MEDITERRANEAN EUWI/WFD JOINT PROCESS

Water scarcity and drought working group meeting
CEDEX
Madrid (Spain), 17th February 2010

CONCLUSIONS
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Working Group web site
http://www.emwis.net/topics/WaterScarcity

These Minutes summarize the discussions and results of the Meeting of the Working Group on Water scarcity and drought of the Joint Process between the Mediterranean Component of the EU Water Initiative (MED EUWI) and the EU Water Framework Directive (WFD). It took place on 17 February 2010, from 09.00 am to 17.15 pm, at CEDEX premises, Madrid, linked to the International Conference on "Water Scarcity and Drought: The path to climate change adaptation", held in Madrid on 18 - 19 February (http://www.conferenciasequia.es/web) and also to the EU Water scarcity and drought working group meeting held in the same day in Madrid. As the two meetings were in parallel most the EU experts (e.g. European Commission, France, Italy) usually involved in the Med WG were unable to attend the meeting.

The Meeting was lead by EMWIS and was supported by the REMOC & CEDEX. The meeting was attended by 21 participants representing 6 countries (Spain, Tunisia, Palestine, Jordan, Morocco and Lebanon) and national & regional institutions (ICARDA, CEDEX, REMOC, Plan Bleu, UPM, UPV & EEA-WTC)[1]. Representatives from Egypt and Turkey were unable to attend due to administrative problems.

List of participants, the presentations and the preparatory documents are available at the web-site of the Working Group: http://www.emwis.net/topics/WaterScarcity

Aims and agenda of the meeting

The last report of this group (2008) highlighted the **need for data and common indicators** to assess the situation on objective basis and monitor the impact of the WS & D management plans and mitigation process defined or under preparation by a large number of Mediterranean partner countries. This meeting focused on the evaluation of indicators used by water authorities, the availability of data to fulfil proposed indicators, and to a less extend to some examples of management plans for such extreme phenomena.

The EU expert group has a similar focus (see its mandate) with a voluntary reporting launched at the end of 2009 and at set of DPSIR[i] indicators tested in pilot river basins. Indeed, in at the EU level the interest on water quantity is rather new as most of the Water

[1] (ICARDA: International Center for Agricultural Research in the Dry Areas; CEDEX : Centro de Estudios y Experimentación de Obras Públicas; REMOC : Mediterranean Network of Basin Organizations; UPM: Universidad Politecnica de Madrid ; UPV: Universidad Politecnica de Valencia; EEA-WTC: Water Topic Center of the European Environment Agency)

Framework Directive focus on quality issues. While South and Eastern Mediterranean countries are used to recurrent drought phenomena and therefore their water needs are much lower than in the EU, indeed even if most of these countries have been considered as water poor[ii] or even in water shortage[iii] conditions for many years, they managed to maintain and develop their socio-economic activities.

The Mediterranean experts have got the opportunity to have a presentation on and discuss the data collection and reporting tool set-up at the EU level thanks to the participation of Ms. Maggie KOSSIDA (Water Topic Center of the European Environment Agency) who left the EU expert group parallel meeting on water quantities to join to join the Med JP in the afternoon.

Prior to the meeting a survey was launched among Mediterranean Partner Countries on the water data availability on three main categories: Water Availability, Water Abstraction, and Water Use. This survey is based on documents and tools prepared by the European Water Topic Centre of the EEA to prepare the European State of Environment. A full exercise of data collection was also launched with the 2 non EU river basins that took part in pilot activities related to the WFD during the previous phase of the Med joint Process: the Sebou in Morroco and the Litani in Lebanon. For this exercise, the EEA reporting tool has been customised with Mediterranean Partner Countries –MPC- administrative regions and river basins.

The first results of this activity will be presented in a leaflet on WS&D in the Mediterranean, that could be the 1st issue of regular publication as recommended by the last working group report.

The meeting was based on the following topics:

- Reminder on the Water Scarcity and Drought working group
- Current activities on water quantities at the EU level
- Overview of indicators proposed in the last working group report (2008)
- Presentation of a case study on the Jucar river basin in Spain and an analysis of Climate Change impact in water resources in Spain
- Indicators and management plans in non EU countries (Tunisia, Palestine, Jordan, Morocco & Lebanon)
- Drought management and early warning (by ICARDA: International Centre for Agricultural Research in the Dry Areas)
- An introduction on Sebou basin in Morocco & Litani basin in Lebanon for testing data collection and validation in two pilot river basins
- Presentation of the European Water Quantity Reporting Tool and potential EU indicators
- Wrap-up and way forward

Main issues discussed

Based on the presentations given and the related debates, the **main issues raised during the discussion** are highlighted below:

1. The participants proposed a third phase for this Joint Process WG on water scarcity and drought, to allow progressing in that issue, mainly to test data collection & indicators performance in pilot basins, to further exchange experiences on management plans and the possibility to apply the approach further **to the whole Mediterranean region**. This extension will aim as well to envisaging a development of sustained Droughts Early Warning Systems based on data and common indicators. The results of such activities could provide information & data useful for 2 topics of the Mediterranean Strategy on water (to be adopted at the forthcoming Ministerial

conference on water, Barcelona, 13 April 2010): "the adaptation to climate change" and the "water demand management" chapters.

