



Dr. Ismail Al Baz

Ph.D Water Microbiology

Project Director EMWater Project

Jordan

EMWater Project

Efficient Management of Wastewater, its Treatment and Reuse in the Mediterranean Countries 2003 - 2007

Funded by the European Union



Implemented by InWEnt







InWEnt -"Internationale Weiterbildung und Entwicklung" gGmbH

Capacity Building International, Germany

The merger between the:

Carl Duisberg Gesellschaft (CDG)

and

German Foundation for International Development(DSE)

Business fields continue the prior work of the CDG and DSE:

- Training of specialists and political decision makers in development cooperation
- International dialogue and exchange of experience
- International and intercultural qualification of specialists, directors and up-coming professionals from Germany and other industrial countries
- Preparing German development experts for their foreign assignments
- Domestic development-based political information and training programs





MEDA Progamme

- In 1995 the European Union has started the MEDA Programme (Euro-Mediterranean Partnership)
- The Programme shall improve the infrastructure in the so called MEDA Countries
- Objective is the establishment of the Euro-Mediterranean Free-Trade Area in 2010





Euro-Mediterranean Water Network

- Important Milestone in this process has been the establishment of the Euro-Mediterranean Water Network in 1999
- The Euro-Mediterranean Water Network shall strengthen the regional cooperation between the MEDA Countries in the field of water supply and wastewater management





Water in the Middle East

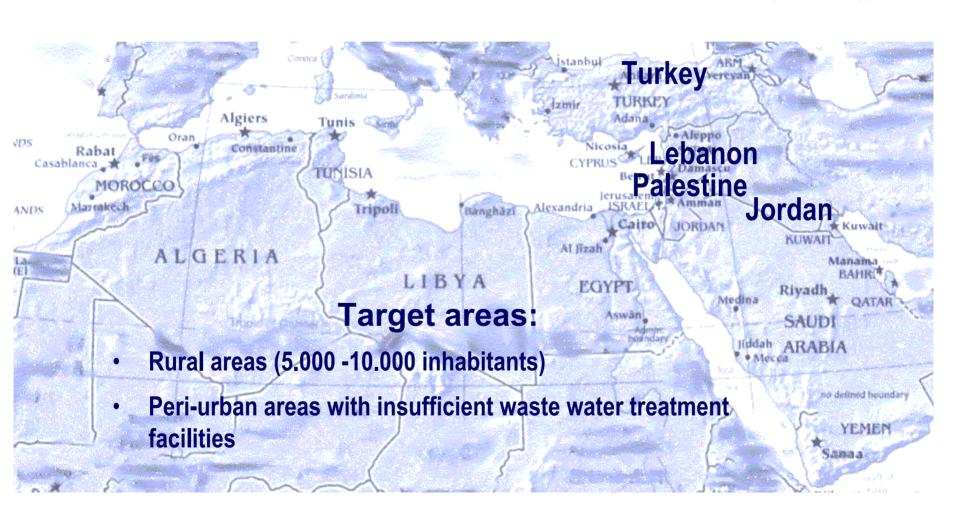
- Water is an essential element for the economic development and political stability in the whole region
- Limited water resources are recognised as the most important obstacle to the development of the agricultural sector
- Aspects of decentralisation and privatisation are increasingly taken in consideration to enhance the efficiency of water management

MEDA 2003-2007

inNent

Target countries:

Internationale Weiterbildung und Entwicklung gGmbH







Situation in the beneficiary countries

- In all of these countries, wastewater treatment is not sufficient
- High water losses in the drinking water supply (average between 30%-50%)
- Rural and peri-urban areas are mostly neglected from water and wastewater facilities (average between 20-30% coverage while in cities 50-90%)





 Jordan and Palestine belong to the countries which are most affected by water scarcity worldwide

 Availability of renewable water resources are below 500m³ per capita and year





Internationals Weiterhildung und Entwicklung glämbH

Project - Objectives and Purposes

- Implementation of technical guidelines for wastewater
- Strengthening the exchange of experience
- Cooperation between the Mediterranean Countries (South-South Cooperation) and between the EU Countries (North-South Cooperation)
- Development and application of low-cost solutions



Fields of Action



- Analysis and estimation of the local situation
- Practical work through sampling and analysing programs
- Development of policy guidelines
- Training of stakeholders and professionals
- Design and construction of pilot plants
- Organisation of workshops and a regional conference





Participation and Promotion of Environmental Awareness

through:

- All stakeholders
- User and consumer associations
- Women organisations
- Environmental protection organisations



Partners



Internationale Weiterbildung und Entwicklung gemühl

- InWEnt- Internationale Weiterbildung und Entwicklung gGmbH
- Yildiz Technical University, Yildiz, Turkey
- Balamand University, Tripoli, Lebanon
- Birzeit University, Birzeit, Palestine
- Al al-Bayt University, Mafraq, Jordan

- Technische Universität Hamburg-Harburg
- Adelphi Research gGmbH
- ENEA- Ente per le Nuove Tecnologie, L'Energia e L'Ambiente





Expected Results

- Policy guidelines for efficient wastewater treatment
- Reuse standards
- Human resources development
- Computer based training
- Pilot Plants for demonstration
- Increased public awareness
- Increased environmental protection

Project first year achievements

- Country studies for the MEDA countries is now finished and ready for publication
- Training programs local, regional and web-based announcement, selection of participants and module development is now finalized.
- Implementation of training programs will take place between June and October 2004 in the MEDA Countries.

- Project web-site is established and used actively by all project members.
- EU and MEDA partners meetings has been successfully organized.
- Coordination with local stakeholders and international donor organization in the region is going well.
- Active participation in regional water conferences (Water Demand Conference in Dead Sea, Jordan) and other conferences to present project results.
- Dissemination of project information is continuously done through project brochures and announcement in different specialized journals.

- Procedures for procurement of the pilot plant and time plan for design and construction is established
- Report writing and financial management of the project is also functioning well.
- Coordination meetings with EU representatives in the region is going continuously
- Established of taskforces within partners including:
- Pilot plant design and construction
- Web-based training
- > Training programs
- Low cost technologies

Constrains

- Difficulties in communication due to the huge number of partners and different work mentalities.
- Difficulties by follow up the EU guideline for financial management.
- **❖** The high working load due to staff limitation.
- **❖** Political restrictions in the region e.g. Palestine.
- Difficulties by NGOS involvement in the project in some countries due to special country conditions.

Thank you