



**Plan
Bleu**

A decision- making support guide for local authorities

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Méditerranée



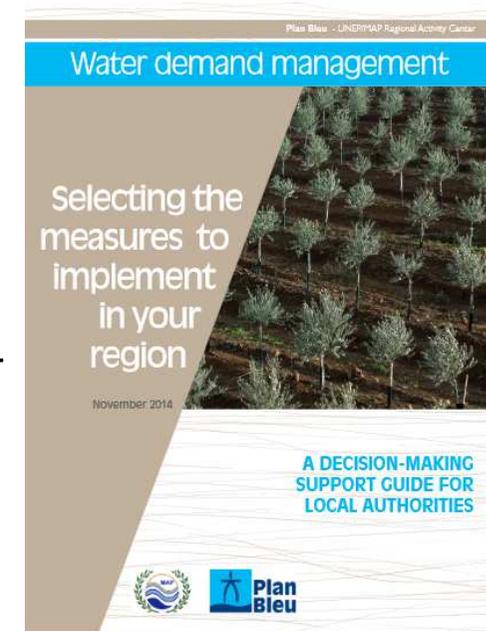
**Regional workshop on water demand management
in the Mediterranean**



*2nd Mediterranean
Water Forum
Murcia, 25/11/2014*

Decision-making support guide: Objectives

- Present an overview of the WDM measures that can be applied in the Mediterranean
- Suggest a methodology for characterising, assessing and ranking WDM measures using a multi-criteria cost-benefit analysis
- Support local policymakers in selecting WDM measures



Overview of WDM measures in the Mediterranean

Double-entry typology:

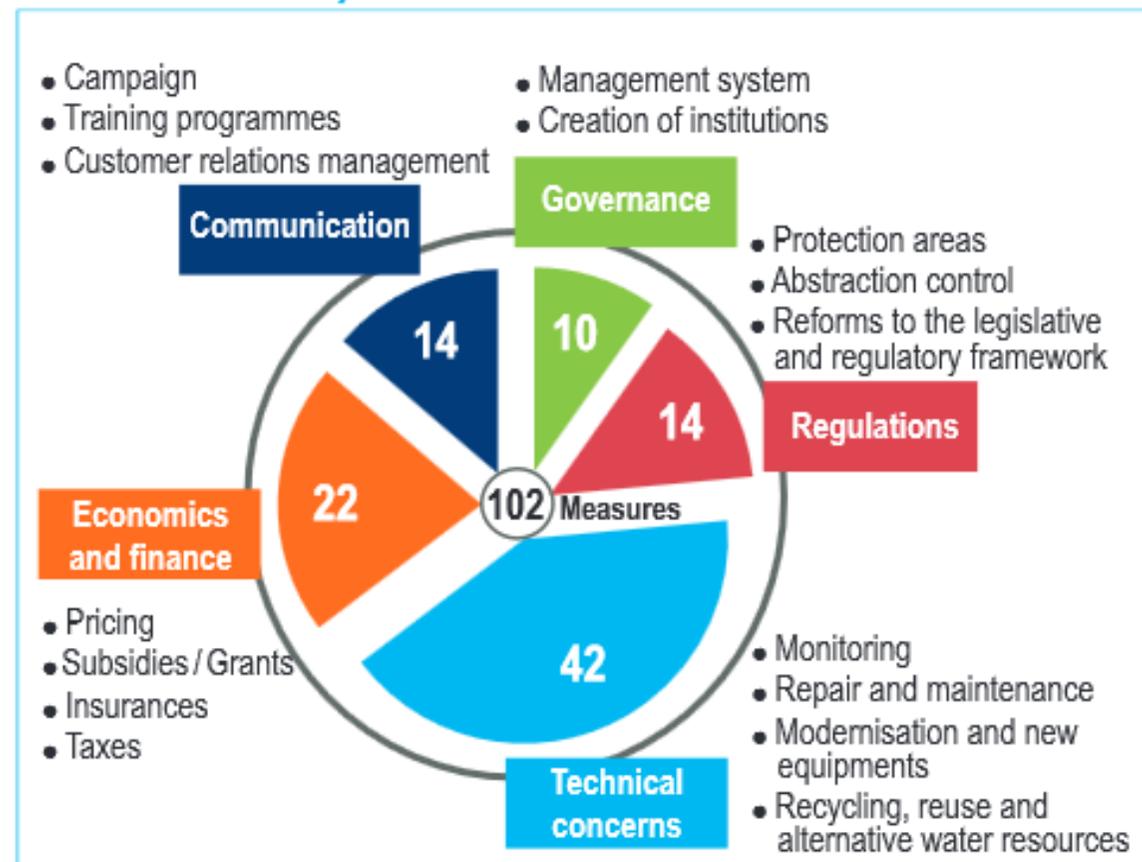
• Type of tool used:

- Governance ;
- Regulations ;
- Technical concerns ;
- Economics and finance ;
- Communication.

• Water use:

- Agricultural ;
- Domestic ;
- Tourism ;
- Industrial.

Figure 3: Distribution of WDM measures in the Mediterranean by field of action

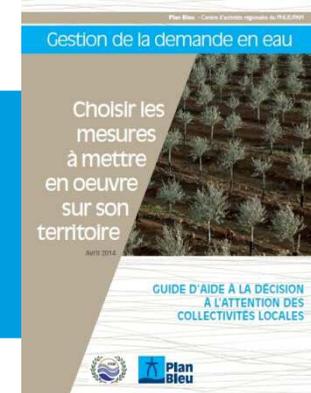


Source: Nomadéis, 2013

Steps for conducting a cost-benefit analysis

1. Definition and technical description of the measure
2. Identification of economic and financial impacts
3. Choice of a method for assessment and quantification of monetary value
4. Selection of a discount rate
5. Calculation of indicators showing net costs and benefits of each measure:
 - Benefit to cost ratio
 - Net present value(VAN)
 - Cost-effectiveness ratio

Content of the Guide



Objective: Determining the most appropriate WDM measures to implement from a social, environmental and economic perspective.

- 1. Producing a regional inventory**
(characterising the resource, needs, allocation, demographic and economic assessment, current WDM policies and measures...)
- 2. Defining needs and objectives**
(Prioritise needs, define operational objectives)
- 3. Pre-selecting appropriate WDM measures**
(Multi-criteria analysis, Régnier's abacus, decision tree...)
- 4. Assessing the pre-selected WDM measures**
(CBA, geographical area, timeframe, reference situation)
- 5. Arbitrating between different measures**
(benefit to cost ratio, VAN, cost-effectiveness ratio)

Limitations of the analysis (1/2)

- **Some data does not exist on the scale of the study area**
- **Some measures are too recent and/or their impact has not been assessed**
- **It is difficult to isolate the impact of some measures, due to combined effects** associated with the simultaneous implementation of several WDM measures
- **It is difficult to transpose some calculations and observations from a country to another** due to socio-economic, geographical or cultural differences, etc.

Limitations of the analysis (2/2)

- Result of various cost-benefit analyses (ratios ou VAN) gives **an indication of the most efficient/effective measures to be implemented** on his territory
- This **result has to be treated with caution** since limits of analysis
- The cost-benefit analysis needs **to explain what it cannot put a figure on**
- Looking beyond the final result, **the overall approach is source of information: knowledge of territory, identification of stakeholders, anticipation of main drivers and barriers, etc.**



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Thank you for your attention!

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