2. The working group membership has been renewed following letters sent by EMWIS Steering Committee President to Water Directors of MPC. It was reminded that membership is opened to any organisation active on water scarcity and drought, especially research organisations involved in projects at the Mediterranean level.
3. There is still ambiguity on some concepts (water scarcity, shortage, and drought) and explanations were provided, but the provision of definitions on the WG web page (in Arabic, English and French) would be useful.
4. The various presentations from MPC highlighted the use of drought indicator rather water scarcity, i.e. the availability of data on water availability but less on abstraction and use. The geographical scale is usually national only and on yearly basis although some data might be available on at lower temporal scale.
5. It is still too early to reach an agreement on common indicators between all the countries, as further exploration is necessary thanks to the pilot exercises. But the discussions raised the necessity to use indicators that do not require too much data collection and "simple" to understand (e.g. WEI or SPI). It has also been recognised that different types of indicators are necessary to respond to the needs of stakeholders' categories, e.g. politicians, managers, famers.
6. The participants highlighted the importance of associating indicators with simulation tools (real-time models) and Decision Support System to improve user participation in planning or during scarcity periods. Indeed, end users and farmers are the real actors that can contribute directly to the improvement of water use efficiency. Participants mentioned the necessity of taking into account climate change impact at long term, as well as considering water quality and political issues especially in the Middle East countries.
7. It was felt that complementary indicators were necessary to take into account the impact of WS&D on water quality, socio-economic and operational issues. Water productivity and drought vulnerability indexes were discussed.
8. The problem the reliability of data for shared water resources or in case of overexploitation of aquifers was also addressed, specialty when water abstraction cannot be controlled. This results in difficulties to establish valid reference averages to prepare indicators.
9. In addition to the 2 pilot river basins, other countries were interested in testing data collection using the reporting tool. Members expressed also their interest on the DPSIR indicators and the possibility to carry out pilot activities in river basins from several MPC.
10. The case studies and the country presentations on management plans highlighted the priority put by MPC on water conservation.
11. A leaflet will be prepared to emphasise the aforementioned points, and participants were charged to contribute in a part each. This leaflet will be promoted at the end of the year widely through the regional and national water conferences. A draft outline structure is included in annex as a basis for discussion and contribution.

Conclusions and next steps

Based on above discussions, the following conclusions and next steps were identified:

- The working group members asked the coordinators to ensure that Med Joint Process will continue for at least 3 years and that it will report to the appropriate governance structures, e.g. Union for the Mediterranean water directors or similar group (i.e. "UfM-water governance body").
- To reflect this new phase, a new working group mandate is to be drafted and circulated to the working group members for comments and then presented for formal validation by the "UfM-water governance body"

- Country members, who have not already done it, should complete the data availability survey related to the EEA water quantity reporting tool in order to assess the feasibility of using the different indicators proposed
- The full water quantity reporting exercise, including quality assurance, quality control and indicators preparation, is to be conducted with the two pilot river basins Sebou (Morocco) and Litani (Lebanon) using the EEA water quantity reporting tool.
- The possible provision of additional support by the water topic center of the EEA was welcome by the participants, in particular for:
  - Remote assistance on data collection using the water quantity reporting tool, including conversion of data format to facilitate uploading in the reporting tool;
  - QA/QC on data collected, data processing for the calculation of the various indicators foreseen at the EU level (when feasible with the data collected), the definition of thresholds;
  - Training on the DPSIR WS&D indicators evaluated with some EU pilot river basins

  The EMWIS Technical Unit will explore with the EEA the feasibility of setting-up such support.
- Working group intends to publish mid 2010 a short leaflet (4 to 8 pages) on WS&D in the Mediterranean. Members and participants should review the leaflet outline proposed in annex and:
  - Send comments on the structure proposed
  - Identify on which topic they can contribute
  - Send their contributions for chapter or case studies to the EMWIS Technical Unit
- Additional members are welcome to ensure the representativeness of water scarcity and drought purpose and to involve research and development project representatives
- Organisation of next working group meeting during the second semester 2010, if possible in relation with EU CIS-WG on water scarcity and drought (e.g. back to back to the EU conference to be held in Madrid 18-19 June 2010)

Chapter number	Chapter title	Aim of the chapter/ Topics proposed	Chapter coordinator	Contributors
I	**Introduction**	Purpose of leaflet, brief reminder on the Med JP on WS-D and previous report, links with the Med Water Strategy & projects of the Union for the Mediterranean, Regional & National Information systems, the EU WS&D WG,	**EMWIS**	
II	**Mediterranean context**	General trends on WS-D in the Mediterranean, socio-economic impacts, exacerbation of the risk of conflict on transboundary resources, impact on water quality		
III	**Why collecting data and using common indicators**	Exchange of experience, assessing mitigation strategies, monitoring the impact of the Med Water Strategy and related projects Difference between operational indicators and assessment indicators		**Ana Iglesias & Jeremy Schlickenrieder** UPV, Madrid, Spain
IV	**Experiences with Pilot basins:** **1- Sebou (Morocco)** **2- Litani (Lebanon**	Data collection process & indicators test: - collecting water quantity data (water availability, water abstraction & water use) from the pilot river basins using the EEA reporting tool and guidance documents - Analysing difficulties in data collection including data gaps, proposal of alternative indicators - Analysis of data collected		
V	**Conclusions and Recommendations**	Key learning points, recommendations for regular monitoring, need for further research on socio-economic indicators linked to WS&D	**EMWIS**	ALL

[i] Driving forces, Pressures, States, Impacts, Responses

[ii] Less than 1000m3 of renewable water per capita per year

[iii] Less than 500m3 of renewable water per capita per year