007. Each demonstration project leader will write a review paper, using the scientific information that underpins its demonstration project status and to show the application of ecohydrology principles. Furthermore, each site should show the means of disseminating the lessons learned, from uptake of the ecohydrological principles that the site highlights among the community and the political leaders.

It was agreed that the following steps would be taken in order to move forward on this endeavour:

- discuss with editors of the journal to make sure that external reviewers for the manuscripts be given clear information that these are not “normal” scientific manuscripts, ascertain the timescale, and circulate the journal’s instructions for authors (Ms Iwona Wagner, ASAP);
- write an overview paper that shows the linkages between the papers and the overall links to the theory (Mr Harper, by end of September 2006);
- write an introduction/foreword (UNESCO Secretariat);
- write a conclusion chapter, which shows the “future” of demonstration projects (where are we going?) and provides link towards IHP-VII (Ms Wagner);
- complete manuscripts (all demonstration project leaders, end of January 2007).

5. Linkages with HELP:

- from the experiences of DPTF members whose sites are within the HELP network (Pilica River in Poland, Lake Naivasha in Kenya and Guadiana Estuary in Portugal), it was recognised that the differences in *scale* (HELP is basin-wide and organisational; ecohydrology demonstration projects are not) and in *focus* (HELP is to spread good practice of IWRM by example; ecohydrology demonstration projects are working examples of one practice), make linkages between the two programmes difficult, but essential;
- one concrete means of linkage was to approach the HELP secretariat with a proposal for a session or a section entitled “Ecohydrology as a major tool for sustainable water management: lessons from ecohydrology demonstration projects” at the International HELP Symposium, “Local Solutions to Global Water Problems - Lessons from the South” to be held in Pretoria, South Africa, 4-9 November 2007. The aim of such a session would be to emphasize ecohydrology as the most important (and perhaps the only) practical means of implementing “the Ecosystem Approach”, which is widely promoted as the correct way of applying IWRM. Therefore, ecohydrology should be seen as a major tool for HELP basins to achieve IWRM;
- this could serve as a catalyst to form an ecohydrology sub-network within HELP;
- another means of linkage would be to look for new demonstration project sites (see also 7. below) from the HELP network.

To move forward on this endeavour it was agreed that:

- demonstration project leaders whose sites overlap/are close to HELP basins (e.g., São Francisco Verdadeiro river basin, a sub-basin of the Paraná river) will try to contact HELP basin counterparts and share data, etc.;
- the HELP secretariat be approached with this request for a session or a section (by UNESCO Secretariat);
- when/if this is accepted, members of DPTF will develop a proposal for such as session (by all).

6. “TWIN basin” initiative provides funds for two years for exchange of professionals, students or technicians between two basins (information available at: www.twinbasin.org). Pilica and Naivasha became “twined” with Welland (a HELP basin in the UK) in March 2006, and it was agreed that other sites would consider “twining” at the next call for proposals.
7. Expanding the network of demonstration projects:
 - this year, the number of demonstration projects was reduced to eight, due to the fact that two sites (Polesie in Belarus, Poland & Ukraine, and Saguling in Indonesia) did not respond to repeated requests for submission of proposals in order to establish a contract between them and UNESCO;
 - due to the many requests from sites around the world to become part of the ecohydrology network, in principle, it was agreed that the number of sites could be increased back to ten;
 - DPTF members were cautious regarding increasing the network to larger than ten sites, due to the fact that the group would need to become stronger before becoming wider, as well as considering UNESCO’s limited resources;
 - in increasing the demonstration project sites, it was felt that the additional sites should be selected based on certain criteria, as well as take into consideration the geographical and ecological coverage of the existing sites (e.g., currently there are no sites in Asia and the Pacific, Middle East and North America; none in arid ecosystems);
 - the need for a transparent mechanism to process proposals was recognized, and this would begin with formulation of criteria;
 - looking towards the future, the importance of the sites to continue into IHP-VII was acknowledged; however, some sort of “closing” or “wrap-up” should also be considered, i.e., certain sites to move into an educational objective, instead of purely demonstration objective;
 - therefore, categorization of demonstration project (as in the HELP system) was proposed, in order to increase the number of sites that are part of the ecohydrology network: (a) “model” or “educational” sites; (b) “operational” or “demonstration” (ten) sites; and (c) “proposed” sites. Such categorization would differentiate sites on the basis of levels of ecohydrological application.

