



“Mediterranean Dialogue for Integrated Water Management”

MELIA

INCO-CT-2006-517612

Coordinator: Prof. Rafael Rodríguez-Clemente

Project Manager: Dr. Ana Hidalgo

E-mail: ana.hidalgo@ebd.csic.es

Doñana Biological Station-CSIC, Sevilla, Spain





FINANCING PROGRAM: INCO FP6 (international cooperation with third countries)

INSTRUMENT: Coordination Action

Coordination actions are actions of multiple partners to promote and support networking and coordination of activities. They cover the definition, organization and management of joint or common initiatives as well as organizing conferences, meetings, studies, exchanges of personnel, exchange and dissemination of good practices, and creation of information systems and expert groups in common.



BUDGET: 2.000.000 €

CONSORTIUM COMPOSITION: 45 partners representing 17 countries from both the EU (Italy, Spain, France, Cyprus, Greece, Holland, Malta, Austria) and the Mediterranean (Turkey, Morocco, Algeria, Tunisia, Egypt, Syria, Lebanon, Jordan, Palestine).

PARTICIPANTS: Research Institutions, basin management organisations, decision makers, policy makers, water providers, users, International or Intergovernmental Organizations, NGOs.

DURATION: 1 Sept. 2006-31 Agosto 2011



THE LANDSCAPE:

✓ Integrated water management has been a continued topic of collaboration between the EU and the MPC through different instruments.

WHY MELIA?

✓ There exists a general perception that water management models are still constructed from points of view that ignore contributions by all the key stake-holders (especially users and citizens). The local, cultural, social and economic peculiarities are critical to generate the necessary efficiency of water planning and management, and the collective concern on its issues.

✓ The added value of MELIA respect to other similar projects is its diversity in the composition of the consortium, based on the will to incorporate to the dialogue on IWRM multiples points of view from different countries and economic, intellectual and social sectors.

✓ The main hypothesis of this project is that the dialogue of the multiple partners and the external invited expert will produce recommendations on the implementations of the sustainable and integrated water management that could be used as a common reference for the MPC.



MAIN OBJECTIVES:

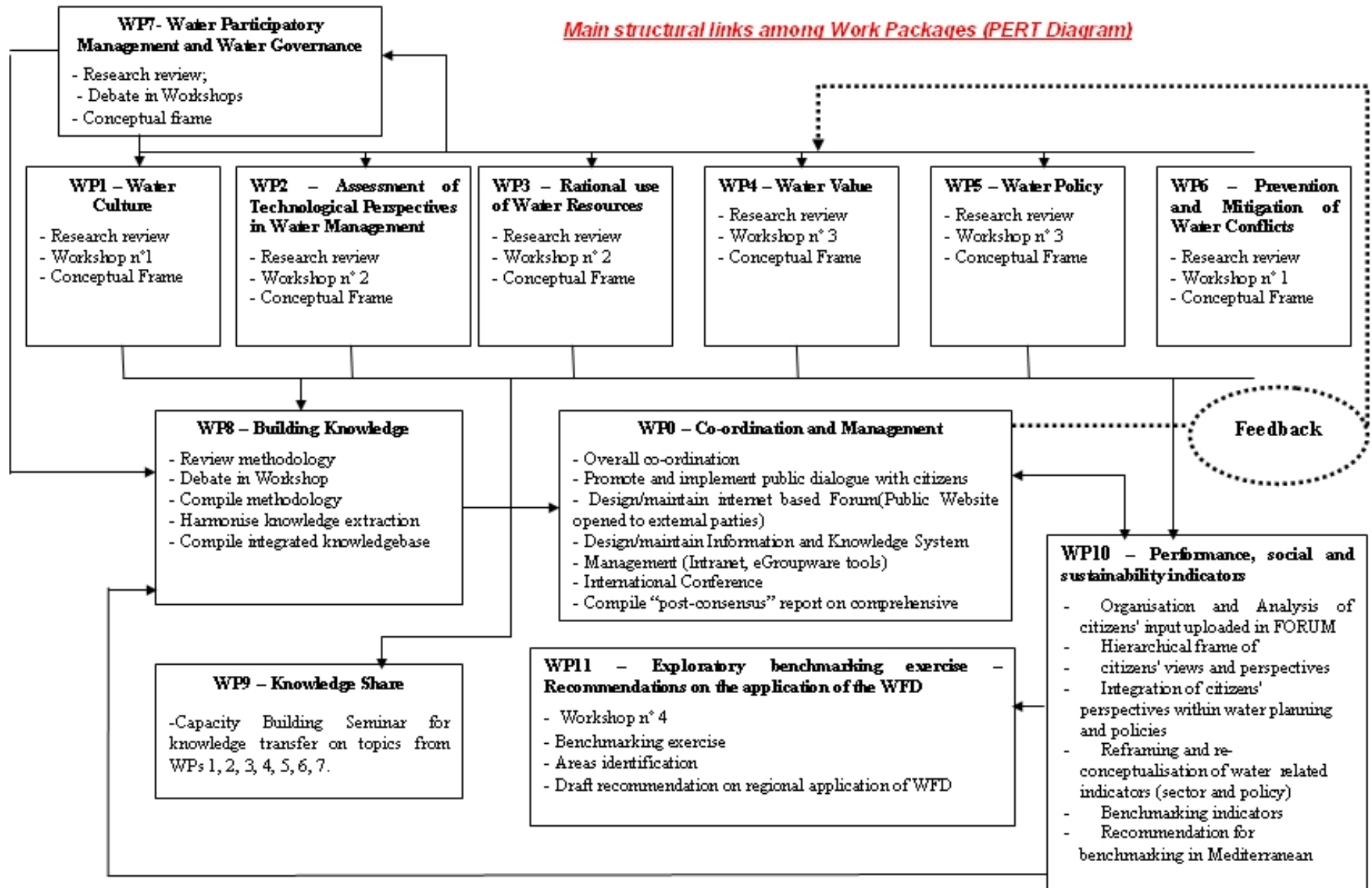
✓MELIA aims at opening a dialog between stakeholder interested in the water management of the Mediterranean area, in order to explore the possibility to define a common frame of reference and actions to support a sustainable approach to the integrated water management in this area, based on the contributions from the previous and running scientific and technical project of co-operation, and the identification of the cultural, legal, economic and political frames. In other words: to foster a common Mediterranean Water Policy inspired in the principles of the WFD, i.e., sustainable management and care for the quality of waters.



