



Stakeholder Participation in support of Policy Proposals

The INECO Stakeholder Assembly Workshop
Tunis, 15-16 July 2008

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INECO...

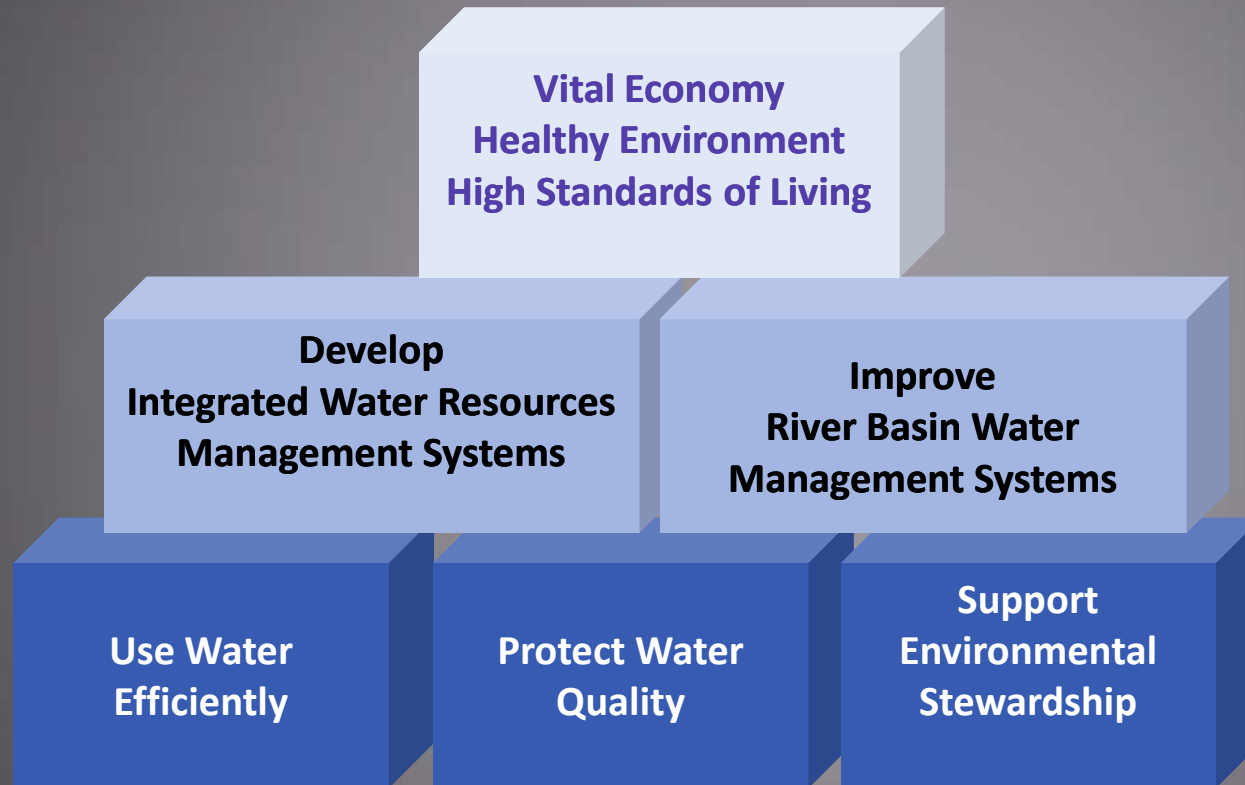
- ◎ Stands for “*Institutional and Economic Instruments for Sustainable Water Management in the Mediterranean Region*”
- ◎ Builds on previous research to disseminate methods and approaches for constructively engaged IWRM
- ◎ Aims to facilitate the uptake of policy outcomes
- ◎ Builds on the active participation of local communities

