



Countries of partners in EUWARENESS



Research model of case studies



External Change Agents

Change agents:
European Union policy and Regime changes
National policy and regime Changes
Problem pressure
Other

Conditions:
Tradition of cooperation
Joint problem
Joint chance
Credible alternative threat
Institutional interfaces

Institutional Resource Regime

Property & use rights



Elements of Public Governance



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Integrated water regimes

Aspects:

- Extent (Scope)
- Coherence
 - of public governance
 - of property & use rights
 - between public governance and property & use rights



Extent of water regime

Several new uses and users were mentioned, but one entered in all cases: the role of water for nature & landscape



Aspects of Public Governance

- Levels and scales
- Actors and networks
- Perspectives and objectives
- Strategies and instruments
- Responsibilities and resources for implementation





Rivalries:

Here: fishing, kayaking, industry



Operational definition of 'sustainable use'

- Ecological: environmental quality, natural resource protection & risk avoidance in as far as related to observed rivalries (cf. 'good status')
- Economical: economic consequences of ecological degradation or improvement and of measures taken
- Social: social consequences of ecology and measures taken





Case selection criteria

- Demarcation should follow hydrological and geographical boundaries at regional scale (tributary character)
- Rivalries between uses / users, preferably several
- Preferably also private ownership involved
- Variation between “wet” and “dry” cases
- Presence of attempts to attain more integrated regimes: Only when “seeds have been sowed, one can see when the soil proves fertile”.



Hypotheses case comparison



Hypotheses on regime change towards integration:

1. Most change agents will lead to more differentiation in the regime (**extent**).
2. Other external change agents of a specific nature can also lead to **coherence**, with attempts by motivated actors.
3. Attempts to change regimes into a more integrated status will have relatively more success with a **tradition of co-operation**, a **joint problem**; a notion of **joint chances**; a **credible alternative threat**, and good **institutional interfaces**.
4. The more **detailed characteristics** of regime changes reflect to a large degree the balances in other elements of the regime

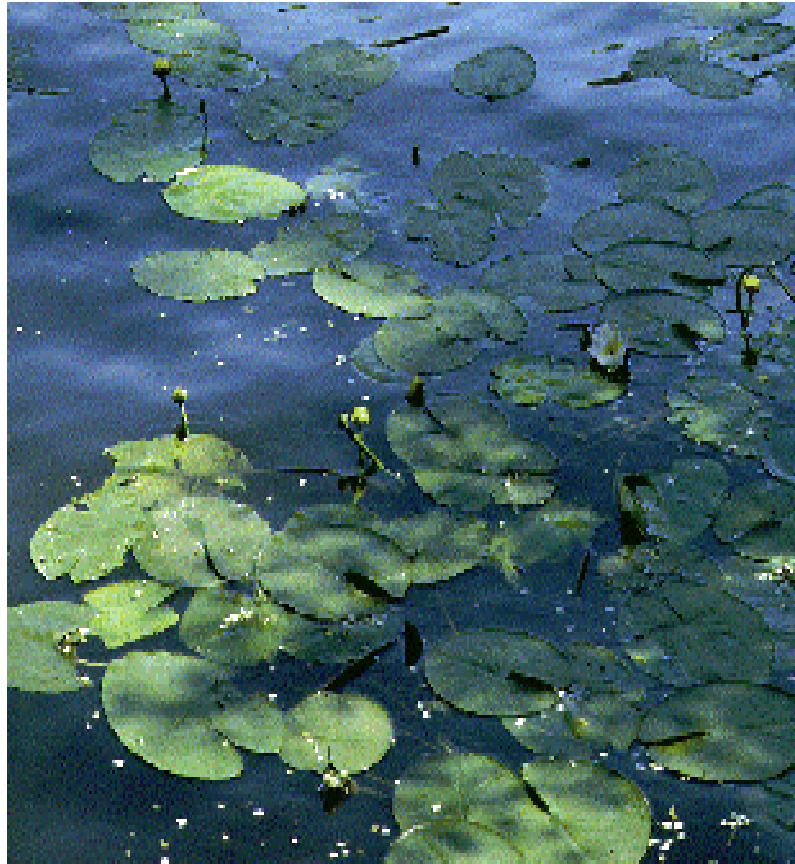
Hypotheses on the sustainability of institutional resource regimes:

5. Regimes with a deficient '**extent**' will be more likely to lead to degradation of water resources or inability to protect the ecological functions of the water resource, than regimes with a larger extent.
6. Regimes with a large 'extent', but with low **coherence** will be more likely to lead to degradation of water resources or inability to protect the ecological functions of the water resource, than regimes with a similar extent but a higher degree of coherence.





