

International HELP Symposium on
River Basin Level Responses to Water Scarcity and
Drought under Uncertain Climate Futures

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May 27 Dinner (plus 35 euros) ☐

Informations

Registration:

50 euros
Reduced rates are available for students and NGOs under request.

Registration can be done by telephone contact, fax or email:

Tel: +351 253 603 234
Fax: +351 253 603 233
Email: info@sopsar.pt

Registration is only valid with payment receipt.

Cheques and bank transfer with reference to event to:

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There is a consensus among scientists that global warming will result in an intensification and acceleration of the global hydrological cycle. This intensification could translate as increasing rates of evaporation and precipitation. While it is still uncertain what effects these changes will have on water resources, it is expected that a shortage of water will have repercussions on water quality and the frequency of extreme events, such as droughts and flooding. In 2030, 47% of world population will be living in areas of high water stress. In Africa alone, by 2020, between 75 and 250 million people may experience increased water stress due to climate change. Water scarcity in some arid and semi-arid regions will have major impacts on migration. From 24 to 700 million people are expected to be displaced because of a scarcity of water. This symposium aims to tackle the drought and water scarcity issues at the river basin level.

UNESCO is working on managing droughts and water scarcity through partnerships between governments, the private sector and civil society through its Hydrology for Environment, Life and Policy (HELP) program. HELP is actively contributing towards local capacity-building for the implementation of integrated water resource management through research-to-development continuum, and to form collaborations where consortia, alliances, networks, and individual organisations may all find their place both to fund it and to benefit from it. Currently there are 91 HELP basins across the globe (in Australia, Asia, Africa, North America and Latin America) to demonstrate how HELP principles can be put in practice. The current HELP Network involves more than 60 Member States of UNESCO. The experiences shared by HELP initiative clearly show that sustainable water development and management through stakeholder empowerment is extremely complex and requires local approaches to solve global problems. Such approaches need to be capable of incorporating a broader understanding of water scarcity, unequal water access and inadequate adaptive capacity and readily adaptable to emerging issues.

Douro River Basin is a transboundary HELP river basin, shared between Portugal, the downstream country, and Spain. Douro River is 897 km long (3rd longest in the Iberian Peninsula) and about 97.500 km² drainage area (the largest there) and rises in Sierra de Urbión (2080 m) in central Spain. It flows west across the North of Spain, then southwest to form part of the Spanish-Portuguese border before flowing west across the Northern part of Portugal to the Atlantic Ocean at Porto. The Eastern part of the Douro River Basin is much prone to water shortage and drought. There are high possibilities (IPCC 2007) for worsening of these issues as a result of climate change.

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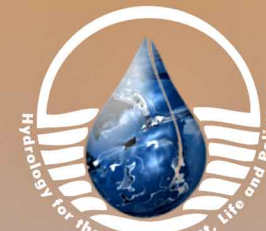


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Douro River Basin

UNESCO IHP-HELP



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United Nations
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International
Hydrological
Programme



Sociedade Portuguesa de Simulação
Ambiental e Avaliação de Riscos



Universidade do Minho
Escola de Engenharia

Mirandela / Portugal
27, 28 May 2010



International HELP Symposium on River Basin Level Responses to Water Scarcity and Drought under Uncertain Climate Futures

The **International Symposium on River Basin Level Responses to Water Scarcity and Drought under Uncertain Climate Futures** aims the promotion of public awareness towards water resources sustainability within Douro river basin. It is organized under the UNESCO HELP – Hydrology for the Life and Policy programme, a global network of basins and is designed to create a new approach to integrated basins management addressing key policy issues. The ultimate goal of the programme is to help scientists and stakeholders break through the traditional paradigm lock that separates them from implementing integrated solutions to deal with drought and water scarcity challenges at the river basin level.

The ARH do Norte, I.P. is preparing Douro River Management Basin Plan according to the Water Law (part of WFD). This symposium is viewed as a part of the stakeholders participation process and is strongly encouraged by ARH do Norte, I.P.

May 27

 **08:30-09:00 Reception**

 **09:00-10:45 Opening session**

Shahbaz Khan, UNESCO-HELP Global Coordinator
António Guerreiro de Brito, President ARH Norte I.P.