The Challenges of WRM

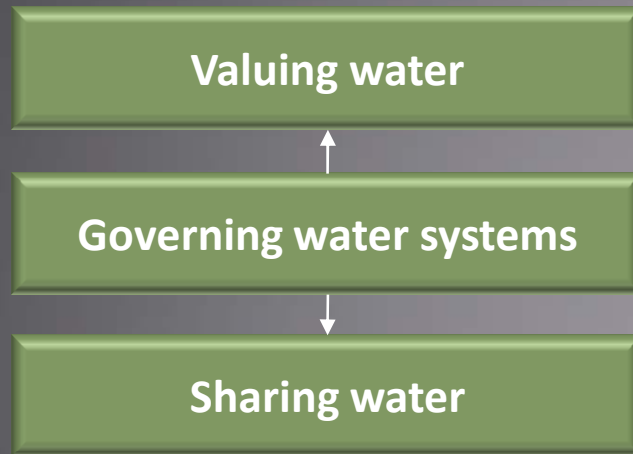
- ⦿ Inefficient land use
- ⦿ Poor infrastructure maintenance
- ⦿ Overuse of non-renewable water resources
- ⦿ Lack of access to basic water services
- ⦿ Pollution, environmental damage
- ⦿ Climate change & increasing water stress

Potential solutions to water problems are in most cases well known but have often not been implemented

Effective Water Management: The Elements



Sustainable WRM



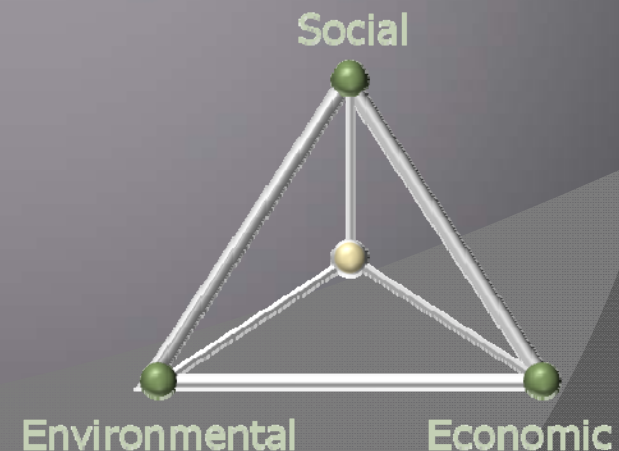
Estimating costs and values, Assessing the socio-economic importance of water uses, Maximizing economic efficiency, Allocating costs

Public participation, Decentralisation, River basin management, Financial sustainability, Subsidiarity principle

Managing effectively shared resources, taking into account the interests of all users, ensuring access to water services