To move forward on this endeavour it was agreed that:

- preliminary list of criteria to be developed, upon which a format for an “application form” would be developed (Ms Wagner to provide a draft, to be followed up by UNESCO Secretariat);
 - based on format developed by UNESCO Secretariat, potential demonstration project leaders would apply to be part of the network, which would be examined and decided by SAC.
8. Other items that were discussed:
 - an invitation to all members of DPTF (as well as leaders of the other TFs) was made to participate in guest lectures in Brazil after February 2007, as a way to promote international cooperation. Members of DPTF as well as leaders the other TFs should contact leader of Parana demonstration project site when they will be in Latin America; the University then could provide funds for local transportation and accommodation (Mr Luis Gomes will provide more details later, on how many guest lecturers the University can support, etc.; UNESCO Secretariat to coordinate);
 - clarifications were sought regarding use of UNESCO logo, e.g., in documents and materials produced by demonstration project leaders (Secretariat to follow-up with

- details);
- an idea to create a UNESCO-ecohydrology logo in order to “sell” ecohydrology was well-received (members of DPTF to provide ideas, Secretariat to follow-up);
 - as part of an effort for information dissemination, publication of a general ecohydrology brochure, targeted towards the general public (non-scientists), to introduce the concept of ecohydrology and UNESCO activities conducted, was welcomed (Secretariat to follow-up, with input from DPTF and other TF members);
 - also as part of information dissemination efforts, the plan to launch a comprehensive ecohydrology website in the UNESCO Water Portal was also well-received. Another purpose of this new website would be to effectively facilitate sharing of information and materials among TF members (planned for launch in October 2006, TF members to provide materials based on request made by the Secretariat);
 - with regard to “letters of support” demanded from demonstration project leaders, there was general agreement on the draft format provided by Secretariat. Each leader would provide the Secretariat with details to be inserted into the second paragraph of the letter when/as the need for such letters arises;
 - concerning cooperation with the MAB Programme, leaders of sites that overlap with biosphere reserves (Lobau in Austria, Serengeti in Tanzania/Kenya), or the one that is working to become a separate biosphere reserve (Parana, Brazil) would work towards further cooperation.
 - the next meeting of DPTF is tentatively planned to be held late September or October 2007, in Brazil or Argentina. It was agreed by the TF members that this meeting should be a joint meeting of all the TFs, which would further facilitate integration of the work of the TFs. The suggestions from the other TFs that the next meeting be held in Brisbane was not well-received, since there is no demonstration project site on that continent that could be visited as part of the meeting. Demonstration project leaders in Argentina and Brazil to discuss the matter and one of them come up with a proposal for the next meeting).
 - outside the formal meeting, it was suggested that the 2008 meeting could be held March in the Serengeti National Park, Tanzania or at Lake Naivasha, Kenya, in conjunction with an ecohydrology training course.
9. Administrative matters:
- one of the chairpersons, or his alternate, would attend the next meeting of the SAC on ecohydrology as an observer, planned to take place in Paris, 4 – 5 September 2006;
 - in order to process the first payment of the contract between UNESCO and demonstration project sites, demonstration project site leaders need to provide “cover letter” for the demonstration project report submitted and powerpoint presented at the Portugal meeting. The cover letter should also include an estimate budget for the year 2006;
 - for the final report (and to process final payment), the Secretariat will provide format by November.