Example from 'key facts and assessment sheet'



Main variable C. Implications for sustainability

1. Natural resources & environment

Key facts:

- Overall improvement in water quality indicators
- Slight increasing of ground water pumping pressure
- Protection of a large surface of the water basin by the Regional Natural Park, specially the Voluntary Natural Reserve
- Increasing social consideration of the Environment as a water use by Park's work
- Flooding problems practically disappeared
- Increasing diffuse pollution due to agriculture (partly because of structural economic development)

2. Economic development consequences

Key facts:

- Development of nature tourism related to water and landscape (riding, walking, boat excursions...)
- Continuous development of big firms (Bonduelle, Arc International...)
- Progressively more intensive agriculture

3. Social development consequences

Key facts:

- Maintenance of young population
- Survival of market gardening (even if not profitable or financially viable) permitted (it was a social decision) by the project made during the "Contrat Ville Moyenne" (realised by the Urban-town planning- Agency)
- Modernisation of agriculture
- Development of an associative movement

General assessment implications for sustainability

- Sustainability has clearly improved, with a relative equilibrium between the three components (even if environmental aspects have sometimes "suffered" from the development of the other two aspects)

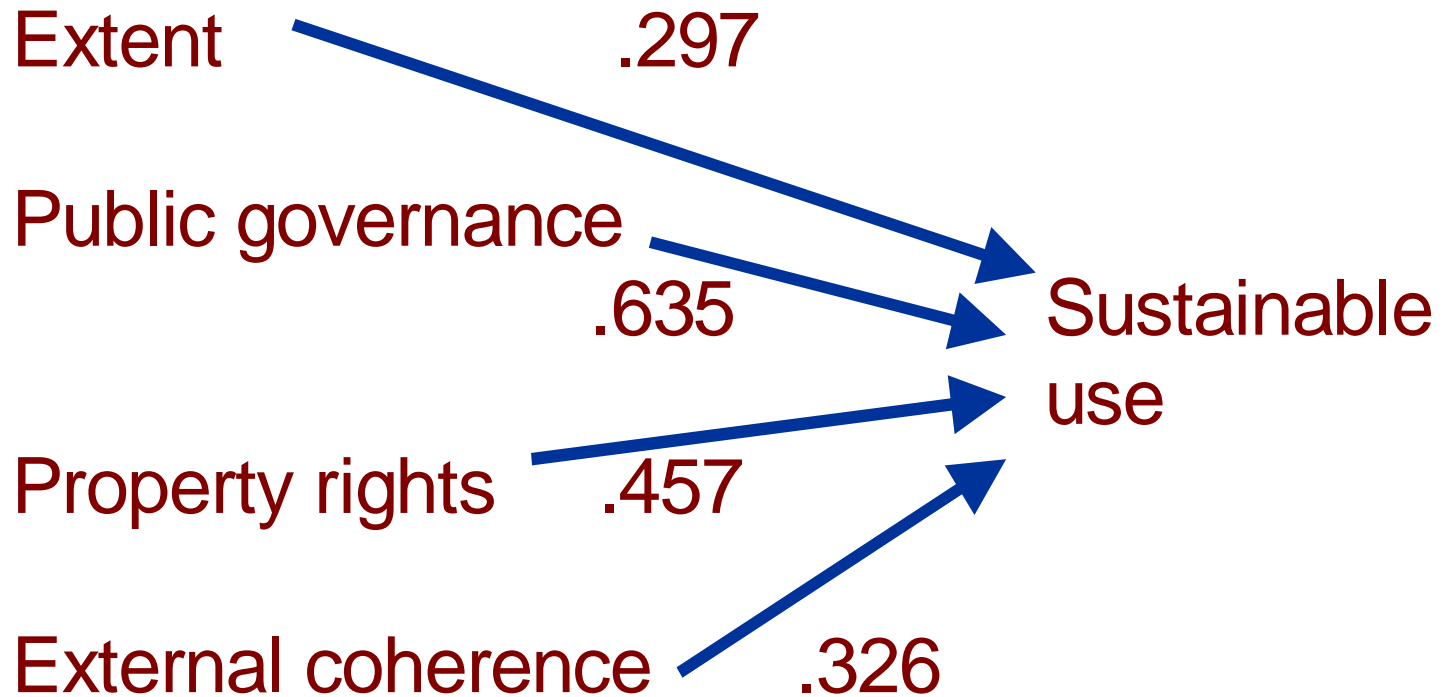
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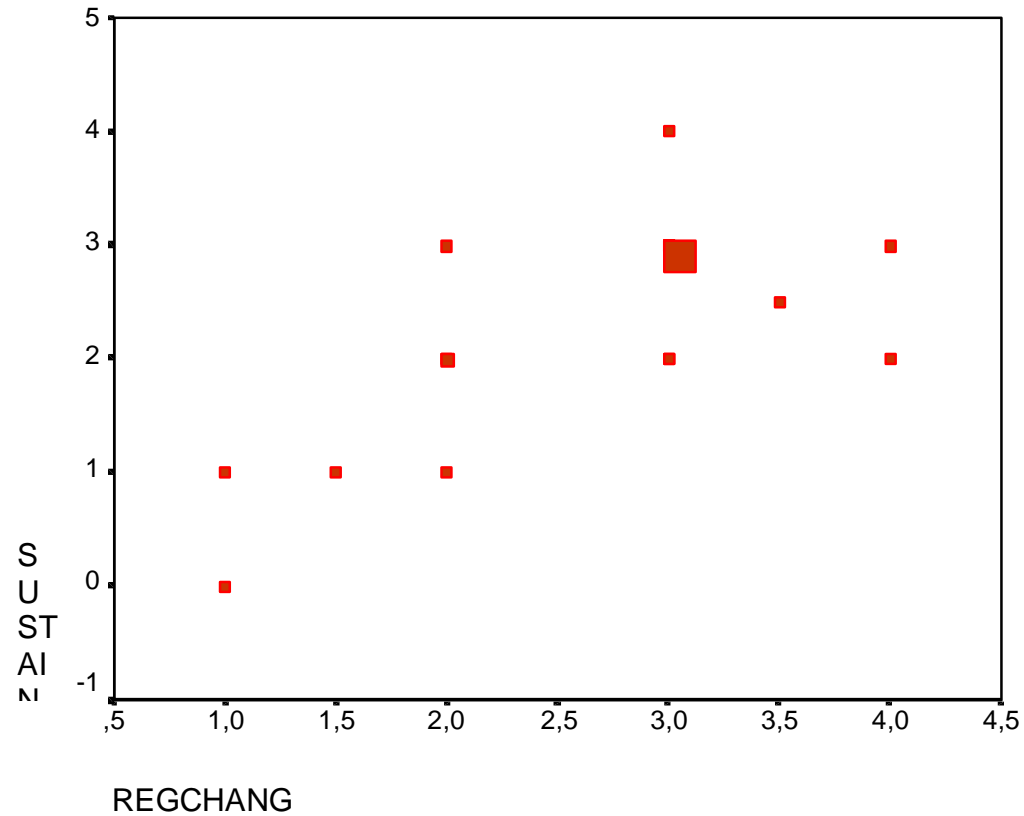