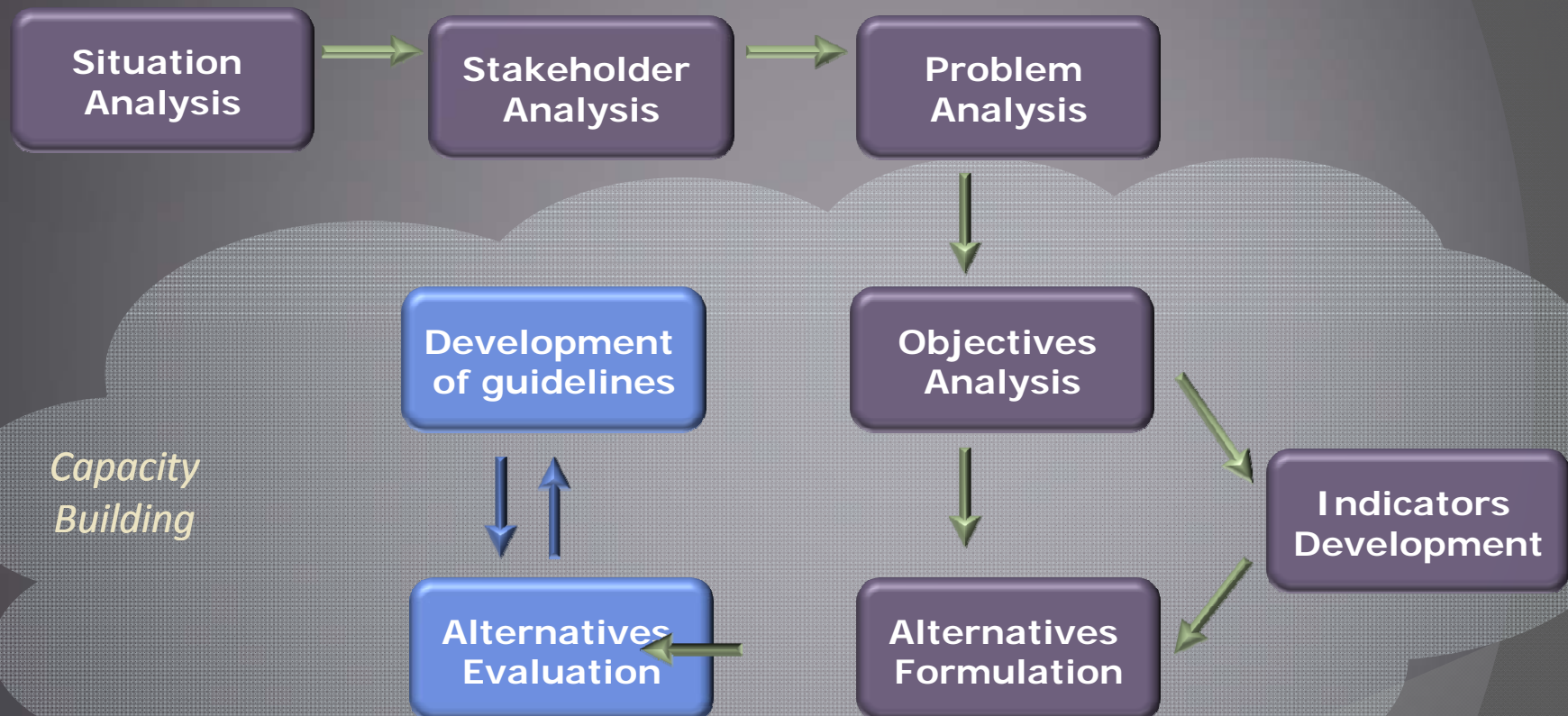
Engaging Multi-stakeholder Fora



Building on local participation: Why?

- ⦿ Project implementation is largely the job of the local community
- ⦿ Communities are instigators of policies
- ⦿ Community-needs must be addressed when projects are formulated and not after they have been implemented
- ⦿ Enforcement by the community, empowers community's responsibility

The INECO Approach



From Situation to Problem Analysis

◎ Situation analysis in regions

- Water supply, demand & water use patterns
- Water pollution, resource depletion
- Provision of water services, infrastructure
- Current institutional and financial context for water resource management and protection

◎ Stakeholder analysis & consultation



◎ Identification of critical (focal) water management problems – **The INECO Case Studies**

◎ Problem Analysis

- Mapping of causal interrelationships
- Problem Tree Analysis
- Development of indicators relevant to the specific water management issues, their causes and effects

The INECO Case Studies:

A typology of water management problems

River Basin Management

- ⊙ Water stress & sectoral allocation
 - **Lebanon:** Water stress in the Damour River Basin
 - **Morocco:** Inefficient water use in the Oum Er Rbia River Basin
- ⊙ Groundwater management
 - **Cyprus:** Aquifer depletion and sea intrusion
 - **Tunisia:** Aquifer depletion and salinisation

Urban water management

- ⊙ Water quality degradation & inadequate services
 - **Egypt:** Water quality deterioration in the region of Bahr Basandeila Canal
 - **Syria:** Water pollution in the Barada River Basin (Greater Damascus Area)
 - **Algeria:** Water pollution in the Seybouse River Basin

... and of underlying causes

Country	Sharing			Valuing			Governing				
	S1	S2	S3	V1	V2	V3	G1	G2	G3	G4	G5
Syria		✓	✓	✓	✓		✓	✓	✓	✓	✓
Tunisia		✓		✓	✓		✓	✓	✓		
Cyprus	✓	✓			✓				✓	✓	✓
Morocco	✓	✓		✓	✓			✓			
Lebanon	✓	✓	✓	✓	✓		✓		✓		✓
Egypt		✓	✓	✓	✓		✓	✓		✓	
Algeria		✓		✓	✓		✓		✓		✓

