

Urban water management

Water pollution prevention & control

Summary of inputs
Discussion themes

The INECO Case Studies (1/2)

SEYBOUSE RIVER BASIN, ALGERIA

- ◉ Pollution of the Seybouse River
 - Lack of sewage treatment schemes (under implementation)
 - Uncontrolled discharge of industrial effluents, esp. in urban areas
- ◉ Need for:
 - Improving the environmental performance of the industrial sector
 - Economic incentives for wastewater treatment
 - Shift towards cleaner production practices
 - Ensuring the sustainability of the sewage treatment schemes under implementation
 - Cost recovery for sewage collection & treatment

BARADA RIVER BASIN, SYRIA

- ◉ Water quality degradation of the Barada River
 - Uncontrolled disposal of domestic waste, sewage, and industrial wastewater & excessive use of agrochemicals
 - Reduction of river flow
- ◉ Need for:
 - Improving the environmental performance of the industrial sector
 - Economic incentives for wastewater treatment
 - Shift towards cleaner production practices
 - Water conservation in domestic use & improvement of the performance of urban water services

The INECO Case Studies (2/2)

BAHR-BASANDEILA REGION, EGYPT

- Drinking water quality problems & health risk
 - Water quality deterioration of drinking water supply sources (canal water)
 - Lack of proper maintenance of distribution & sewerage networks/facilities
- Need for:
 - Control over
 - Discharge of industrial effluents
 - Controlled and wise use of chemical fertilizers & pesticides
 - Maintenance of the Nile distribution network, maintenance & expansion of facilities and networks
 - Commitment among water users to implement pollution mitigation measures & community empowerment

Summary of Suggested Options (1/2)

SEYBOUSE RIVER BASIN, ALGERIA

- ◉ Stricter discharge & technology standards for industries
 - Regular monitoring of discharges
- ◉ Effluent charge systems, Tradable permits
- ◉ Voluntary agreements, eco-labelling schemes
- ◉ Grants & incentives for industrial wastewater treatment
 - Relocation
 - Grants, subsidies, soft loans
- ◉ Training of industrial operators
- ◉ Awareness campaigning & participation

BARADA RIVER BASIN, SYRIA

- ◉ Stricter discharge & technology standards for industries
 - Regular monitoring of discharges
- ◉ Effluent charge systems, Tradable permits
- ◉ Voluntary agreements with industries & farmers, eco-labelling schemes
- ◉ Grants & incentives for industrial wastewater treatment
 - Relocation incentives
 - Grants, subsidies, soft loans
- ◉ Reform of water pricing policies (cost recovery, incentives)
- ◉ Decentralization, institutional reform, awareness & participation

Summary of Suggested Options (2/2)

BAHR-BASANDEILA REGION, EGYPT

- ◉ Stricter discharge and technology standards for industries
- ◉ Effluent charge systems
- ◉ Voluntary agreements (industry & agriculture)
- ◉ Increased taxation of agricultural inputs (fertilizers & pesticides)
- ◉ Incentives for organic farming
- ◉ Reform of utility pricing policy
 - Cost recovery for water supply & sewage collection and treatment
- ◉ Community management for water supply and wastewater treatment in villages

