



Institutional and Economic Instruments for Sustainable
Water Management in the Mediterranean Region

Evaluating current and potential institutional
and economic options from the INECO case
studies: context and methodology

Antonio Massarutto

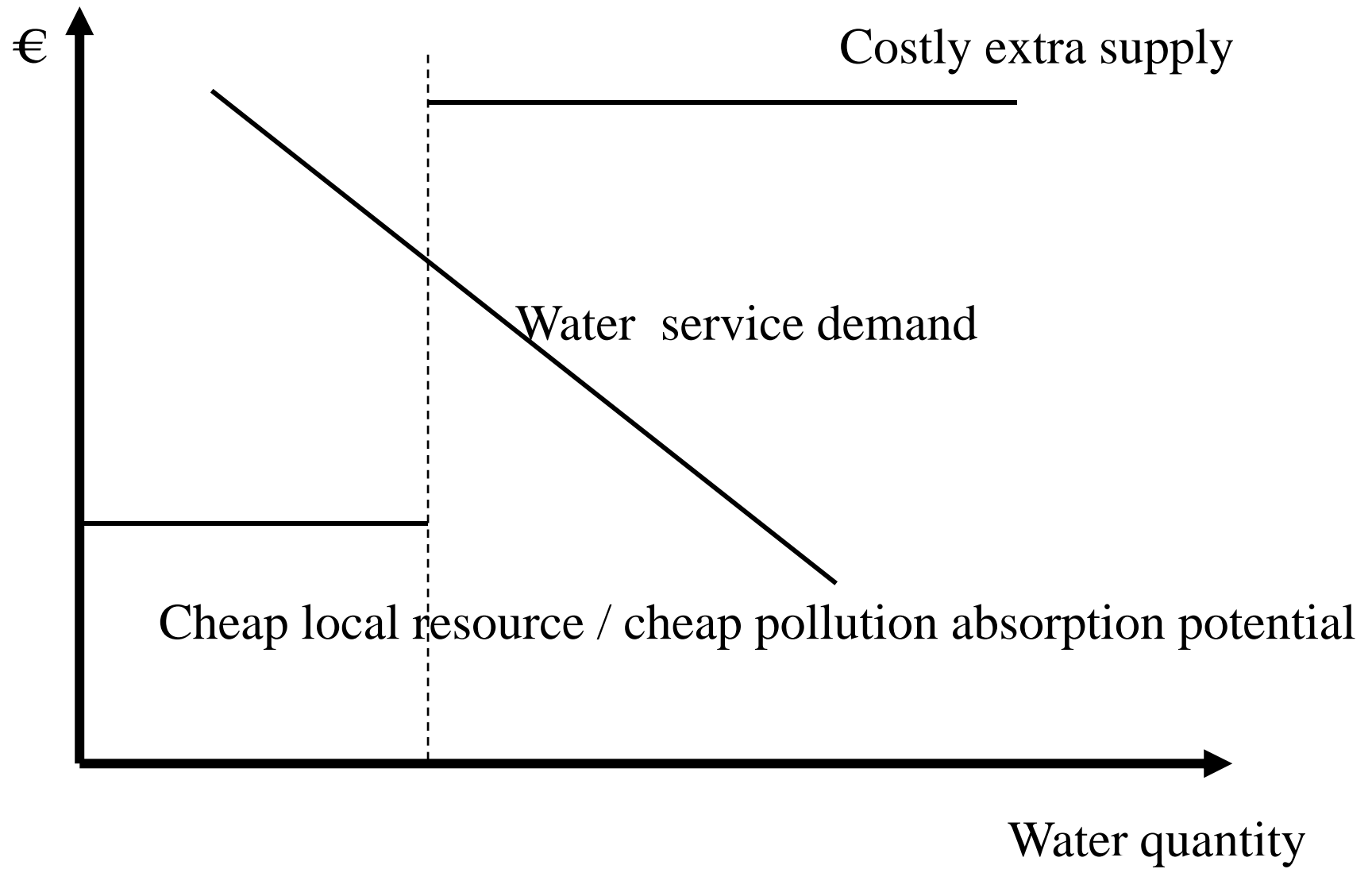
University of Udine, Dept of Economic Sciences

