



Sustainable Water
Integrated Management (SWIM) -
Support Mechanism



Project funded by
the European Union

Water is too precious to waste

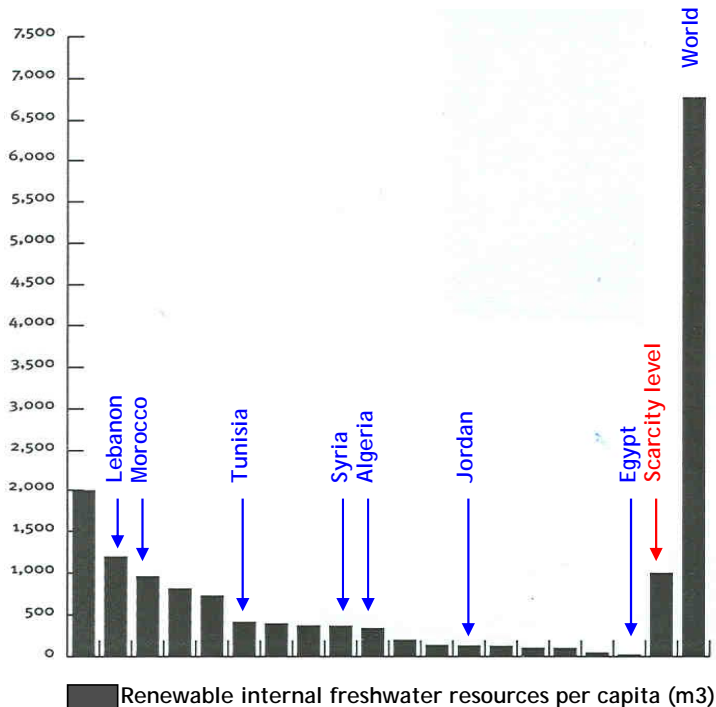
**4th Meeting of the
HORIZON 2020 Steering Group**

Amman, Jordan | 22-23 February 2011

Presented by: Dr. Sherif Arif, Team Leader SWIM-SM

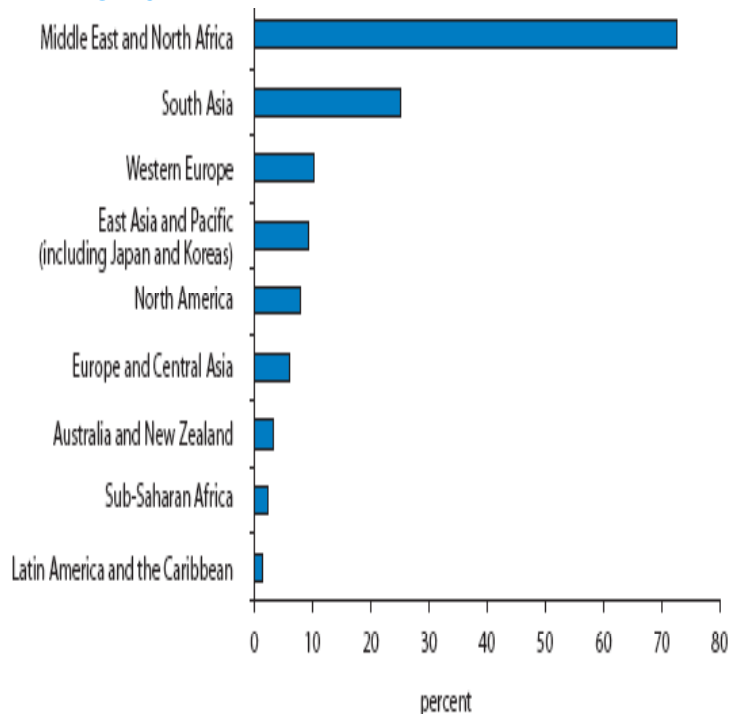
The Water Situation in the Southern Mediterranean Region is Critical

