

Júcar river basin – Spain

- 22,200 km²
- Upland plateaus, mountains and coastal plain; semi-arid climate
- Water use: 80% irrigation; 20% urban supply, industrial, and environmental requirements
- Conflicts between upper and lower basin farmers, groundwater depletion, theft
- Absolute water scarcity; drought episodes exacerbated by climate change



BARRIERS TO THE ADOPTION OF INNOVATIVE ADAPTATION POLICIES

Barriers

Example

Rigid regulations



The polluter-pays-principle stated in the Water Framework Directive can preclude other beneficiary policies

Discretionary water allocation mechanisms



Water allocation uncertainty hinders irrigated agriculture insurance

Limited institutional know-how on novel technologies and governance mechanisms precludes transformation



Subsidies to increase irrigation efficiency allocated to save water, despite much evidence showing the contrary

Limited monitoring, as well as enforcement, and institutional capabilities



Even when illegal abstraction is widely documented, many offenders remain unpunished

Limited penetration and marketability of innovative policies



Lack of awareness of transformational potential, lack of foresight data can generate concerns about safety (e.g. of treated wastewater)

Innovative solutions demand high return from investments hindering their implementation



Extensive paybacks periods and uncertainty about effectiveness of innovative solutions, such as NBS or insurance systems, limit their implementation

Decision-making and people's awareness are strongly influenced by personal beliefs (based on experiences, memories, group dynamics etc.)



River basin authorities are mostly made of hydrologists, who tend to support engineering approaches over soft/economic instruments

POTENTIAL INNOVATIVE ADAPTATION POLICIES

1. Introduction of novel agricultural insurance for irrigated crops
2. Implementation of a dynamic water pricing system to reflect water scarcity