IEFE, Bocconi University, Milano

antonio.massarutto@uniud.it

CONTEXT

The policy dilemma



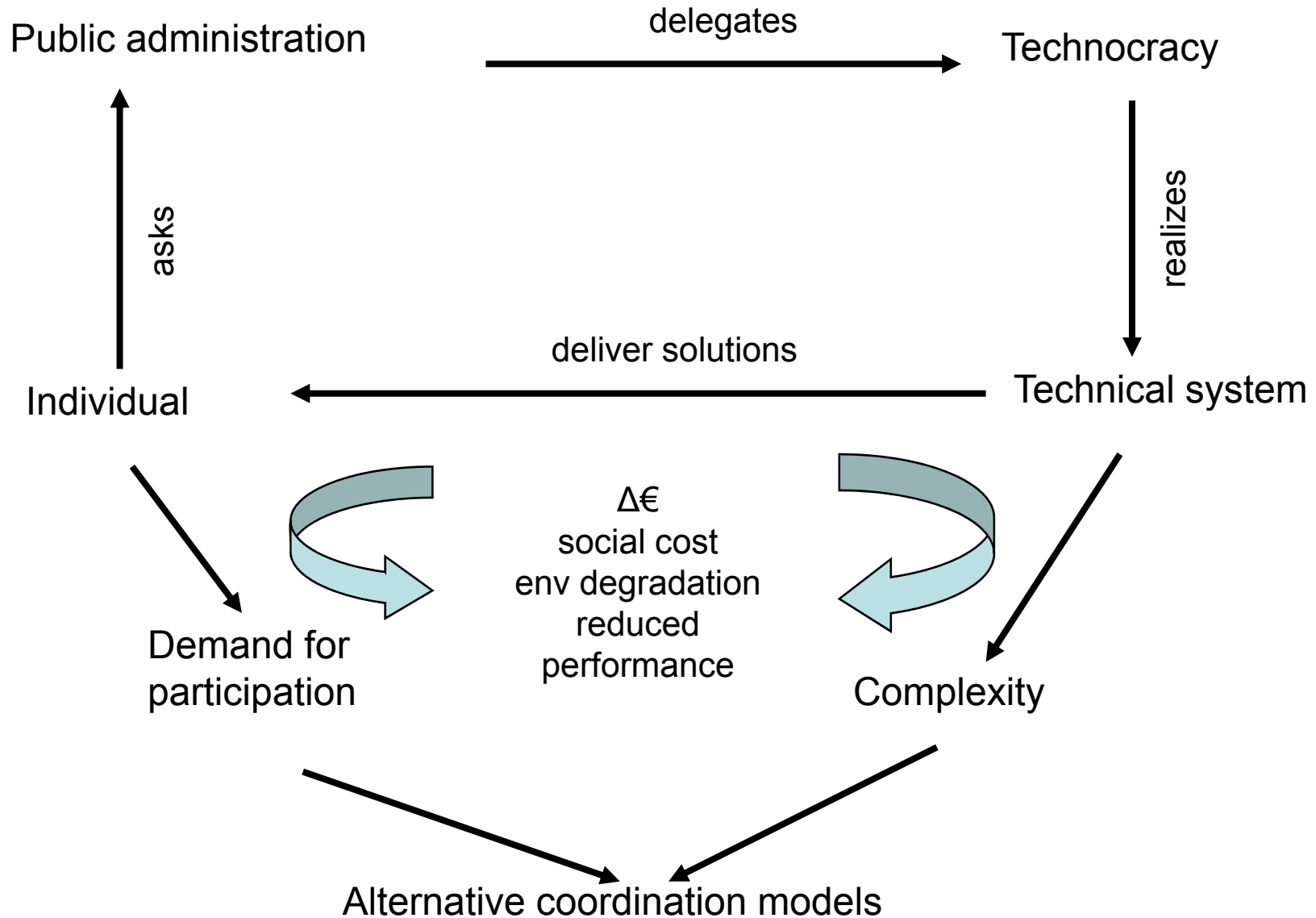
The policy dilemma – way out

- Expand supply \Leftrightarrow more with more raw water
 - Pump more from the underground
 - Water transfers
 - Desalination
- Δ productivity \Leftrightarrow more with same raw water
 - Integrated water management schemes
 - Water-efficient irrigation
 - Wastewater reuse
- Reduce demand \Leftrightarrow less with same raw water
 - Increase water prices up to the scarcity value in order to phase-out uses with the lowest value
 - Reallocate existing water rights \Leftrightarrow “irrigar los turistas vale mas que irrigar los campos”
 - Promote “soft” demand reduction (eg virtual water trade; change of agricultural patterns)

The limit of the traditional approach

- Δ supply \Leftrightarrow more with more raw water
 - Very costly; most of the times inefficient (eg transfers)...
 - ... or might entail high resource/external costs (eg GW)
 - Unaffordable without public spending
 - Access to capital markets possible but very costly without public guarantees \Leftrightarrow recovery of sunk cost difficult
- Δ productivity \Leftrightarrow more with same raw water
 - Requires professional water management (PSI?)
 - Costs cannot be easily transferred to the public sector (mostly operational and management costs instead than infrastructure)
 - Not necessarily good for the environment
- Reduce demand \Leftrightarrow less with same raw water
 - socially or politically difficult \Leftrightarrow distributive and affordability issues
 - Empowerment of water authorities problematic
 - Enforcement difficult (point vs. non-point)
 - compensation can alleviate political opposition but is unfeasible under the sectoral management model

The vicious circle of traditional solution



New water policy conventions

- Traditional :
 - water as a social right; role of government to guarantee this right
 - water services as public goods; role of government to supply them and finance out of general/local taxation
 - water management as a supply-side problem; sectoral approach
 - little attention to ecosystems' value
- Present / WFD
 - water as a scarce resource having an economic value; role of government to ensure its efficient and fair allocation and promote sustainability
 - recognition of the importance of ecosystem services and non-market values
 - water services as utilities; role of government to guarantee universal access (but not, or not necessarily, to pay for the cost via taxation)
 - water management as both a supply- and demand-side problem; integrated approach

Economic approach: myths ...