S.1 Water allocation conflicts (scarcity & stress)
 S.2 Inefficient management of shared resources
 S.3 No access to basic water services

V.1 Low recovery of costs
 V.2 Ineffective application of the polluter-pays principle
 V.3 Inefficient water allocation

G.1 No financing/planning for technical solutions & water works
 G.2 Limited/no public participation
 G.3 Inability/unwillingness to enforce legislation
 G.4 Overlaps in responsibility
 G.5 Lack of human resources

The INECO Workshops: A Decisive Step



*Damour, Lebanon
12/09/2007*



*Damascus, Syria
10/09/2007*

**Tunisia Assembly
Workshop
15-16/07/2008**



*Basandeila, Egypt
21-22/07/2007*



*Pegeia, Cyprus
26-27/10/2007*



*Afourer, Morocco
21/03/2008*



*Nabeul, Tunisia
06/12/2007*

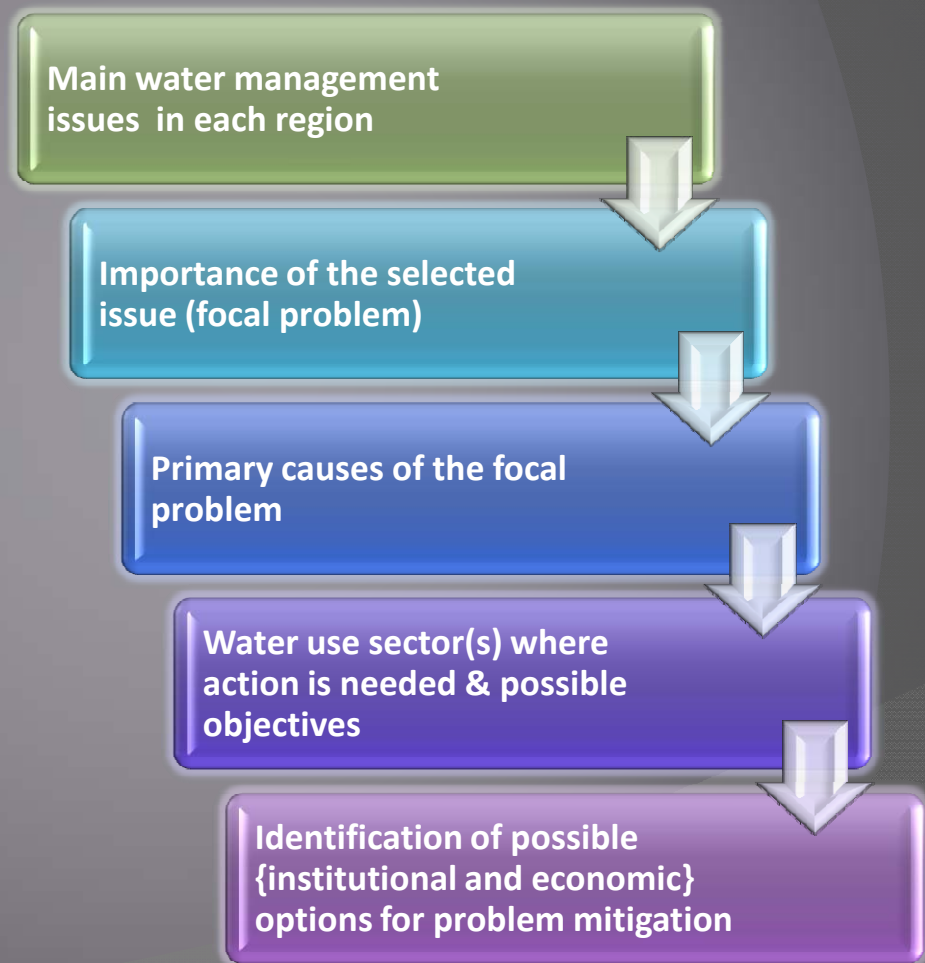


*Annaba, Algeria
19/01/2008*

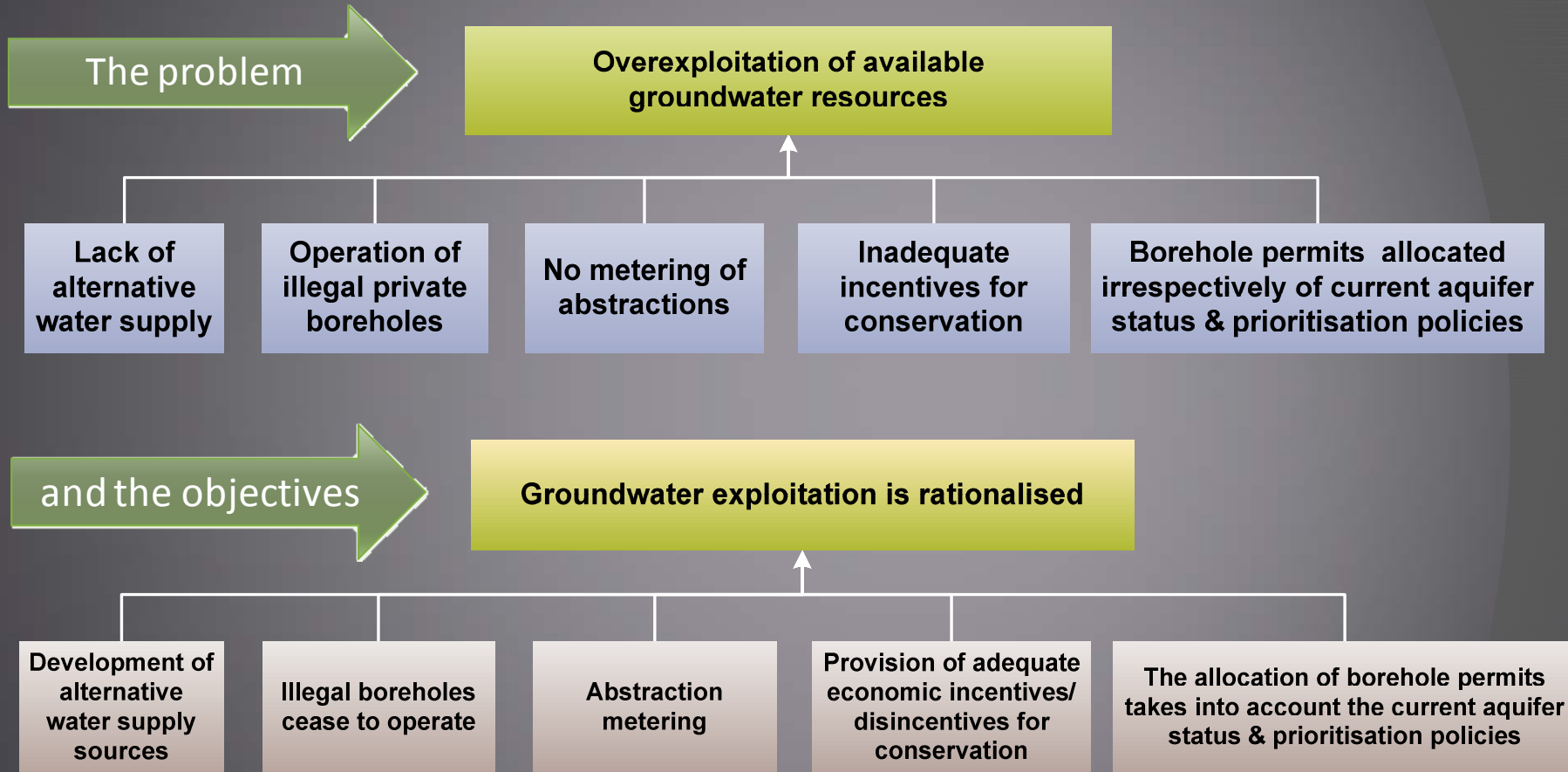
Regional workshops

Objectives & Focus of discussions

- ◎ Engagement in a constructive dialogue
 - Maximize opportunities for multi-faceted solutions
 - Learn from stakeholders
- ◎ Establishment
 - Shared frame of reference
 - Shared goals
 - Shared design of process to achieve goals