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



Source: UNDP Arab Human Development Report, 2010

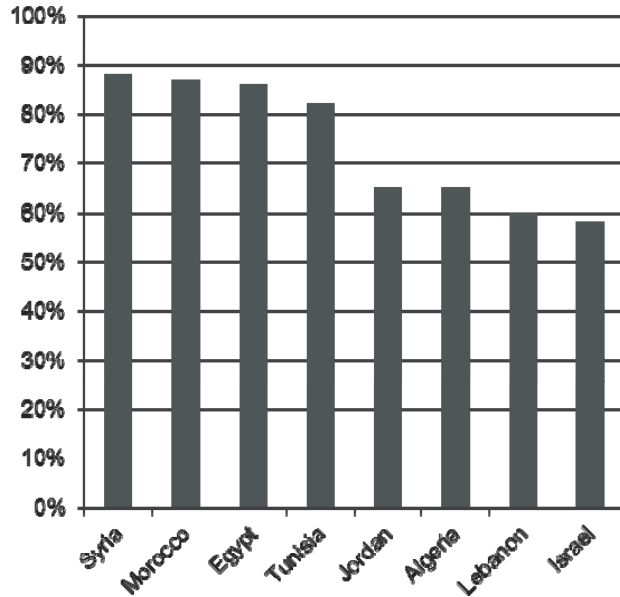
Renewable Water Resources Withdrawn is the Highest in the World



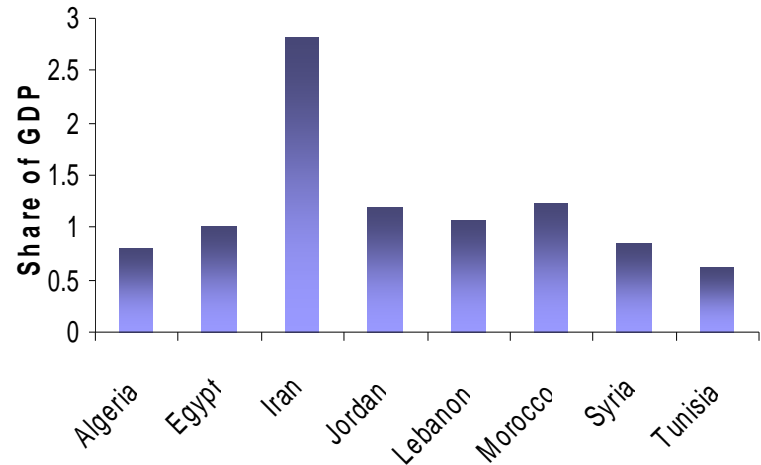
Source: FAO Aquastat, Making the Most of Scarcity, the World Bank 2006

