


Sustainable Water Integrated Management (SWIM) - Support Mechanism



Project funded by the European Union

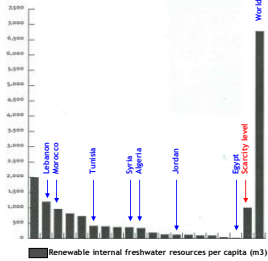
Water is too precious to waste

ENPI HORIZON 2020 CB/MEP WASTEWATER TREATMENT & REUSE, Amman - Jordan, 8 March 2011

Presented by: Suzan TAHA, SWIM-SM

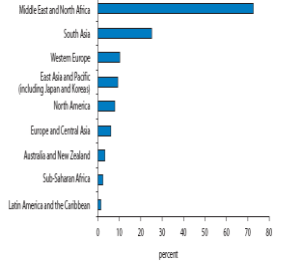
The Water Situation in the Southern Mediterranean Region is Critical

Per capita Renewable Water Resources in the South Mediterranean countries is the Lowest in the World



Source: UNDP Arab Human Development Report, 2010

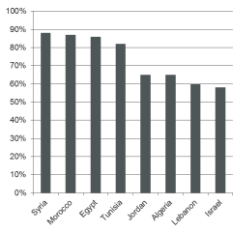
Renewable Water Resources Withdrawn is the Highest in the World



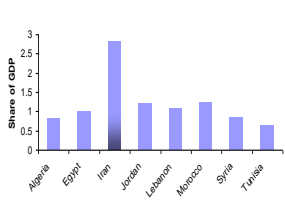
Source: FAO Aquasat, Making the Most of Scarcity, the World Bank 2006

Water in the Southern Mediterranean Region is mainly Used for Agriculture and its Quality has Deteriorated

Most of the Water Withdrawals comes from Agriculture



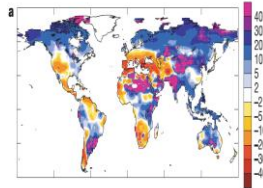
Deteriorating Water Quality is Costly and Affects Public Health



Sources: The Little Green Data Book, The World Bank, 2010 & Sarraf et al: Cost of Environmental Degradation, METAP

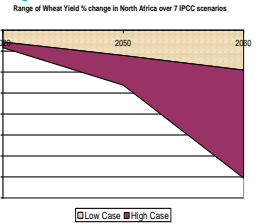
Climate Change will make the water situation worse

Water Availability will Decrease



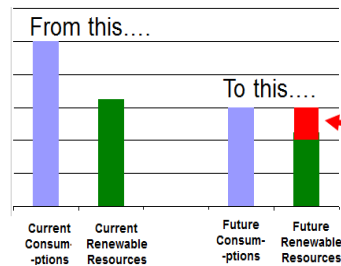
Source: Milliman et al. (2005), published in Nature

Agriculture Yields will Decline



Source: Stern Report Background paper

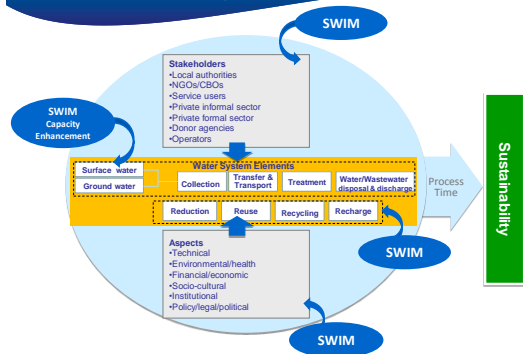
THE MOST PLAUSIBLE SOLUTIONS... Manage Water Demands & add Water Supplies



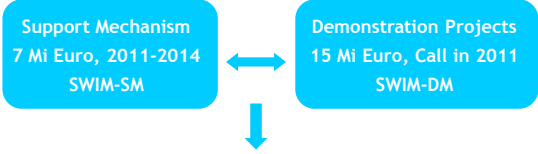
Additional resources:
 • Conventional
 • Non-conventional
 • Water savings

Source: P.Montovani (2008), Climate Change and Water in the Arab World, 13th World Water Congress

THE MOST PLAUSIBLE SOLUTIONS... Manage Water Holistically, in an Integrated Manner that leads to Sustainability



