



Water Markets scenarios for Southern Europe: new solutions for coping with water scarcity and drought risk?

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Research team

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Policy context

- Increasing water scarcity in Mediterranean regions
 - Climate change: reduced available resources, increased demands (agriculture)
 - Increased environmental allocation (WFD)
 - Rationing procedures will be needed (Cap)
 - Source of economic inefficiencies
- Increasing flexibility through trading
 - Water transferred from low to high economic value uses
 - On a voluntary basis, win-win agreements
 - Exchanges within or between economic sectors, long or short term ..



Research questions & activities

- Q1: Which WM for Southern Europe ?
 - Existing WM in Australia, USA, Spain
 - Many possible institutional frameworks, definitions of water rights, role of regulator, circulation of information, etc.
- Planned research:
 - Objective : to construct scenarios of WM development in France, Italy & Spain considering national contexts
 - Method: Literature review, consultation of national experts in 3 countries



Research questions and activities

- Q2 : What potential for water markets ?
 - Expected intensity of water trading ? Economic gains associated to trading ?
- Activities
 - Objective: to simulate potential water trading intensity, price level, distributional impacts between farmers and between agriculture and urban areas.
 - Method: economic modeling in 5 case studies.



Research questions and activities

- Q3: Are water markets acceptable in southern Europe?
- Activities
 - Objective: assess acceptability of water marketing in different socio-cultural and legislative contexts in Southern Europe
 - Method: consultation of stakeholders through interviews & focus groups in case study areas



Research questions and activities

- Q4 : Transaction costs
 - Cost of establishing water markets ? Comparison with benefits ?
- Activities
 - Objective: assess the cost of establishing and running water markets in real cases (Spain) and potential future cases (Fr, It).
 - Method: cost modeling of WM scenarios in 5 case studies



Research questions and activities

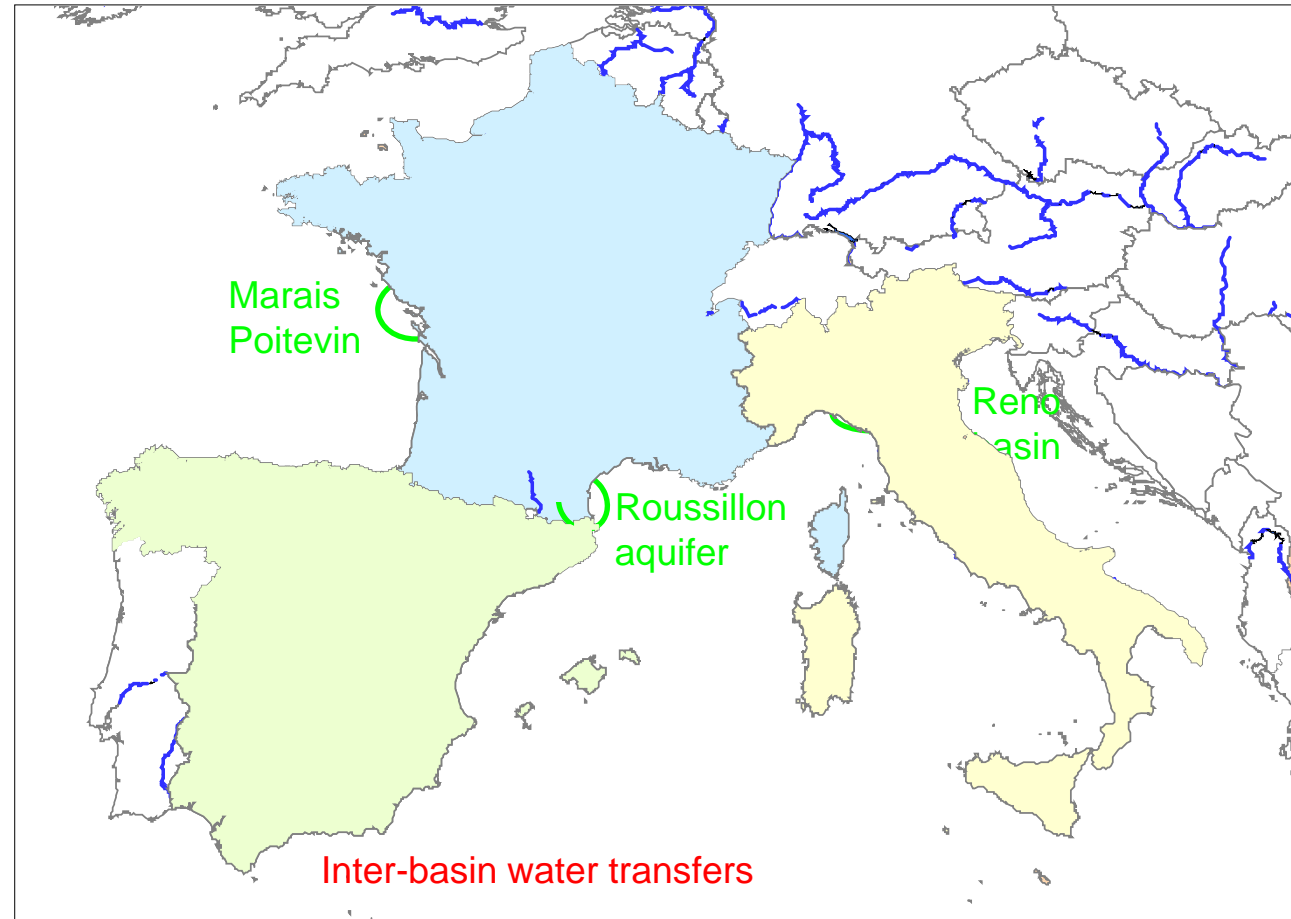
- Q5 : How to phase the development of WM ?
 - How should market be introduced in water policy to minimize risk of reform failure ?
- Activities
 - Objective: propose a policy reform pathway
 - Method: Simulations of policy reform with stakeholders/building recommendations.