Regime aspects and sustainable use



Plot of regime change and sustainable use



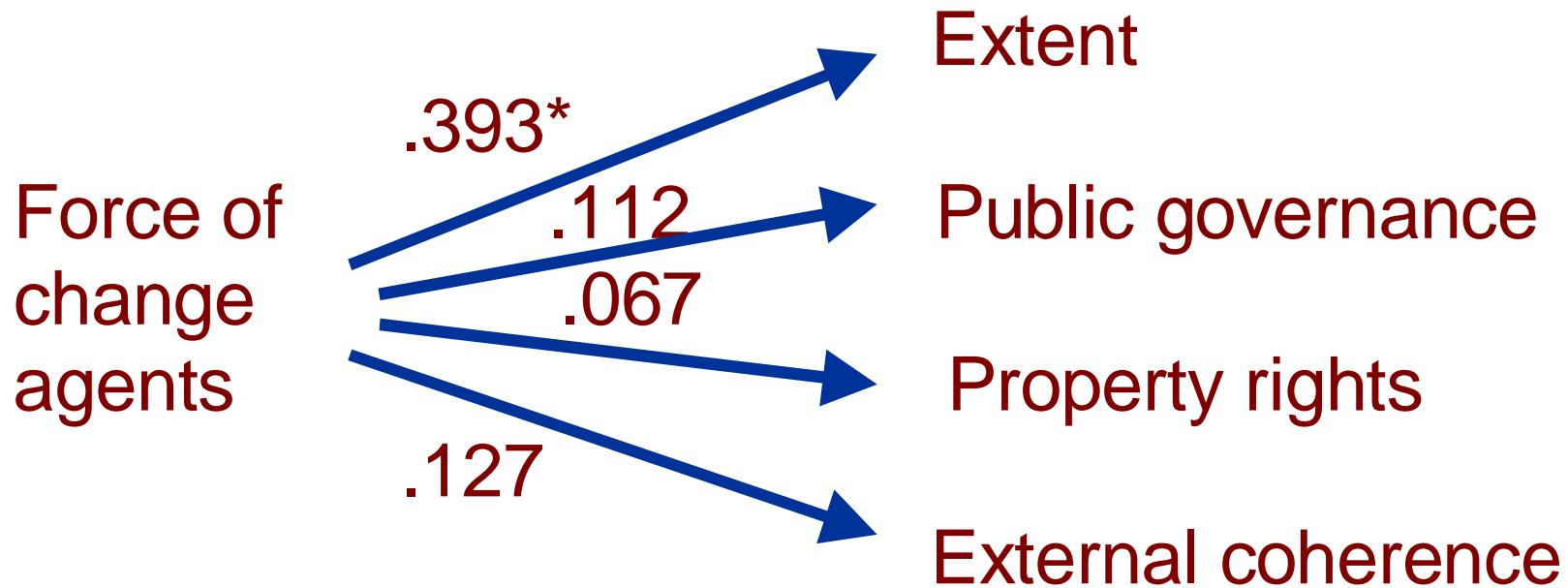
Change agents

- EU policy & regime pressures: 13 x
- National policy & regime pressures: 22 x
- Problem pressures: 19 x
- Other circumstances: 10 x