Option Analysis

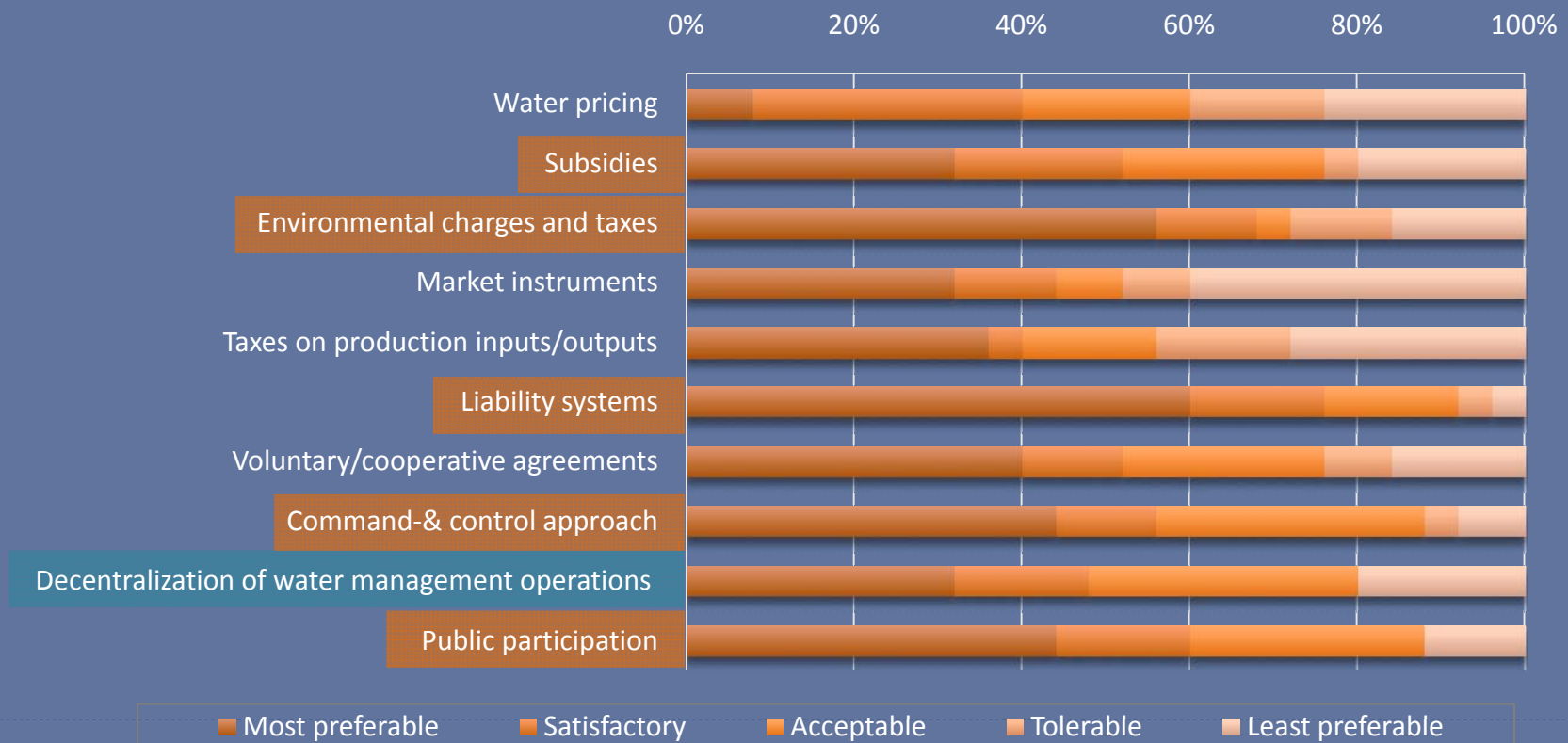
Seybouse River Basin, Algeria

- ◉ Limited availability of financial & monitoring data throughout the river basin
 - Infrastructure and possibly part of running costs are state-funded
- ◉ Discharge standards exist but technology standards for industrial processes have not been defined
- ◉ Effluent charges are introducible according to the overall institutional framework
 - The specific legislation has not been yet introduced
- ◉ Voluntary agreements have been introduced by the Ministry of the Environment
 - 5 industries out of 86 in the Seybouse River Basin have signed a contract
- ◉ Possible forms of grants offered to industries for wastewater treatment
 - Direct grant from the State
 - Exemption/reduction of pollution taxes, reduction of water taxes