- The scarcity problem is (just a) pricing problem \Leftrightarrow get the price right
- Inefficient allocation derives from lack of economic support to decision \Leftrightarrow do CBA and allocation will be efficient
- Inefficient management derives from the public sector \Leftrightarrow provide water services as commercial utilities
- State vulnerable to “capture”: let market operate

Some more realistic views

- Efficiency vs. distributive vs. financial vs. environment
- Water governance issues depend on many different factors (not only economic)
- Pricing: trade-offs entailed by alternative tariff structures (eg IBT vs. affordability, cost recovery)
- Economic instruments \Leftrightarrow new costs (eg metering)
- Stakeholder response to EI not obvious
- State continues to be necessary, but increasingly weaker and poorer
- Difficulty to create appropriate economic regulatory institutions allowing PSI \Leftrightarrow difficult to introduce market-based mechanisms for WS&S provision

What can we expect from economic approach

- The usefulness of economic instruments
 - Provide incentives to users and allow more efficient allocation of existing water
 - Provide a “true” representation of users’ WTP for improving the water management system
 - Recover cost of alternative actions and ensure financial viability of WS&S \Leftrightarrow attractiveness for investors
 - Reveal information on individual values
 - share the cost more equitably
- The importance of insitutional reforms
 - Encourage a watershed vision of problems
 - Enhance cooperation among users
 - Favour a multidisciplinary decisionmaking
 - Establish property rights in a more efficient way
 - Allow professionalization of water management through the creation of adequate counterbalances

Categories of instruments - I

- Water resource (re)allocation
 - Marketable permits
 - Fostering voluntary agreements
 - Auctions for releasing use licenses
 - Segregation of uses
- Efficient water use & reduction of pollution
 - Taxes / prices / charges based on marginal cost
 - Promoting water saving, wastewater reuse, rainwater harvesting ...
- Implement a long-term vision
 - Liability systems
 - Ownership of the resource \leftrightarrow ownership of problems
 - FCR of artificial water capital including decommissioning

Categories of instruments - II

- Promoting IWRM
 - Compensation of ecosystem services
 - Bargaining “a-la-Coase”
 - Users’ associations
 - Subsidizing opportunities of cooperation among users
 - Sharing costs in a more effective and acceptable way
- Addressing macro-drivers
 - Urban development, agricultural policy ...
- Promoting self-sufficiency of WS&S undertakings
 - Cost recovery (whatever scheme)
 - Securitization & other financial arrangements
 - Commercialization / privatization of WS&S provision + economic regulation

What have we learned

- Economic instruments are helpful but do not work alone nor automatically
- Economic instruments are not “magic sticks” \Leftrightarrow no invisible hand delivering the solution automatically
- Trade-offs among sustainability targets \Leftrightarrow no “double dividends”; cost recovery (especially of sunk costs) often at odds with incentive structures
- Constraints arising from the actual capacity to develop robust and effective institutional solutions
- Need to add a bottom-up component (public participation; voluntary agreements; “market-based” instruments)
- Addressing macro-drivers more important than providing micro-economic incentives to final uses
- EI pose affordability problems, but distinguish collective affordability vs. “affordability for the poor” (which may not be considered as a water policy issue)
- Need to “tailor” solutions and instruments to specific needs and policy targets

METHODOLOGY

The INECO approach

- Diagnosis of the situation (“problem tree”)
 - What are the main problems and to whom do they belong
 - What are the main drivers behind them
 - how far is the lack of IWRM the root of the problem
- Understanding policy options
 - Policy objectives
 - Categorizing available alternative actions
- Understanding the potential of economic instruments and institutional reform
 - What EI are already in use and how could be improved
 - What can we expect from them
 - How do stakeholders react about them
 - What constraints hamper their adoption

“Personalized” questionnaires

- Sent in march 2008 for each case-study area
 - Background analysis /understanding of the problem and delimiting the space of solutions
 - EI actually used
 - EI that might help solving the problem
 - Understanding of constraints and institutional gaps
- Most complete now; outcomes will be presented in the next sessions
- Next phase: completion of a comparative report discussing the data returned



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Thank you !!

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