09:15-09:45 Key speech 1
Portuguese strategy for adaptation to climate change impacts mediated by water, Luís Veiga da Cunha, FCT-UNL

09:45-10:15 Key speech 2
Towards a Portuguese strategy for water scarcity and drought focal points, Francisco Nunes Correia, IST

10:15-10:45 *Coffee break*

 **10:45-12:30 Planning tools to face water scarcity and drought (WS&D) - sharing experiences**

Chairman: Francisco Nunes Correia, IST

10:45-11:00 Climate change, water security and IWRM in UK, Ian Barker, Head of Water, Environment Agency

11:00-11:15 Harmonising Environmental Considerations with Sustainable Development Potential of River Basins, Ramah Elfriti, Langat River Basin, Malaysia

11:15-11:30 Douro River Basin planning. WS&D issues, Victor Arqued Esquia, Confederacion Hidrografica del Duero, Spain

11:30-12:00 Key speech 3
Water scarcity and drought and the energy nexus, Shahbaz Khan, UNESCO

(discussion period)

12:30-14:15 *Lunch break*

14:15-14:40 Esproarte Orchestra performance

 **14:40-15:30 Special Session**

Dulce Pássaro, Minister of Environment and Spatial Planning.
José Silvano, Mayor Câmara Municipal Mirandela
Jorge Gomes, Governor Bragança District
Carlos Lage, President CCDR-N
Naim Haie, Univ. Minho/SOPSAR, Douro HELP UNESCO
António Guerreiro de Brito, President ARH Norte I.P.

 **15:30-16:30 Water management under WS&D – trends and current solutions**

Chairman: Rui Cortes, UTAD

15:30-15:45 Food and water nexus in the North of Portugal under WS&D, António Ramalho, Regional Director of Agriculture

15:45-16:00 Security of water supply and emergency plans, José Vieira, University of Minho

16:00-16:15 The approach of integrated management of water and land, Susana Neto, Technical University of Lisbon

(discussion period)

16:30-17:00 *Coffee break*

 **17:00-18:15 Water management under WS&D - future scenarios**

Chairman: Naim Haie, University of Minho

17:00-17:15 Drivers of WS&D including climate change: drought in the Nile River Basin, Abdalla Abdelsalam Ahmed, UNESCO Chair

17:15-17:30 Water governance, equity and sustainability, Laudemira Ramos, ARH Tejo

17:30-17:45 Managing water and energy nexus, Pedro Domaniczky, Coordinador por Margen Derecha del CIH., Centro Internacional de Hidroinformática, CIH -Central Hidroeléctrica Itaipu, Asunción, Paraguay

(discussion period)

20:00 *Dinner*

May 28

 **9:00-10:00 Forum discussion: dilemmas and opportunities under WS&D**

Chairman: Joaquim Poças Martins, FEUP

Representative from UNESCO-HELP basins, Adérito Mendes (INAG), Francisco Olazabal (Regional Water Council), Ricardo Magalhães (Douro Mission), José Antonio Paixão (ATMAD)

10:00-10:30 *Coffee break*


 **10:30-12:30 V Regional Water Council (RWC) of ARH do Norte**

Chairman: Guedes Marques (RWC General-secretary) and A.G. Brito (ARH do Norte, I.P.)

Focus on the River Basin Management Plan preparation process

- Coordination and management, Arnaldo Machado, ARH do Norte, I.P.
- Water resources planning.
- Water economics.
- Strategic Environmental Assessment.
- Public participation.
- Information and decision support system.

(all conference participants are invited to attend the RWC)

 **12:30-13:00 Closing session**

Shahbaz Khan, UNESCO-HELP Global Coordinator
Naim Haie, Douro HELP UNESCO
Susana Neto, Guadiana HELP UNESCO
Francisco Taveira Pinto, President APRH Norte
Rosário Norton, Vice-President ARH do Norte, I.P.

13:00-14:30 *Lunch break*

 **15:00-17:30 Côa museum or alternative visit**

Informations:

Venue:
Mirandela (Portugal), Municipal Auditorium

Who should attend:
Policy makers, public administrators and functionaries, NGOs, scientists, Company employees, graduate students, and the general public.

Language:
The conference will be in English and Portuguese with simultaneous translation.

Organizing committee:

Shahbaz Khan, HELP Global Coordinator
Naim Haie, HELP Douro, University of Minho/SOPSAR
Cláudia Sil, HELP Douro, SOPSAR
Susana Neto, HELP Guadiana
Arnaldo Machado, ARH do Norte, I.P.

The symposium is organized under UNESCO-HELP programme in a partnership with University of Minho and SOPSAR and is strongly supported by ARH do Norte, I.P.