The EC-Funded Sustainable Water Integrated Management (SWIM) Project can Contribute to the Solution



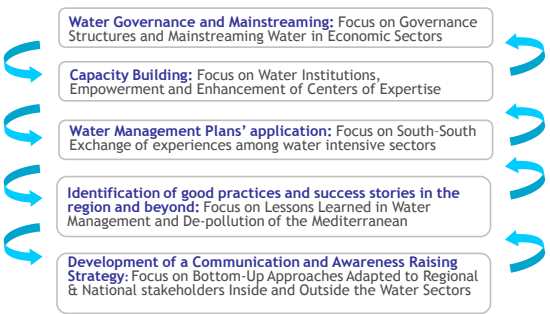
Overall objective:
 To promote actively the extensive dissemination of sustainable water management policies and practices in the region given the context of increasing water scarcity, combined pressure on water resources from a wide range of users and desertification processes, in connection with climate change.

The SWIM Program Bridges Partners Countries & EC Initiatives Related to Water & Pollution

SWIM Partner Countries:
 Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, the occupied Palestinian territory, Syria and Tunisia



SWIM Support Mechanism: Project Components



SWIM Support Mechanism: Consortium

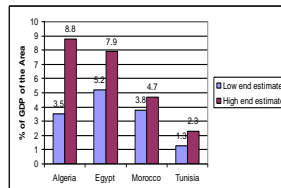
Formed by:	Name of legal entity:	Based in:
Leader	LDK Consultants Engineers & Planners SA	Greece
Member 1	Arab Countries Water Utilities Association (ACWUA)	Jordan
Member 2	Arab Network for Environment and Development (RAED)	Cairo
Member 3	DHV B.V.	The Netherlands
Member 4	Global Water Partnership-Mediterranean (GWP-Med)	Greece
Member 5	Greek Ministry of Environment, Energy & Climate Change, Department of International Relations & EU Affairs	Greece
Member 6	Lebanese Ministry of Energy and Water, General Directorate of Hydraulic and Electrical Resources	Lebanon
Member 7	Tunisian Ministry of Agriculture and Environment, Hydraulic Resources & Fishery, Bureau de l'inventaire et des Recherches Hydrauliques / Direction Generale des Ressources en Eau	Tunisia
Member 8	Environment Agency Austria - Umweltbundesamt GmbH	Austria

Synergies with Horizon 2020



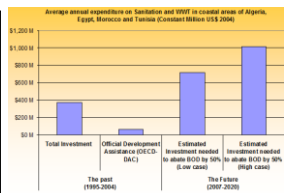
De-polluting the Southern Mediterranean from Wastewater is Expensive

Annual Cost of Environmental Degradation along the Southern Mediterranean Coasts is VERY HIGH



Source: METAP/World Bank, 2006, estimates based on data from selected pilot coastal areas

Annual Investments in Sanitation and Wastewater Treatment are VERY HIGH



Source: World Bank staff calculation based on data from Governments, OECD, Plan Bleu

Examples of What SWIM Can Offer to Horizon 2020

Water Governance & Mainstreaming



- Support the development of Governance structures for wastewater and solid waste management
- Enhance compliance and enforcement of relevant water regulations in the industrial and solid waste sectors
- Assess the cost of mitigation of water quality degradation in industrial and municipal wastewater

Capacity Building



- Environmental Economic Tools for Cost Benefit Analysis of water & wastewater
- Case Studies for Training of water and wastewater operators at the sub-national levels
- Development and Adoption of Innovative Technologies in Wastewater Treatment and Re-Use and leachate treatment

Examples of What SWIM Can Offer to Horizon 2020

Application of Water Management Plans



- Identification of Institutional and Financial Barriers in water & wastewater management plans
- Preparation of Compliance & Enforcement Action Plans to reduce water & wastewater pollution at the plant level

Identification of Good Practices & Success Stories



- Development of case studies & lessons learned from the Mediterranean Hot Spot Investment Program and the Capacity Building/Mediterranean Environment Program

Development of a Communication & Awareness Raising Strategy



- Support of Public Disclosure of Information Related to Water Quantity and Quality

مع خالص شكري
وامتناني

Thank you
for your attention

Merci pour
votre attention



For additional information please contact:
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