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

Most of the Water Withdrawals comes from Agriculture

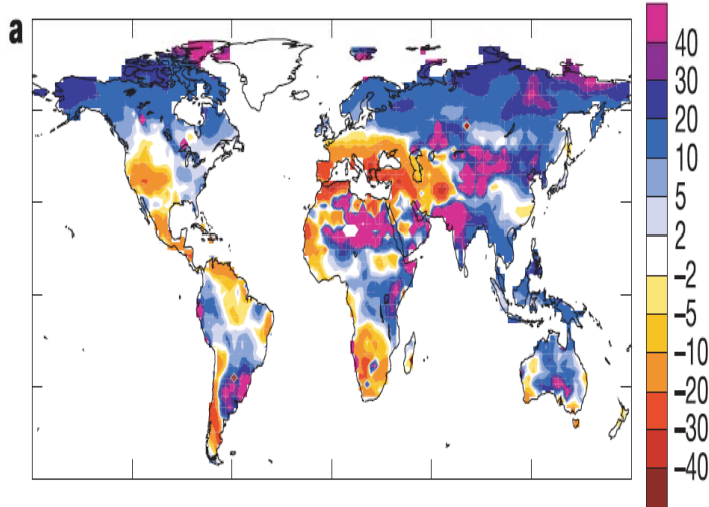


Deteriorating Water Quality is Costly and Affects Public Health



Climate Change will make the water situation worse

Water Availability will Decrease



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

Agriculture Yields will Decline

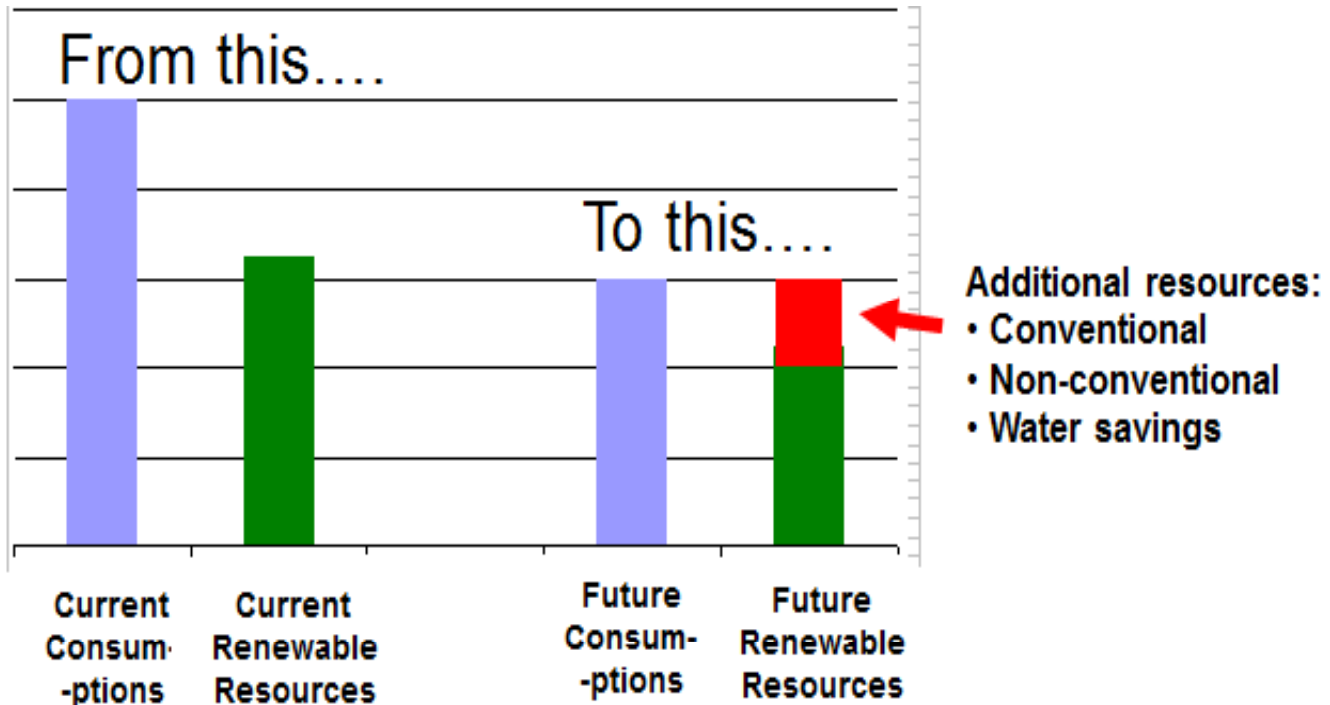
Range of Wheat Yield % change in North Africa over 7 IPCC scenarios