AGENDA

Second meeting of UNESCO's ecohydrology demonstration project leaders
(Meeting of Task Force 5)

University of Algarve, Portugal (9 – 10 June 2006)

Day 1 **Friday, 9 June (09:30 – 18:00)**

- 09:30-09:40 Welcome by host of meeting (L. Chicharo, University of Algarve, Portugal)
- 09:40-11:10 Reports on activities between November 2005 – June 2006 and planned activities for rest of 2006 (demosite leaders, 15 mins each)
- Lacar Lake, Argentina: Sustainable management of Andean-Patagonian watershed: Improving land use policy at Lacar Lake watershed based on an ecohydrological approach (R. Sarandon)
 - Floodplain Forests, Brazilian Amazon: Sustainable timber production and management of central Amazonian white-water floodplains, Mamirauá Sustainable Development Reserve (F. Wittman)
 - Paraná Floodplain, Brazil: Creation of a biosphere reserve to prevent decline in the unique subtropical river floodplain biodiversity (L. Gomes)
 - Serengeti Plain, Kenya & Tanzania: Study of inter-basin transfer of water resources and water deficit for large mammals migrating to Serengeti (E. Gereta)
 - Lake Naivasha – Malewa, Kenya: Re-creation of artificial *Cyperus papyrus* wetlands surrounding the lake and at the inflowing rivers delta; basin-wide phyto-technological methods for restoration of the basin hydrology and hydrochemistry (D. Harper)
 - Biosphere Reserve Lobau, Austria: Sustainable floodplain lake management: conserving macrophyte biodiversity and ecosystem services (G. Janauer)
- 11:10-11:30 *Coffee/tea break*
- 11:30-12:00 Continuation of reports (demosite leaders, 15 mins each)
- Pilica River, Poland: Application of ecohydrology and phytotechnology for water resources management and sustainable development (I. Wagner-Lotkowska)
 - Guadiana Estuary, Portugal: Sustainable estuarine zone management for control of eutrophication, toxic blooms, invasive species and conservation of biodiversity (A. Chicharo)
- 12:00-13:00 Meeting of and discussions by members of all Task Forces (TFs) on ecohydrology:
- means of communication/ networking among TFs
 - working with different TFs
- 13:00-14:30 *Lunch*

- 14:30-16:00 Election of chairperson/ leader for demonstration project TF (TF 5)
- Discussions on workplans for biennium 2006 – 2007 for the ecohydrology demonstration project TF as a whole:
- common issues and challenges
 - long-term vision, objectives and expected results
 - activities as a TF: means of implementation, timeline, partnerships and information dissemination efforts, including joint activities with the other TFs at specific demonstration project sites
 - link with HELP (Hydrology for the Environment, Life and Policy)
- 16:00-16:15 *Coffee/ tea break*
- 16:15-17:30 Other matters:
- Report of the TF meeting to be presented to the SAC (by leader of TF 5)
 - Letters of support for demonstration project site leaders
 - Next meeting in 2007: dates & venue
- 17:30-18:00 Wrap-up session
Closure of the meeting

Day 2 Saturday, 10 June (09:30 – 17:30)

- 09:00-17:30 Fieldtrip to Guadiana/ Algarve coast

Meeting documents

Working documents

- Agenda
- IHP/Bur-XXXIX/13 “Ecohydrology: Appointment of the SAC and TFs”
(a document prepared for the IHP Bureau, regarding ecohydrology activities to be conducted under IHP for this biennium (2006 – 2007) and the organizational structure and general terms of reference (ToR) for SAC & TFs)
- List of participants

Information documents

- Members of UNESCO’s SAC and TFs on ecohydrology
- Report of UNESCO’s ecohydrology demonstration projects (Compilation of reports by each demonstration project leader)
- Developing links between ecohydrology demonstration projects and HELP

Output of the meeting

- Report of TF 5 (to be drafted by TF leader/rapporteur)



LIST OF PARTICIPANTS

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(Meeting of Task Force 5)

University of Algarve, Portugal (9 – 10 June 2006)

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