Evaluating instruments

Seybouse River Basin, Algeria

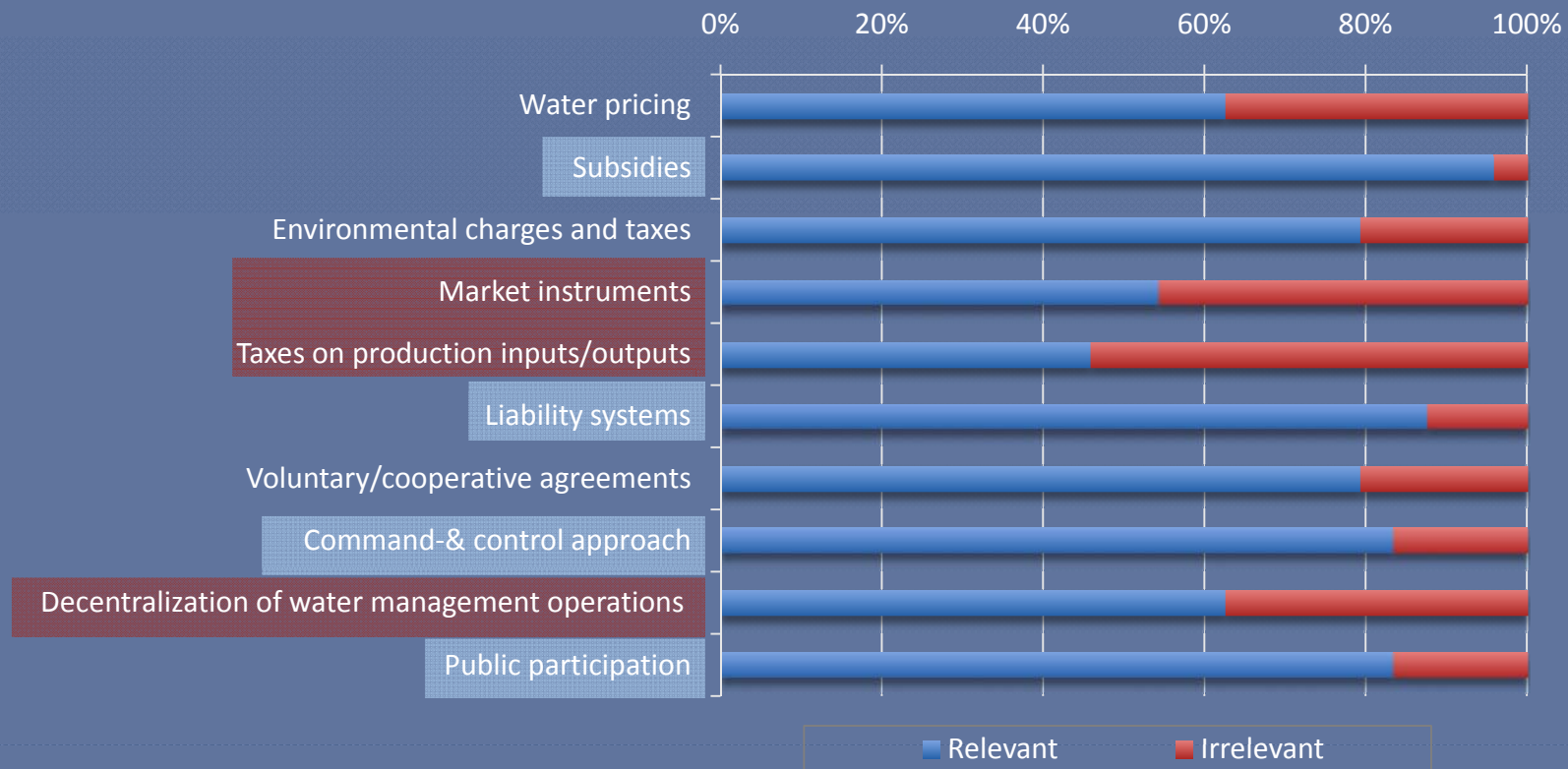
A. Preference on options



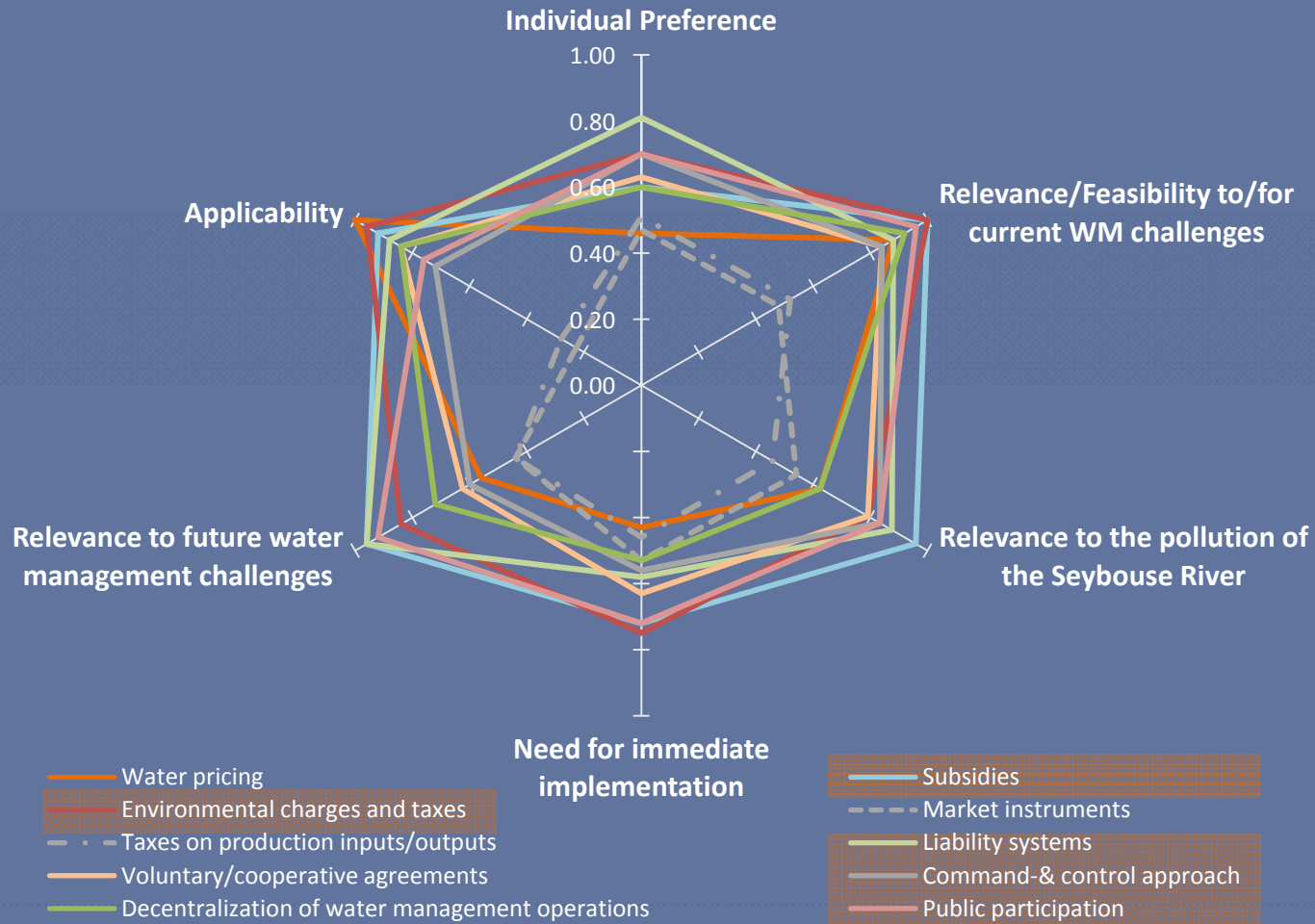
Evaluating instruments

Seybouse River Basin, Algeria

B. Relevance to the pollution of the Seybouse River



Overall Evaluation: Algeria



Option Analysis

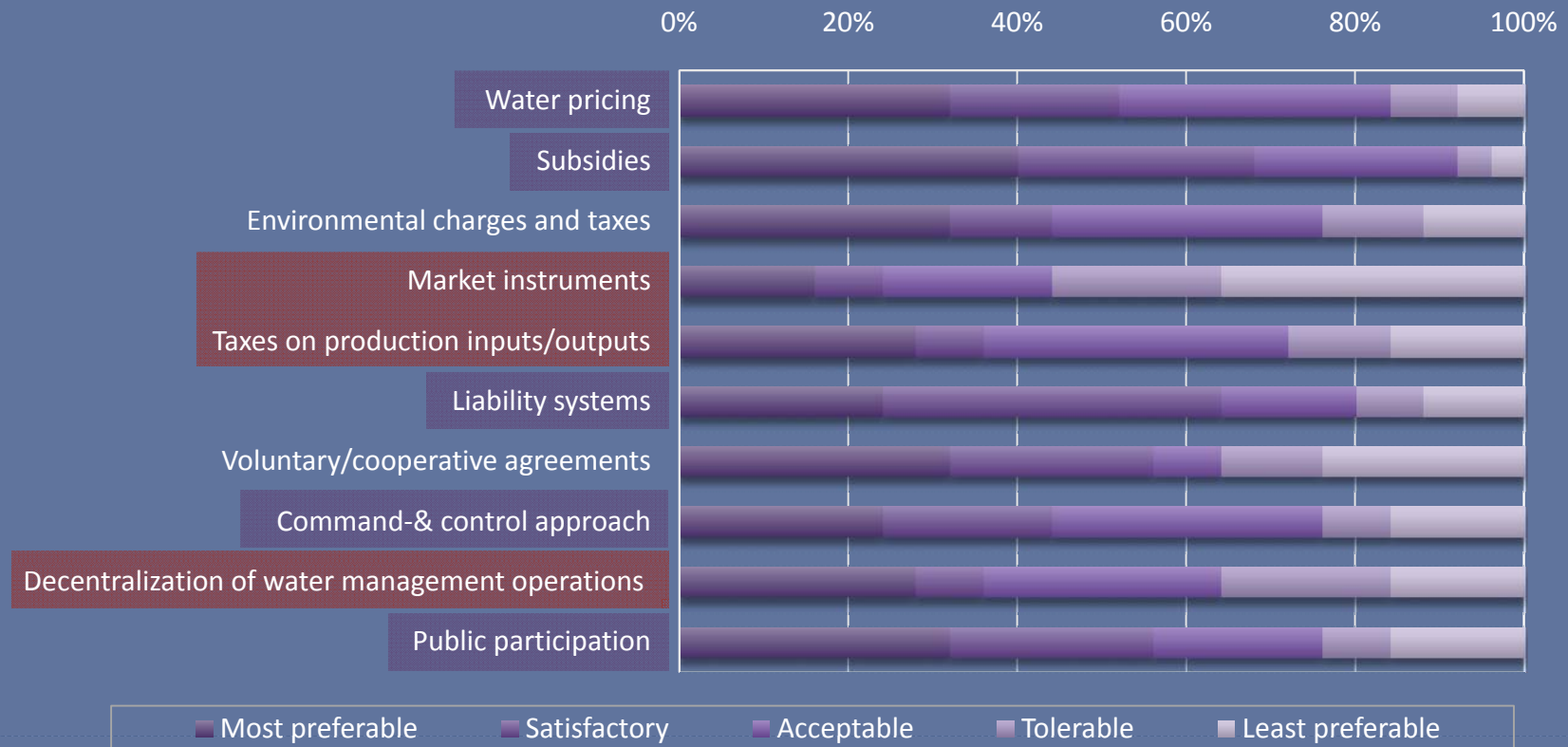
Barada River Basin, Syria

- Establishment of the “Water Police” in 2005, with the aim to monitor violations on environmental legislation
 - Enforcement remains inadequate (dispersion of many small-scale industries)
 - Further “grace” periods provided for compliance with environmental legislation
- Incentives to small industries are considered inadequate
 - The installation of wastewater treatment facilities for tanneries (a major source of pollution) would impact on competitiveness
 - Industries require further incentives to relocate to industrial areas but the Government considers that the difference in land prices would cover the relocation cost
- Urban water pricing recovers almost fully operating costs
 - Tariffs are considered low and provide little incentive for conservation
 - Sewerage charges cover only a small share of sewage collection & treatment costs