From problems to objectives



Groundwater overexploitation in Pegeia, Cyprus

From objectives to options:

Types of alternative instruments

⊙ Economic instruments & voluntary measures

- Aim: Promote self-regulation
- Pricing, subsidies, environmental taxation, indirect taxation, tradable permits, voluntary agreements

⊙ Command-and-control approach

- Regulation by authorities
- Stricter enforcement of legislation/stricter standards/stricter forms of sanction

⊙ Supporting & enabling instruments

- Public participation processes
- Awareness, education, stewardship
- Decentralization & collective management

From objectives to options:

Development of alternative options

Industrial pollution abatement - Seybouse River Basin, Algeria

- (Stricter) effluent standards and delineation of vulnerable/protected areas
- Technology standards for specific industrial processes
- Discharge permits
- Surveillance, monitoring and enforcement of legislation on wastewater discharge:
 - Penalties for non compliance with emission standards
 - Reduction of potential government subsidies in case of non-compliance
- Effluent charge systems – Environmental taxation (e.g. pollution taxes, pollution charges)
- Voluntary agreements with industries to reduce wastewater production and discharge of polluting effluents
- Environmental performance bonds for industries
- Training on wastewater treatment and water recycling in the industrial sector
- Revolving funds for financing collective effluent treatment schemes
- Grants, tax incentives for the relocation of polluting industries
- Tradable discharge permits

Option Analysis

Instruments already in use

- ⦿ Main provisions (legislative, institutional)
- ⦿ Barriers to effective implementation
 - Human/technical resources constraints
 - Lack of data
 - Transparency of procedures (definition & implementation)
- ⦿ Effectiveness
 - Impact on consumption/pollution
 - Cost recovery, etc.
- ⦿ Social issues
 - Water prices and charges → Affordability
 - Cross-subsidization

Option Analysis

Criteria for Proposed instruments

⦿ Effectiveness

- Contribution to the achievement of the key objective
- Mobilization of local community
- Promotion of technological/institutional innovation

⦿ Social considerations

- Affordability for sensitive user groups (poor, women etc.)
- Promotion of inclusion of all user groups
- Cultural/ethical acceptance
- Alleviation of conflict among user groups

⦿ Economic efficiency

- Financial cost of implementation
- Negative economic impact on important sectors
- Impact on regional economic development strategies

⦿ Ease of implementation

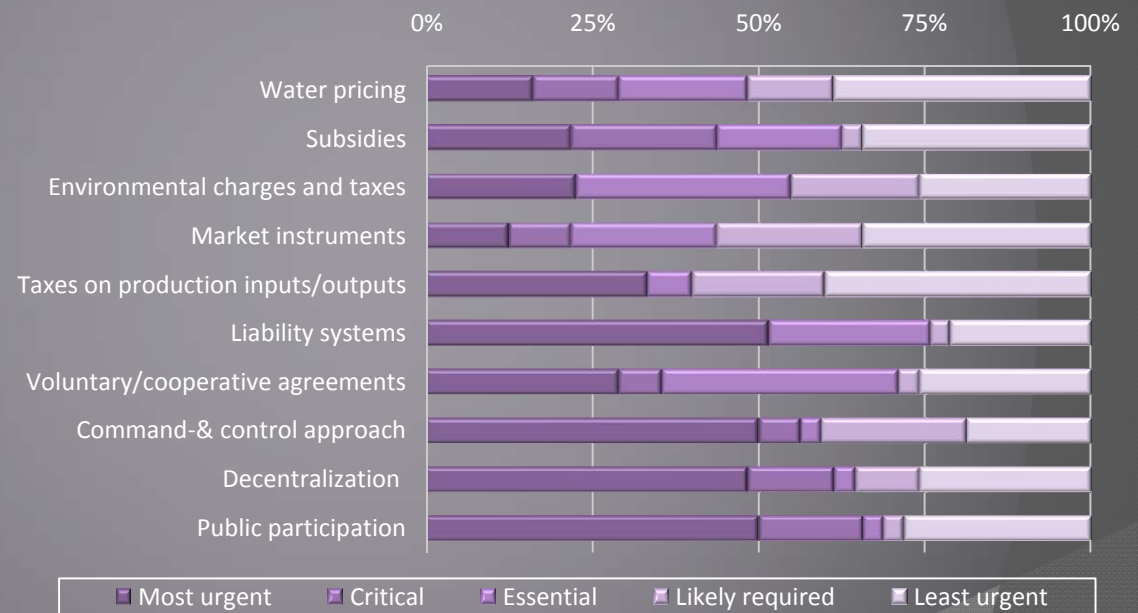
- Need for institutional and legislative reforms
- Required effort for integrating with existing policies for other sectors (e.g. agriculture, industry)
- Administrative barriers to implementation