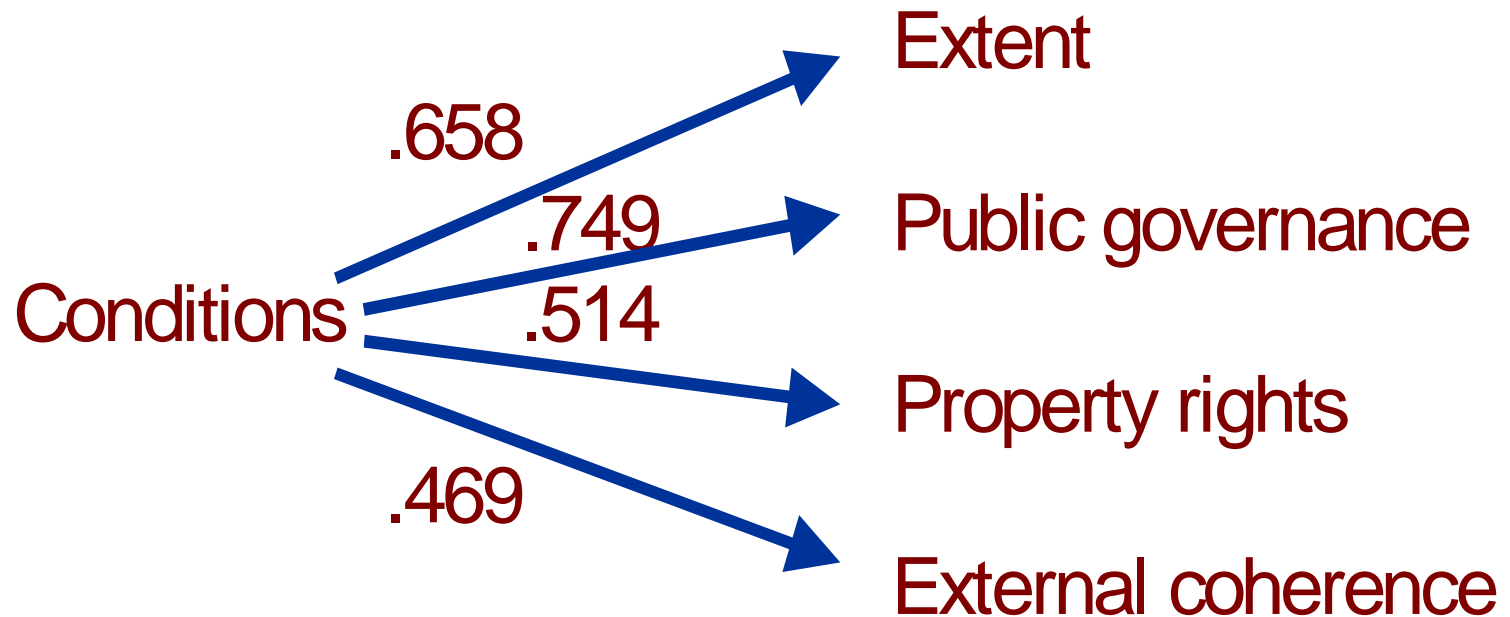




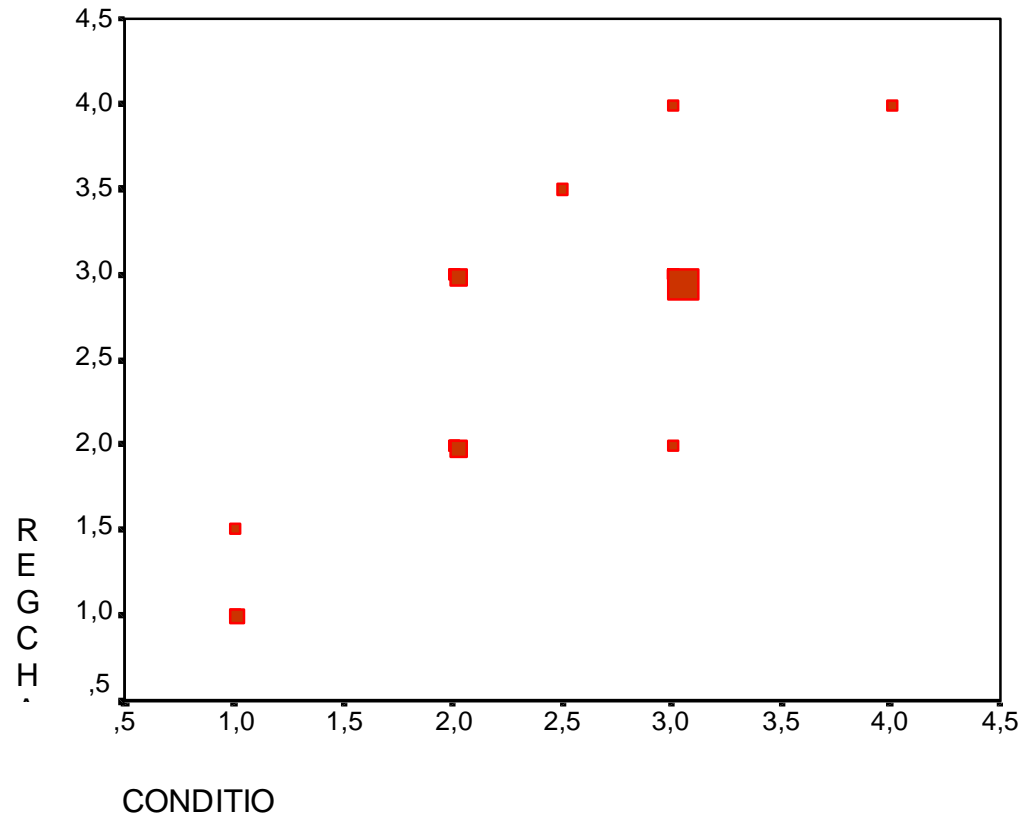
Force of change agents and regime changes



Conditions and changes of regime aspects



Plot of conditions and regime change



Favourable conditions for regime changes towards integrated management



- Tradition of cooperation
- Joint problem
- Joint chance
- Credible alternative threat
- Institutional interfaces



Joint chances

- Knowledge bases from respected sources on opportunities stemming from more integration
- Information symmetry of the actors involved on these points
- A sense of respect for each others' interests of the actors





Institutional interfaces

- Clarity of assigned responsibilities
- Free and alert mass media
- legal of practical possibilities to protect negotiated compromises
- Actors with only process objectives (“brokers”)
- Small number or strong representation of stakeholders
- Legal bases for integration
- Official policy guidelines