Working Methodology:

- ✓ Gathering information
- ✓ Building a knowledge base for integrated water resources management (IWRM), based on integrating contributions from different perspectives, involving the wide spectrum of stakeholders and based on the general frame of the European WFD.
- ✓ Dissemination is carried out by means of a wide communication strategy addressed to all those involved actors in water use, who set up the Community of Practice (CoP) in rising awareness at educational level, in research, administration and policy making.

Main structural links among Work Packages (PERT Diagram)





DISSEMINATION MATERIALS AND ACTIVITIES (face-to-face and on line collaborative):

- 4 Workshops
- 1 Capacity Building Seminar.
- Final Conference.
- Edition of 3 books.
- 2 films.
- Documents, publications, press releases, collaboration in media: radio, television, leaflets, CD ROMs, round tables.
- 1 Itinerant exhibition: “AQUA Domain and Myths” around the Mediterranean:
- Publication of the Exhibition catalogue.
- Development of a semantic library.
- Development of a post-MELIA dissemination strategy.

WATER POLICY GOOD PRACTICES

| Key lever | Country | Activity |
|--|---|--|
| Defining and implementing National water strategies: the central role of Institutional Systems and legal frameworks. | Jordan, Morocco Egypt, Tunisia France | Develop policies and strategies of demand management in addition to water supply strategies. |
| | Cyprus | Concentration of the responsibilities for water issues in the Ministry of Agriculture, Natural Resources and Environment visible through the promulgation law. |
| | Cyprus | Creation of a National Water Authority to accelerate the implementation of EU Directives. |
| | Morocco | Promulgation of a law on Water to adapt water management to social and economical development in a long term view (federal principles: public status of water, unity of water resources management, recognition of the economical value of water, adoption of the polluter-pays principle, creation of basin agencies, promote national and regional solidarity with mechanisms of solidarity concerning transfers between basins) |
| | France | 2006 LEMA (Law for Water and Aquatic environments): Provide the administration, the territorial communities and the water stakeholders in general with the tools for recapturing water quality; Provide the territorial communities with the means to adapt the public services of potable water and sanitation to the new stakes in terms of transparency vis-à-vis the users, of solidarity towards the destitute and of environmental efficiency. |
| | Jordan | The Ministry of Water and irrigation is responsible of water resources; two agencies are executing bodies (WAJ for drinking and waste water, JVA for the development of the Jordan Rift Valley): no overlapping of responsibilities |

| Key lever | Country | Activity |
|--|----------------|---|
| Participatory approach and Governance. Role and responsibilities of the stakeholders. | Lebanon | 10-year plan: innovative aspects of this action plan are interfacing managers and farmers through a combination of advice and incentives. Innovative cycle of analysis for the determination of the best feasible water allocation, which requires expertise in the technology and management of irrigation system. |
| | France | Water policy defined on a partnership basis between the State, all the Territorial Communities and the users – manufacturers, large regional developers, fishermen and fish farmers, conservation associations – associated at each level. Dialogue is institutionalized at three levels: national, basin districts, and at the level of the affluents and the sub-basins corresponding to an hydrographic unit or an aquifer (a local water commission made up for half by the representatives from the territorial communities, for one quarter of the users representatives, and for another quarter of the State representatives, can be created to elaborate and follow the application of the Plan for Water Development and Management (SAGE) |
| | France | Experiences of concerted management between the agricultural users: The mission CGGREF 2005 has indeed “reported, concerning irrigation, the virtues of collective discipline, the virtues of collective structures, or concerning the individual irrigation users, the virtues of the mandatory procedure [...]. These initiative of collective concerted management, can lead to a sharp reduction in the water consumptions for irrigation at the level of the catchment point . |