Screening of instruments by stakeholders

Criteria

- Preference
- Relevance/Feasibility to address current WM challenges
- Relevance to address the regional focal problem
- Need for immediate implementation
- Relevance to future WM challenges (national level)
- Applicability

Need for immediate implementation
Damour Case Study, Lebanon



The objectives of today's workshop

- ⦿ Present and evaluate the outcomes of regional analyses on the applicability of institutional and economic instruments
- ⦿ Share, exchange and integrate experience associated with the application of solutions across the Mediterranean Basin
- ⦿ Assess the corresponding economic, environmental and social trade-offs
- ⦿ Derive recommendations for enabling the effective implementation of proposed instruments

Workshop agenda (1/2)

Tuesday, 15th July 2008

Session 1: Introduction

- 9:00 Welcome & Introduction: The INECO Workshop Scope and expected outcomes
Prof. D. Assimacopoulos, INECO Project Coordinator
- 9:30 Information exchange, participation & networking for sustainable water management
Mr. D. Valensuela, International Network of Basin Organizations
- 09:45 Evaluating current & potential institutional and economic options at the INECO Case Studies: Context and Methodology, *Prof. A. Massarutto, IEFE, Italy*
- 10:15 *Coffee Break*

Session 2: Presentation & discussion on the INECO Case Study Outcomes - Focus on River Basin Management

- 10:30 Water stress in the Damour River Basin, Lebanon
Mr. C. Tabbal, Conseil et Développement s.a.l.
- 11:15 Enhancing efficiency in irrigation water use in the Oum Er Rbia Basin, Morocco,
Mr. A. Affia, ISKANE Ingenierie
- 12:00 Discussion panel on proposed options for the Lebanon & Morocco case studies
- 13:00 *Lunch Break*
- 14:30 Groundwater exploitation in Pegeia, Cyprus
Dr. I. Glekas, Aeoliki Ltd
- 15:15 Groundwater overexploitation in Tunisia
Mr. A. Bouzid, CITET
- 16:00 Discussion panel on proposed options for the Cyprus and Tunisia case studies

Workshop agenda (2/2)

Wednesday, 16th July 2008

9:00 Link to first day outcomes
Prof. B. Barraqué, ENGREF & Prof. E. Vlachos, Colorado State University

Session 3: Presentation & discussion on the INECO Case Study Outcomes - Focus on water quality management

9:15 Pollution of the Seybouse River, Algeria
Mr. A. Bouchedja, Agence de Bassin Hydrographique de Constantinois-Seybouse-Mellegue, Algeria

10:00 Pollution of the Barada River, Syria
Mr. M. Haddad, Studies & Integration Consulting

10:45 *Coffee Break*

11:00 Water quality deterioration in the Bahr Basandeila Canal, Egypt and drinking water quality issues
Prof. M. Abou Rayan, International Consultants Egypt

11:45 Discussion Panel on proposed options for the Algeria, Syria and Egypt case studies

13:00 Wrap-up and conclusion
Prof. D. Assimacopoulos, Prof. E. Vlachos, Prof. B. Barraqué

13:30 *End of Workshop*

What is next

December
2008

- Analysis of prerequisites for the implementation of selected instruments at the regional level

December
2008

- Development of guidelines on institutional and economic instruments

March
2009

- Formalisation of INECO outcomes in web toolbox

May/June
2009

- The INECO Final Conference Event