

# Mediterranean Component of the EU Water Initiative

# Promoting IWRM planning in Lebanon through the GWP-Med /MED EUWI support

**Lead Country: GREECE** 

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### What is the EU Water Initiative (EUWI)

- A process with specific objectives (cfr. MDGs on water and sanitation & WSSD goals)
- Platform for strategic and political dialogue on water issues
- Open forum for consultation with concerned stakeholders
- Mechanism for improved co-ordination between the EU and the countries
- Mechanism to promote ownership and demand from partners
- Means to catalyse funding for IWRM, including water resources development and service delivery



#### The EUWI is NOT

- A new organisation
- A financial institution
- A new source of finance

## **Overall Objectives - Aims**

- →Assist the design of better, demand-driven and result-oriented programmes
- → Facilitate better co-ordination of water programmes and projects, targeting a more effective use of existing funds and mobilising new financial resources
- → Foster co-operation for projects' proper implementation, based on enhancing synergies and strategic assessment

### **MED EUWI Focus Themes**

- Integrated water resources management (IWRM) with emphasis on planning of national & transboundary bodies
- Water supply & sanitation with emphasis on the poorest part of the societies
- Water, food, environment interaction with emphasis on fragile ecosystems
- Non-conventional water resources

#### and Horizontal Focus Themes:

- Transfer of technology, know-how & training
- Education

MED EUWI is one of the 4 Regional Components of the global EU Water Initiative, along with Africa, Central Asia and Latin America

## Mediterranean Component of the EUWI (MED EUWI)

#### Country Dialogues / Interventions – on going and planned

- On-going:
   Egypt (WSS, IWRM, Finance),
   Lebanon (IWRM, Finance),
   Palestine (Governance)
- Pre-Dialogue activities:
   Syria (IWRM), Palestine
   Tunisia (IWRM)
   Libya (Governance)
- Requested:
   Jordan (IWRM), Morocco (Non-Conventional),
   Mauritania (Finance & Governance)
- On going transboundary,
   based on issues and basins:
   Rivers, Lakes, Ground water, Climate Change Adaptation
   Sava, Drin, Ohrid, Skoder, Prespa

#### Lead

Activities are led by the Lebanese Ministry of Energy and Water - DGHER

#### **Overall Goal**

To assist with Integrated Water Resources Management (IWRM) planning in Lebanon

#### **Activities of Phase I (until April 2009)**

- Assist with the review of the 10 Year Strategy Plan for Water,
- Launch the preparation of the National Integrated Water Resources Management (IWRM) Plan: Focus on multistakeholders consultations.

# Assist with the review of the 10 Year Strategy Plan for Water and launch the preparation of the IWRM Plan with focus on multi-stakeholders consultations:

- Brief analysis of current needs and trends (up to 2020) of the water supply sector in Lebanon with focus on demand management for domestic, irrigation and industrial uses as well as on non-conventional water resources (particularly wastewater) and techniques (e.g aquifer recharge);
- Consolidation of the Plan with the provisions of the Law 221, including the evolution of the Water Establishments with regard to Public Private Partnerships;

#### Assist with the review of the 10 Year Strategy Plan for Water:

- Development of an awareness component in the Plan focusing on enhancing water demand management and non-conventional water resources;
- Development of a capacity building component to assist with the implementation of the Plan.
- -Building on a multi-stakeholder approach about 50 targeted stakeholder organisations have been informed and involved in the Dialogue activities under the lead of the MEW.

#### **Activities of Phase II (on-going)**

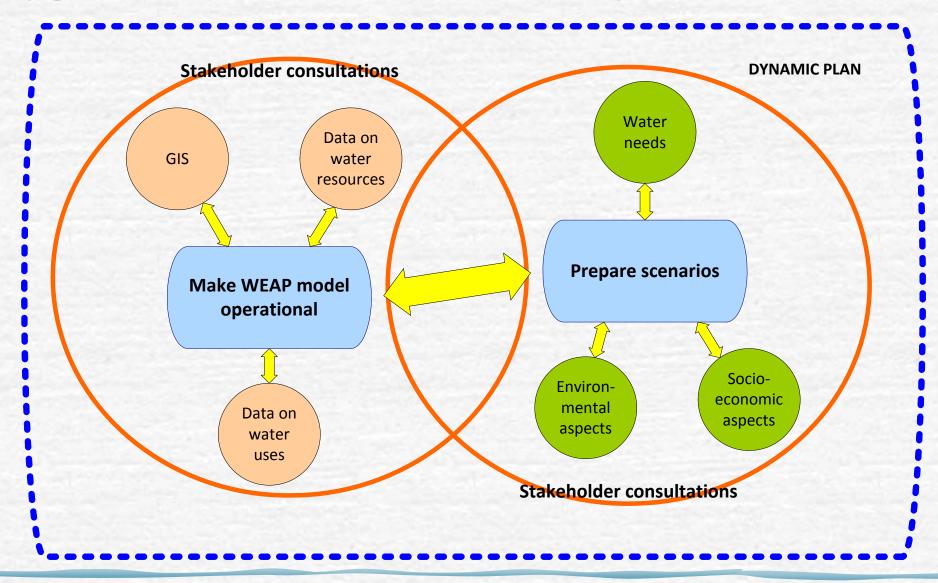
- Assist with the preparation of the National Water Sector Strategy (NWSS)
- Private Sector Participation activity in support to Strategic Planning Efforts of the Government
- Progress towards the preparation of the National IWRM Plan through the set-up and functioning of a WEAP model to serve as a Decision Support tool for policy/decision makers

#### **Support**

MED EUWI activities are supported by the European Commission, the Greek Government and the GEF Strategic Partnership for the Mediterranean Large Marine Ecosystem

#### **MED EUWI Service Contract**

#### (Egis International / IME / CEDARE Consortium)



## **WEAP Data Requirements**

# Schematics and maps of Lebanese river basins

Georeferenced maps

GIS layers of catchments, rivers, land use, vegetation cover, soil type, geology, irrigated areas, and location of relevant infrastructure

#### **Demand data**

Municipal, domestic, industrial, irrigation, livestock, etc.

Total withdrawals from surface and groundwater

**Drivers** 

Water use rates

Withdrawal vs. consumption

Monthly variation in water use

Loss and reuse

#### **Hydrology**

River and tributaries head flows: Time series data or monthly inflows

- River flow monitoring data

Land use/land cover data.

Monthly crop water

requirements

Soil type

Climate data

### **WEAP Data Requirements**

#### Groundwater

Maximum storage capacity

**Initial storage** 

Maximum withdrawal per month

Recharge volume

### Reservoirs

Inflow

Initial and maximum storage capacity

Volume elevation curve

Monthly evaporation rate

Levels of reservoir storage

#### Hydropower:

Max and min. turbine flows tail water elevation, efficiency, etc.

# Other supply sources

imports, transfers, desalinization, etc

### **WEAP Data Requirements**

Losses in the system

(pipes, etc.)

Major point sources for pollutants

> pollutant loads contributed

Wastewater treatment facilities

Volume of wastewater treated and discharged

Percent of pollutants removed or load discharged

Water quality data

and estimates of the river cross-section and length Basic economic information

marginal costs of operation of infrastructure,

capital costs

prices charged on different water uses.

#### **IWRM** based scenarios

Modeling using WEAP & basin management software

**Capacity building on WEAP model** 

GIS data

**Data on water demand** 

**Data on water resources** 

Contribution to the development of water policies & instruments based on IWRM principles



### **THANK YOU**

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