| Key lever | Country | Activity |
|---|--------------------|--|
| Managing droughts and scarcity | Tunisia France | Study to evaluate and quantify the available resources in order to compare it with the water demand . |
| | Tunisia | Policy of reinforcement of connection between reservoirs and regional transfers (Tunisia); |
| | Egypt | Cultivation of new varieties with a shorter growth duration and lower water consumption (decrease consumption by crops) |
| | Egypt | Maximize the drainage water reuse. |
| | Spain France | Drought plan: develop by basin, include drought thresholds and protocols of actions. |
| | Spain | Institutional framework: creation of a “drought observatory” made up of administrations with competences in water issues to form a center of knowledge, anticipation, mitigation and follow up of the effects of droughts in the territory. |
| Definition of an adequate tariff policy | France, Tunisia | Tariff policy founded on the progressivity of tariffs for incitation to water saving |
| | EU countries | User-polluter-pays principle |
| Protecting groundwater resources | Malta | A Resource Authority has the role to investigate the disposal or discharge of dangerous substances and thus maintains the right to prohibit or grant authorisation of its disposal once it ensures that all the necessary technical precautions are respected and no harm is being done to the groundwater |

| Key lever | Country | Activity |
|---|--------------------|---|
| Managing droughts and scarcity | Tunisia France | Study to evaluate and quantify the available resources in order to compare it with the water demand . |
| | Tunisia | Policy of reinforcement of connection between reservoirs and regional transfers (Tunisia); |
| | Egypt | Cultivation of new varieties with a shorter growth duration and lower water consumption (decrease consumption by crops) |
| | Egypt | Maximize the drainage water reuse. |
| | Spain France | Drought plan: develop by basin, include drought thresholds and protocols of actions. |
| | Spain | Institutional framework: creation of a “drought observatory” made up of administrations with competences in water issues to form a center of knowledge, anticipation, mitigation and follow up of the effects of droughts in the territory. |
| Definition of an adequate tariff policy | France, Tunisia | Tariff policy founded on the progressivity of tariffs for incitation to water saving |
| | EU countries | User-polluter-pays principle |
| Protecting groundwater resources | Malta | A Resource Authority has the role to investigate the disposal or discharge of dangerous substances and thus maintains the right to prohibit or grant authorisation of its disposal once it ensures that all the necessary technical precautions are respected and no harm is being done to the groundwater. |
| | Cyprus | Groundwater is vested to the Government and the written permission of the District Officer is required before any water may be taken or use |
| | France Spain | Integration of surface and groundwater in schemes of joint exploitation |

| Key lever | Country | Activity |
|--|---------|--|
| Non conventional waters | Tunisia | National strategy for the reuse of treated wastewater (mobilization for golf, green spaces) and collection of rain water (individual basin construction encouraged by Government credits); desalinization of brackish waters in extension in some touristic urban areas and south agglomerations |
| | Morocco | Development of marine water desalinization for coastal cities |
| Networks for monitoring of water resources | Morocco | Monitoring for irrigation: pollution state in irrigated perimeters, collection of data about intensive agricultural sector, control of the use of fertilizers |
| | France | Water Information System (WIS) : SIW concerns all data useful for the general knowledge of the water resources and the aquatic environments: quality, quantity, uses, regulatory data, etc... |

THE INTEGRATED WATER RESOURCES MANAGEMENT IN THE MEDITERANEAN COUNTRIES



Laws and regulations have tried to apply some IWRM principles of IWRM are common in most of the Mediterranean countries, but there are some factors causing the failure of applying this concept :

- The Lack of public perception of the importance of a appropriate water management is the highest risk. Education and media mobilization at all levels must address this problem.
- Demography, the climatic change impact, a new approach to agriculture and participation must be integrated in the modeling of water uses.
- The Lack of awareness of the impacts of political and economic decision on the long term prospect of water supply is one of the biggest danger of our current society.

MELIA PROJECT RECOMMENDATIONS

- Establishment of an effective and consensual national regulatory framework, to facilitate the IWRM implementation .
- Participation of the public and private partnerships. Promote effective participation of end users.
- Development of a cheap and user friendly wastewater treatment infrastructure, which guarantees sustainability, and is adapted to the context, financial capacity and educational level.
- Law needs to implement control, vigilance and follow-up mechanisms creating penalty regulations, for it to be effectively carried out.
- Civic education and awareness about the risks related to a bad planning of water use, and the necessity of water re-use in guaranteed conditions,
- Water resources are overexploited, and changes in the agricultural model have to be introduced: produce products that consume less water and the use of treated wastewaters for agricultural purposes.

More information in our web:

www.meliaproject.eu

**THANK YOU FOR YOUR
ATTENTION**