Source: Stern Report Background paper

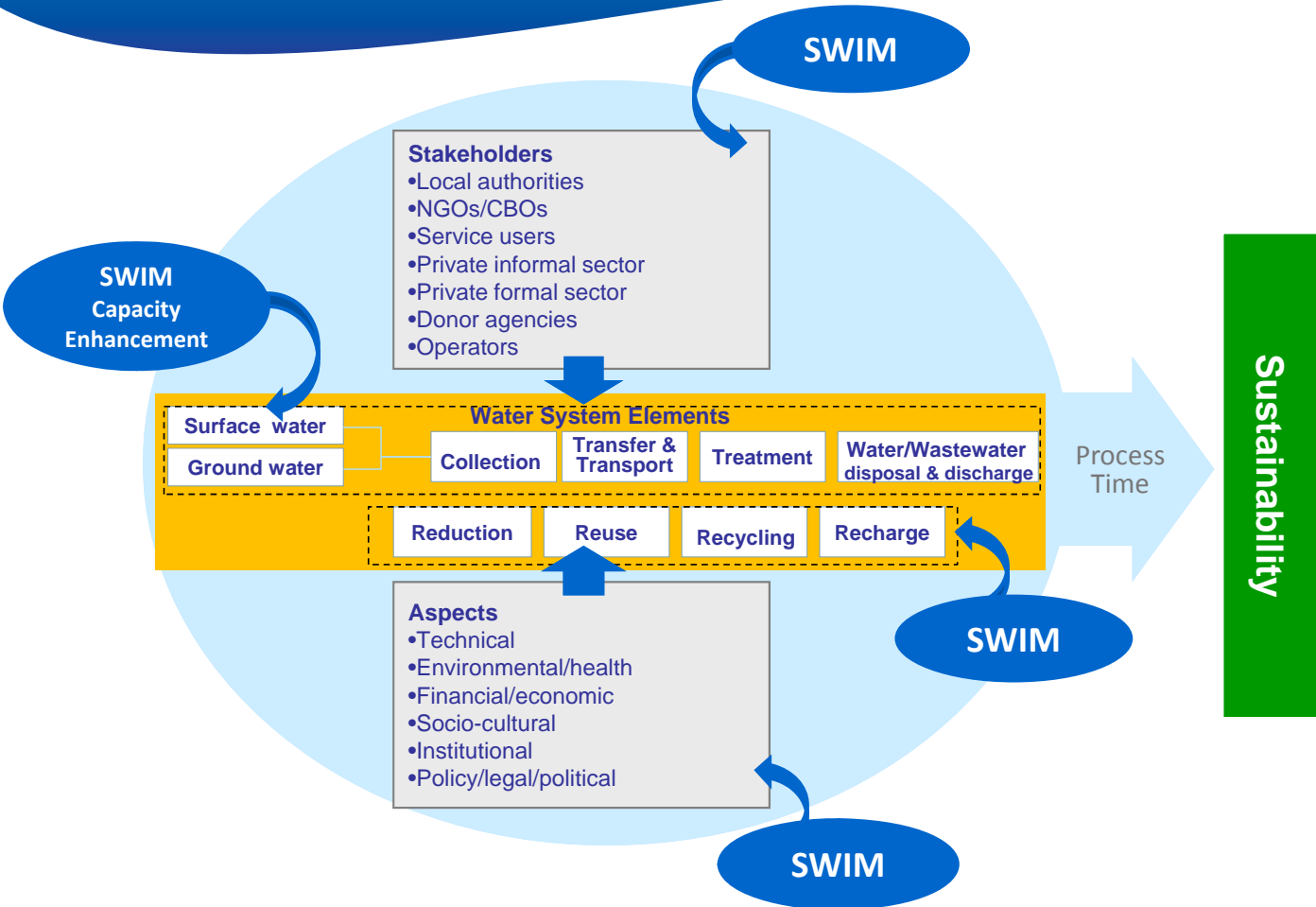
THE MOST PLAUSIBLE SOLUTIONS...

Manage Water Demands & add Water Supplies

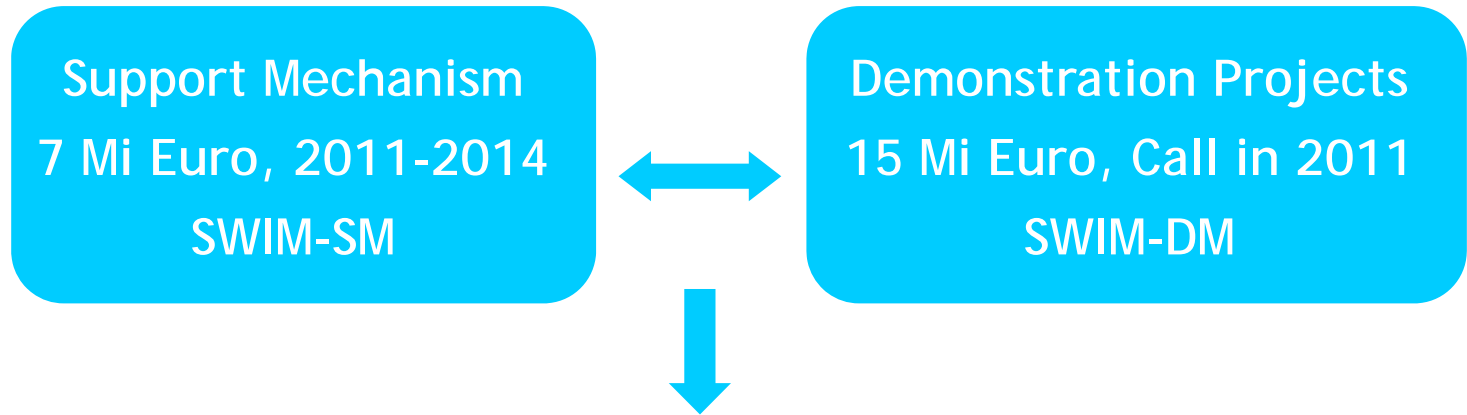


THE MOST PLAUSABLE SOLUTIONS...