Selected case studies

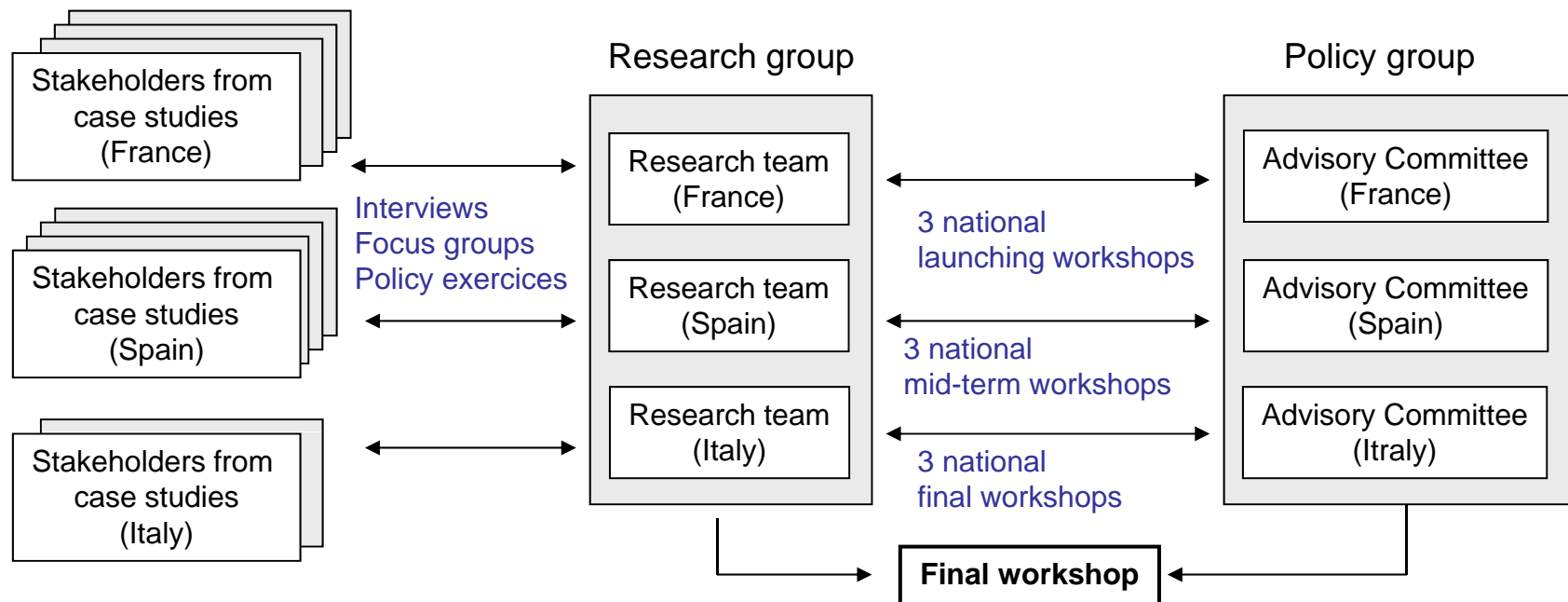
Spain : existing WM and scenarios of more sophisticated WM scenarios

France & Italy : scenarios of future water market development





Cooperation with external organizations





Main insights up to now

- Q1: Which WM for Southern Europe ?
 - Existing WM in Australia, USA, Spain show a variety of designs
 - What is traded
 - Among whom
 - Restrictions
 - Legislation not prepared (IT & FR) & long time to adapt
 - Find a national/local way to WM
 - Likely limited to specific areas/cases



Main insights up to now

- Q2 : What potential for water markets ?
 - No modelling yet, however:
 - Evidence of heterogeneity of water value across users
 - Some evidence of existing trade (including illegal)
 - Incentive to higher efficiency by market trends (agriculture) and policies (EU)
 - Evidence from previous studies: relevant benefits estimated
 - Some potential, to be estimated case by case



Main insights up to now

- Q3: Are water markets acceptable in southern Europe?
 - Mainly skepticism or opposition
 - Also linked to contingent political debate (e.g. referendum in Italy)
 - Bad idea to associate “water” with “market”
 - Legal difficulties (water as a public good)
 - Less opposition if move attention to the technical/production aspects



Main insights up to now

- Q4 : Transaction costs
 - No evidence yet
 - Potentially high in IT and FR (WM do not exists)
 - To what extent WM TC can substitute present regulatory costs?



Main insights up to now

- Q5 : How to phase the development of WM ?
 - Build on existing experience
 - Develop awareness/terminology
 - Identify cases in which usefulness is evident
 - Ensure consistency with each country's legal framework
 - Adapt to local stakeholders/institutions