

Challenges of the water crisis in the Mediterranean

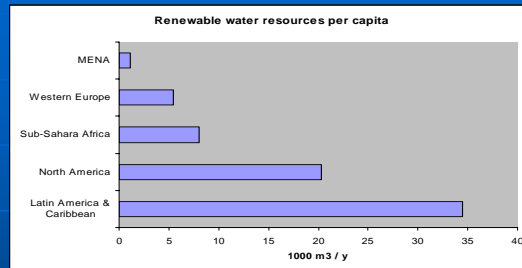
Eric MINO

Euro-Med Information System
on know-how in the water sector

www.emwis.net

Water a scarce & fragile resource

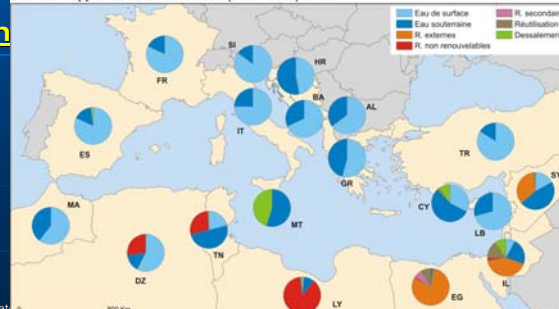
- 60% of the world water poor population



- Unevenly distributed in time and space

- Over exploitation of renewable water and fossil aquifers

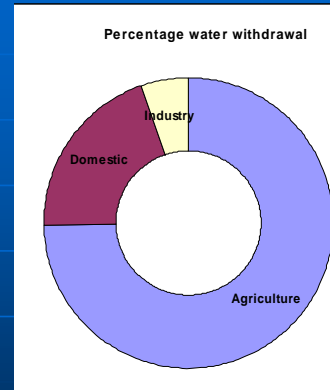
Sources d'approvisionnement en eau (2000 - 2005) en %





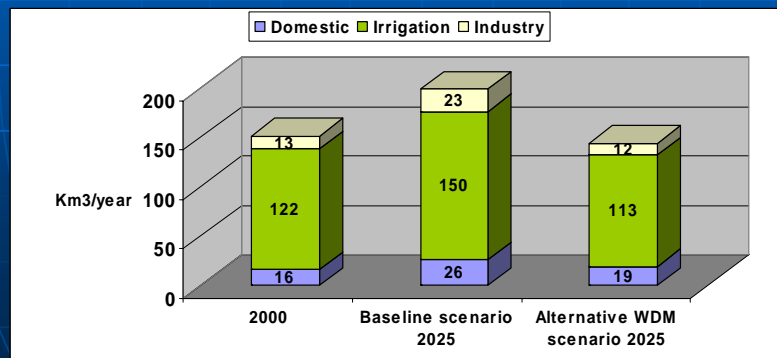
Main pressures

- **Coastal areas:**
 - High concentration of urban population
 - 25% of international tourist trade
- **High level of abstraction for agriculture**
 - 70%
- **But growing demand from urban areas**
 - 20%
- **Growing population in South and East Med**
 - About 4% per year
- **Impact of climate change**
 - Water quality damage
 - More demand for agriculture
 - Less quantity



Potential benefits of Demand Management

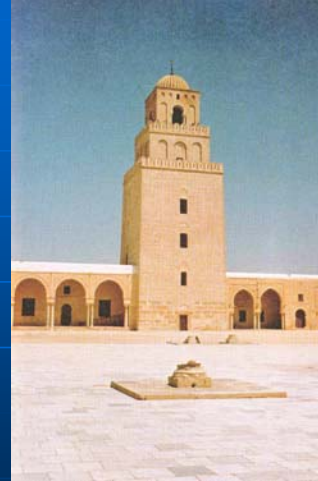
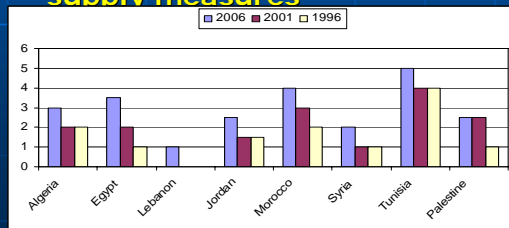
- **Great potential savings:**
 - 25% of water withdrawal in 2025
 - Agriculture: about 67% of potential savings
- **Increased added value of water**



Demand management in water policies



- **A long experience in management the water scarcity**
 - Water harvesting, reuse, ...
- **A policy goal for almost all countries**
- **But remains secondary to supply measures**



Rain water harvesting
Kerouan mosque, XI century

Qualitative review of DM in water management over 10 years, GTZ/ KFW

WWF5 – Side event: Water Resources across Europe – confronting Water Scarcity and Drought, 18 March 2009

Most promising options



- **Water efficiency in irrigation**
 - Water savings between 30% and 50%
 - Increased production
 - Technologies introduced with broader approach: new crops, fertilisers, participatory management
 - Incentives and training
- **Treated waste water reuse**
 - Mainly in urban areas
 - For irrigation purpose
 - In-house recycling of grey-water with incentives
 - Lack of costs/benefits economical analysis
- **Awareness / education campaigns**
 - Usual business of water authorities

WWF5 – Side event: Water Resources across Europe – confronting Water Scarcity and Drought, 18 March 2009



Other lessons

- **Drinking Water supply networks**
 - Constraints due to resource availability (e.g. non permanent water distribution)
 - Reduction of unaccounted-for-water with private water utilities
- **Water valuation to reduce consumption**
 - Difficult for domestic water (low income population)
 - Very limited for agriculture
 - -> largely subsidies (rural development)
 - -> use of non priced resources
 - -> Shift to higher value crops
 - Tourism & industry -> investment in water saving technologies





Main challenges

- **Well balancing supply & demand management**
 - Long term planning for supply investment
- **Local and participative management**
- **Multisectoral approach**
 - Agriculture, industry, tourism, environment (quality, eco-system)
- **Availability of relevant data at the right scale**


Thank you

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National portals


Thematic forums/folders
Ground water, water scarcity
Water glossaries, satellite images, etc.




Common taxonomy
(environment, resources)




Clearing house for EU programs and initiatives
Regional water projects database



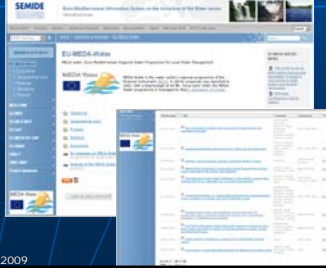
Monthly eNews Flash in Arabic, English and French



e-who does what



EU ARCADIA Atlas



WWF5 – Side event: Water Resources across Europe – conference, 18 March 2009