

SEFS 2011, Girona, 27.6.2011

**Water Management Indicators -
State of the Art for the Mediterranean Region**

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The MELIA project



- EU-FP6 INCO-MED project (framework of the Euro-Mediterranean Partnership)
- Structuring dialogue among key stakeholders concerned and affected by water use / management
 - scientists, professionals, decision makers, policy makers, water providers, media professionals, educators and citizens.
- Need for horizontal and vertical integration / dialogue
- 45 partners representing 17 countries from the EU (IT, ES, FR, CY, GR, BE, MT, AT) and the Mediterranean (TK, MO, AL, TU, EG, SY, LEB, JO, PAL)
- 2006 - 2011



Shaping the aim

1. Identify background for setting up an indicator set in the Mediterranean
2. Compare existing approaches of water resources management which use indicators
3. Identify a set of indicators best suited for the application in the Mediterranean
4. Suggest further proceeding to develop an indicator set within the MELIA project



Role of water in the Mediterranean

1. In the Mediterranean, water resources are limited, fragile and very unevenly distributed over space and time.
2. Water supply in several Mediterranean countries is endangered by the over-exploitation of a part of the renewable groundwater
3. Large projects of water transfer and dams are being built in many regions, but the long-term impacts of those interventions may be catastrophic
4. The role of water affects the several social solidarities among the communities in the south.



Complexity of water resources management

1. type of water resource to be measured has to be defined (blue \Leftrightarrow green, use \Leftrightarrow consumption)
2. spatial & temporal variability of surface water and groundwater
3. data availability and quality
4. concept of “availability” of water (pollution, treaties, etc)
5. life style and the perception of water scarcity problems (lack of awareness)
6. Participation of all relevant stake holders



Evaluation of existing indicator sets

- ❖ SWAP – the Mediterranean Dialogue on Framing Sustainability in Water Policy evaluation (EU-FP6)
 - Indicator matrix organised in
 - different indicator topics (env/econ/soc/gov/etc),
 - the main objectives within these topics,
 - and related indicators;
 - additionally specific objectives with subindicators
 - Advantage: has been developed and is already being applied in the Mediterranean



Evaluation of existing indicator sets

- ❖ Aqua Stress (EU Intergrated project)
 - integrated tool for evaluation of conditions of water stress
 - Aquastress Water Stress Matrix (AWSM)
 - Core: Aquastress Water Stress Index (AWSI)
 - maps, photographs, comments, ‘warning system’
 - set of indicators to assess water stress water using sectors (domestic, industrial, agriculture, env.)
 - water quality and quantity
 - institutional and adaptive capacity
 - Infrastructure
 - society and equity



Evaluation of existing indicator sets

❖ UN Water – Water monitoring

- list of Key Water Indicators for UN-Water
 - already available in UN-Water member databases
 - currently under development
 - few newly proposed
- Target monitoring => SD, MDG, IWRM
- System monitoring
 - Resources / stocks and use
 - Early warning
 - Health and social aspects
 - Economic aspects
 - Quality aspects



Conclusions

- ❖ To effectively analyse existing indicators sets and look for necessary adaptations for a specific region, it is necessary to understand the setting – the circumstances
- ❖ There are dissimilarity among countries adjacent to the Mediterranean Sea, and variable conditions even within the specific countries, in terms of water availability, economic conditions, technical development
- ❖ Main issues to ensure a sustainable management of water resources in the Mediterranean are political as well as technical
- ❖ To evaluate the current situation & to measure the progress towards specific goals, certain indicators are needed
 - “You can’t manage what you can’t measure!”



Recommendations

One aim of MELIA: propose set of indicators applicable in the Mediterranean region → proceeding:

- ❖ general feedback round (additional issues / indicators?)
- ❖ set up a new (?) MELIA indicator set and discuss in workshop
- ❖ involve representatives of national institutions now responsible for the data collection → information on data availability / feasibility
- ❖ apply/ test in MELIA countries
- ❖ Process to identify best-suited set has to be understood as participatory, integrative and iterative

¡Muchísimas gracias!

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