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

Sustainable Water Integrated Management (SWIM)

Mediterranean Component of EU Water Initiative (MED EUWI)

UfM Draft Strategy for Water in the Mediterranean (SWM)

Horizon 2020 Initiative to de-pollute the Mediterranean Sea



Dynamic interaction

SWIM Support Mechanism: Project Components



Water Governance and Mainstreaming: Focus on Governance Structures and Mainstreaming Water in Economic Sectors

Capacity Building: Focus on Water Institutions, Empowerment and Enhancement of Centers of Expertise

Water Management Plans' application: Focus on South-South Exchange of experiences among water intensive sectors

Identification of good practices and success stories in the region and beyond: Focus on Lessons Learned in Water Management and De-pollution of the Mediterranean

Development of a Communication and Awareness Raising Strategy: Focus on Bottom-Up Approaches Adapted to Regional & National stakeholders Inside and Outside the Water Sectors

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 Générale des Ressources en Eau	Tunisia
Member 8	Environment Agency Austria - Umweltbundesamt GmbH	Austria

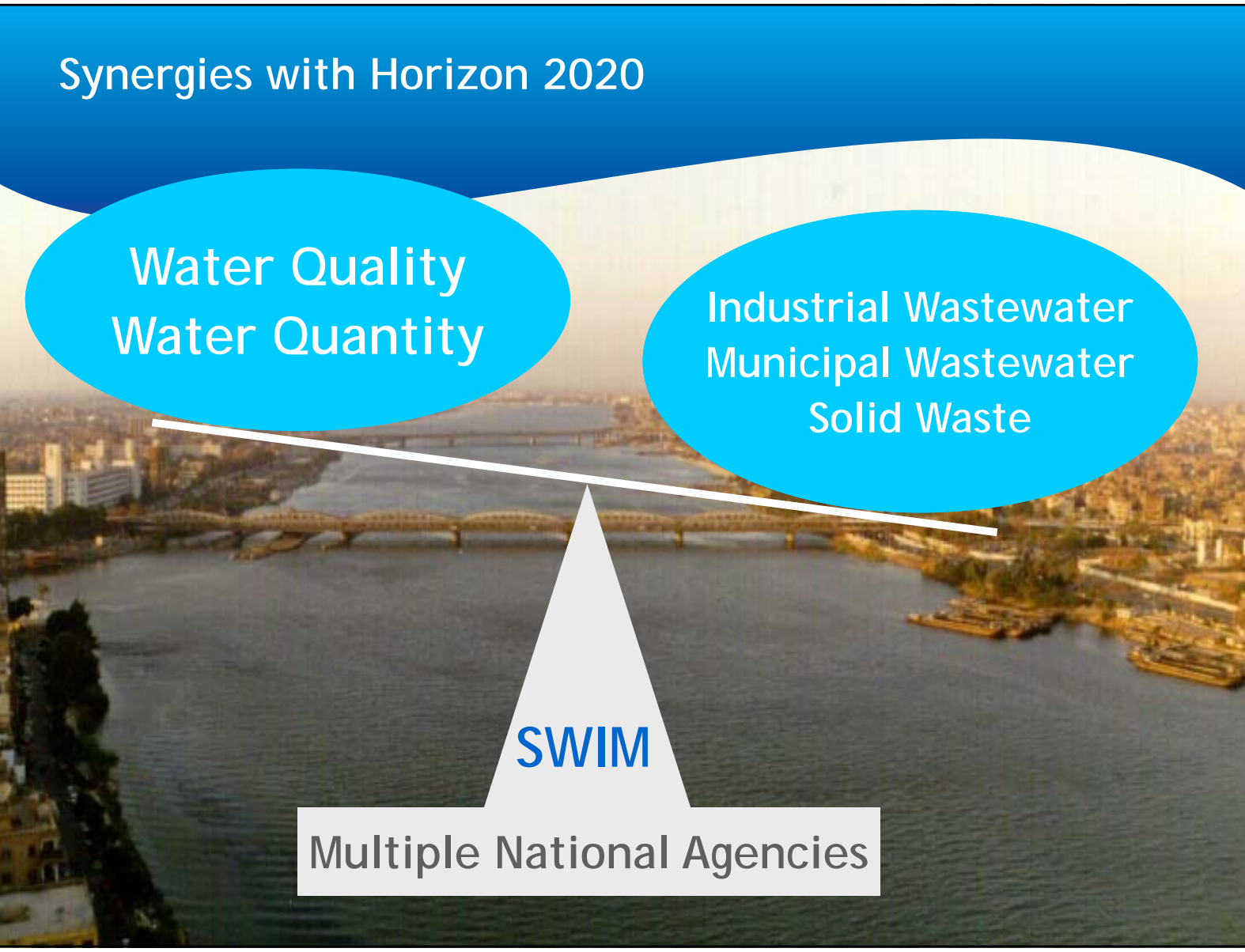
Synergies with Horizon 2020

Water Quality
Water Quantity

Industrial Wastewater
Municipal Wastewater
Solid Waste

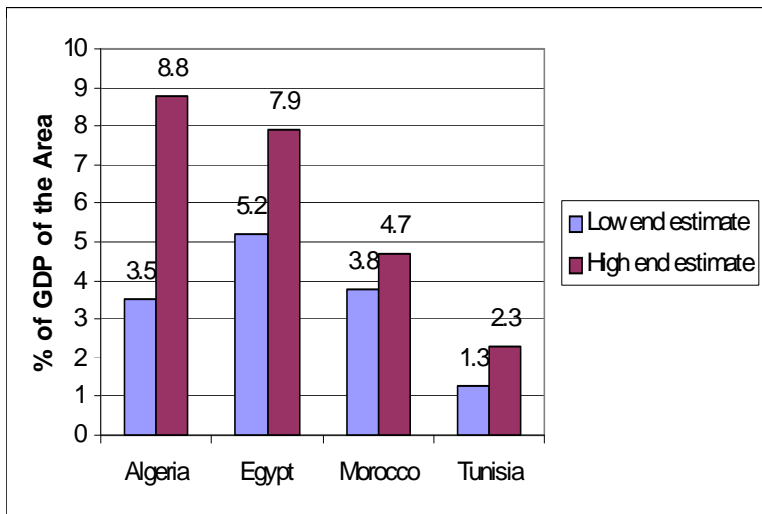
SWIM

Multiple National Agencies



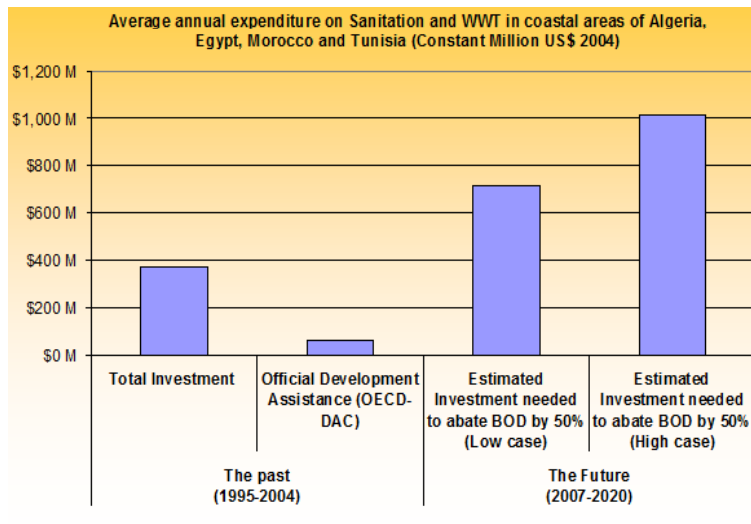
De-polluting the Southern Mediterranean from Wastewater is Expensive

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
وامتتاني

Thank you
for your attention

Merci pour
votre attention



For additional information please contact:

Sustainable Water Integrated Management - Support Mechanism: info@swim-sm.eu