Evaluating instruments

Barada River Basin, Syria

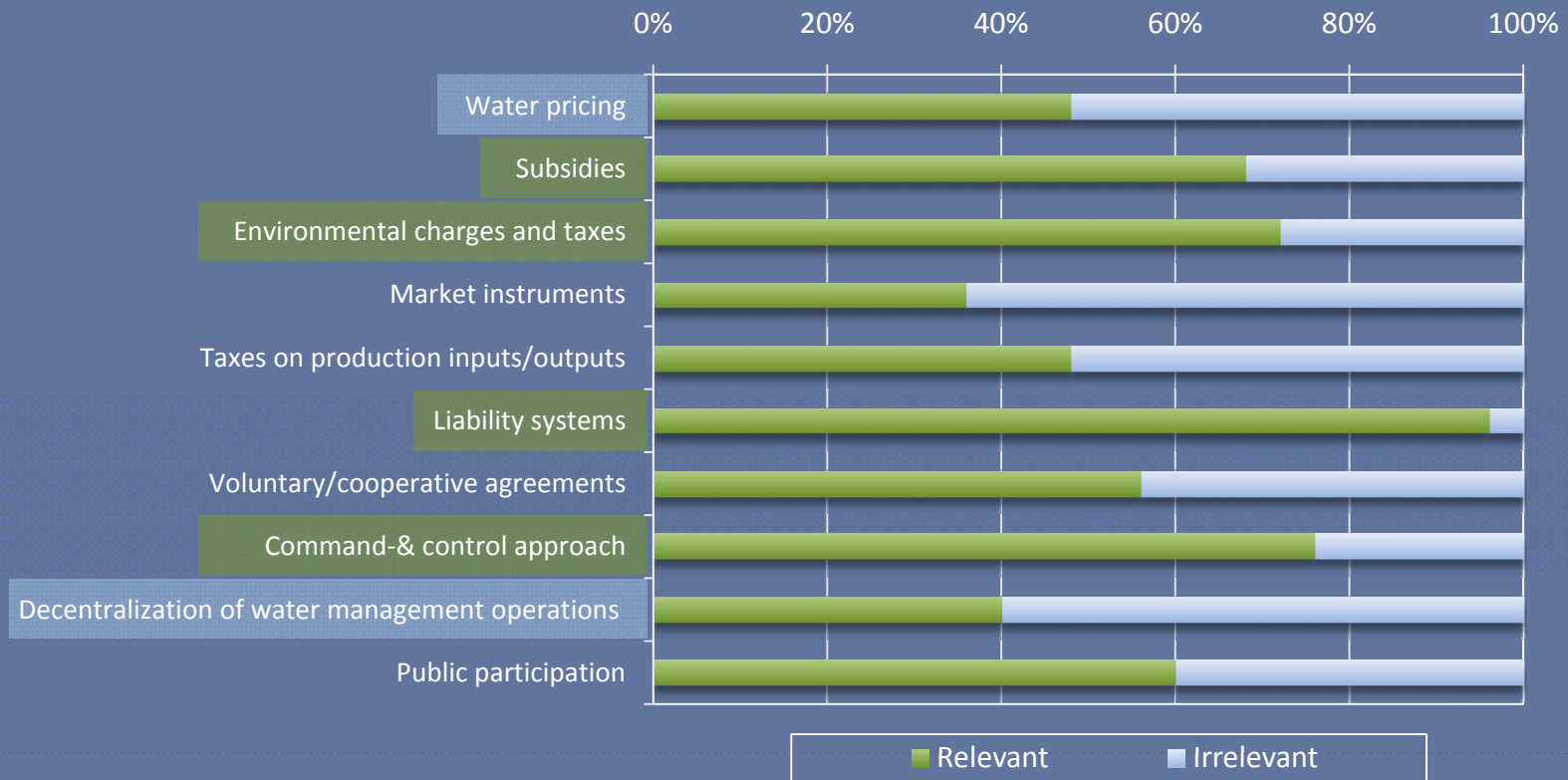
A. Preference on options



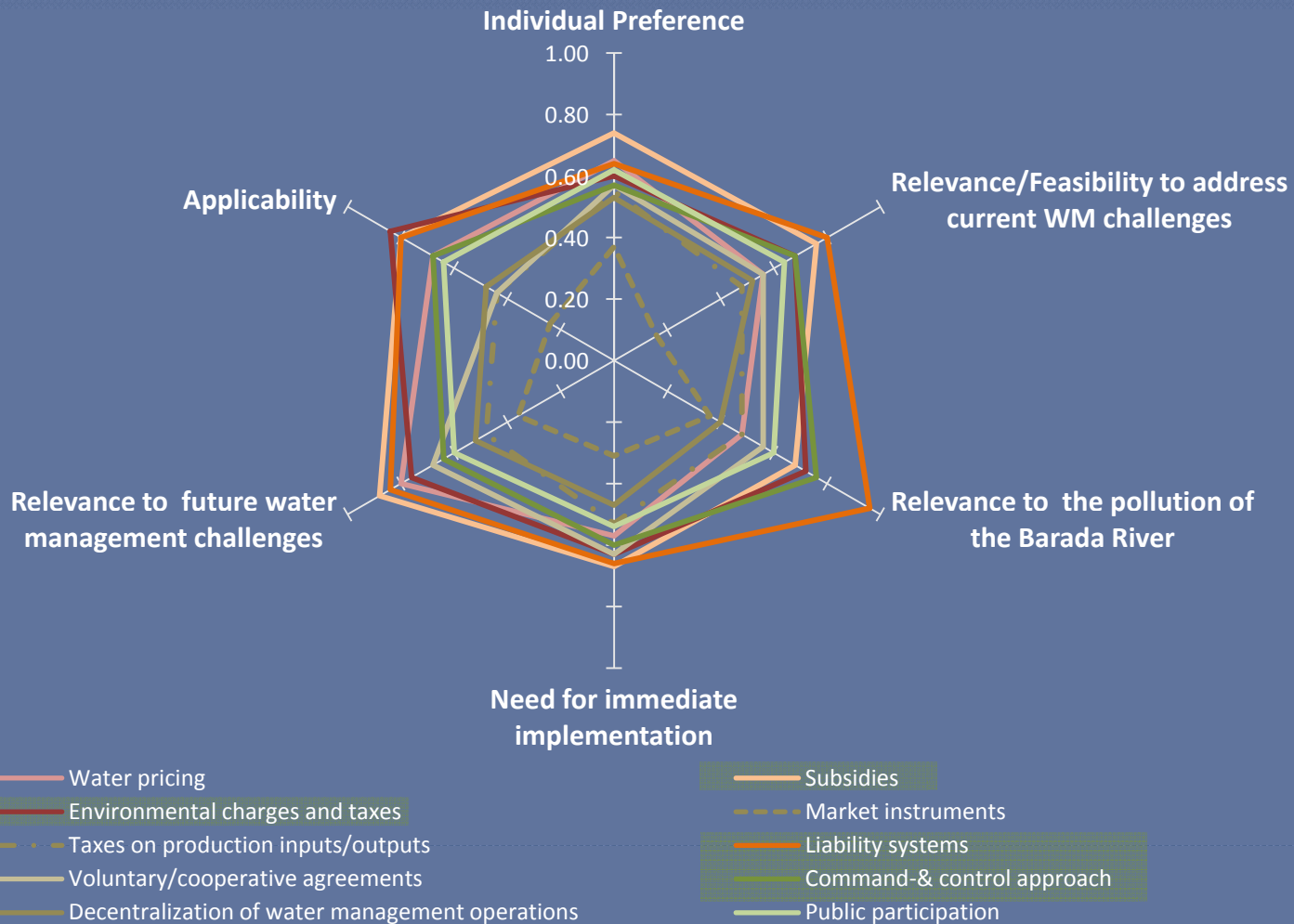
Evaluating instruments

Barada River Basin, Syria

B. Relevance to the pollution of the Barada River



Overall Evaluation: Syria



Discussion themes

- Competitiveness vs. environmental protection
 - Incentives towards cleaner production in the industrial sector
 - Incentives/disincentives to excessive agrochemical use
- Strengthening the participation in voluntary programmes
 - Incentives, user awareness, consumer awareness
- Sustainability of urban water services
 - Funding, cost recovery, affordability and access
 - Community management in rural areas