The Potential of Civil Society Initiatives to Improve Economic Efficiency and Environmental Effectiveness in PES Implementation

Sarah Schomers

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December 11th, 2012
Background

PES = large public payment schemes (such as AEP, Farm Bill)
Participation is voluntary.
Efficient and effective implementation needs support.

Question: who can support PES implementation activities by providing intermediary advisory services?

Potential of German Landcare Association (LCAs)
→ CBNRM institution
→ Unique set-up at international level
→ Qualitative assessment of their potential

I will answer the following question:
How and for which activities of PES implementation can LCAs help to increase economic efficiency and environmental effectiveness?
Definitions

**Economic Efficiency** = cost-effectiveness of PES implementation, refers to costs of running and managing PES schemes

Assessed by transaction costs approach: how and where can LCAs help to reduce TC?

**Environmental Effectiveness** = degree of environmental goal achievement

Assessed:
(1) Overall level of participation
(2) Total ecological knowledge accumulated in governance structure

ECONOMIC EFFICIENCY focuses on costs,
ENVIRONMENTAL EFFECTIVENESS does not consider costs

High TC alone no problem if combined with high degree of environm. effectiveness
Costs for missing the target (CMT) need to be considered.
Generally: TC + CMT = as low as possible!!
Methodology to assess efficiency and effectiveness

PUBLIC AGENT

PES contract

LCA as advisory intermediary

FARMER
• Combine relevant stakeholders from state (municipalities) market (land stewards) civil society (nature conservation groups)

• Required that all 3 groups are represented equally in each LCA’s group committee!!
• Membership is voluntary
IMPLEMENTATION ACTIVITIES

PUBLIC AGENCY
- SEARCH & INFO GATHERING
- BARGAINING & DECISION TAKING
- POLICING + ENFORCEMENT ACTIVITIES

PRIVATE FARMER
- SEARCH & INFO GATHERING
- BARGAINING & DECISION TAKING
- POLICING + ENFORCEMENT ACTIVITIES

BEHAVIOUR OF ACTORS

PUBLIC AGENCY

PRIVATE FARMER

EXCLUSIVE INSTITUTIONAL DESIGN FEATURES
- COLLABORATIVES COMBINING THREE SOCIETAL ACTORS
- LOCAL KNOWLEDGE AND INFORMATION

ATTRIBUTE OF TRANSACTION

POLICING + ENFORCEMENT ACTIVITIES
• Operate at rural district level

• Combining local knowledge of relevant stakeholders of 3 societal actor groups

• Knowledge on political demands and provision of payment schemes, about environmental deficiencies in region etc.
IMPLEMENTATION ACTIVITIES

PUBLIC AGENCY
- SEARCH & INFO GATHERING
- BARGAINING & DECISION TAKING
- POLICING + ENFORCEMENT ACTIVITIES

PRIVATE FARMER
- SEARCH & INFO GATHERING
- BARGAINING & DECISION TAKING
- POLICING + ENFORCEMENT ACTIVITIES

ATRIBUTES OF TRANSACTION

BEHAVIOUR OF ACTORS

EXCLUSIVE INSTITUTIONAL DESIGN FEATURES
- COLLABORATIVES
  - COMBINING THREE SOCIETAL ACTORS
- LOCAL KNOWLEDGE AND INFORMATION
- BROAD SPATIAL APPEARANCE
 LCAs have local groups in all federal states

• Currently approx. 155 local groups

• Number is increasing

• In some federal states LCAs cover almost entire area

EXCLUSIVE INSTITUTIONAL DESIGN FEATURES

COLLABORATIVES COMBINING THREE SOCIETAL ACTORS

LOCAL KNOWLEDGE AND INFORMATION

BROAD SPATIAL APPEARANCE
EXCLUSIVE INSTITUTIONAL DESIGN FEATURES

- COLLABORATIVES COMBINING THREE SOCIETAL ACTORS
- LOCAL KNOWLEDGE AND INFORMATION
- BROAD SPATIAL APPEARANCE
- ACCESS TO STAKEHOLDERS & LOCAL PRESENCE

BEHAVIOUR OF ACTORS

IMPLEMENTATION ACTIVITIES

PUBLIC AGENCY
- SEARCH & INFO GATHERING
- BARGAINING & DECISION TAKING
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PRIVATE FARMER
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ATTRIBUTES OF TRANSACTION
EXCLUSIVE INSTITUTIONAL DESIGN FEATURES

- COLLABORATIVES COMBINING THREE SOCIETAL ACTORS
- LOCAL KNOWLEDGE AND INFORMATION
- BROAD SPATIAL APPEARANCE
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- Access as independent NGO
- Registered as charitable non-profit organization
- Not committed to any political will
- Only bound to protect and minister environment (as defined in their articles of association)
- No sovereign power, operate practically
EXCLUSIVE INSTITUTIONAL DESIGN FEATURES

COLLABORATIVES COMBINING THREE SOCIETAL ACTORS

LOCAL KNOWLEDGE AND INFORMATION

BROAD SPATIAL APPEARANCE

ACCESS TO STAKEHOLDERS & LOCAL PRESENCE

BROKER BETWEEN CONFLICTING INTERESTS

IMPLEMENTATION ACTIVITIES

PUBLIC AGENCY

SEARCH & INFO GATHERING

BARGAINING & DECISION TAKING

POLICING + ENFORCEMENT ACTIVITIES

PRIVATE FARMER

SEARCH & INFO GATHERING

BARGAINING & DECISION TAKING

POLICING + ENFORCEMENT ACTIVITIES

BEHAVIOUR OF ACTORS

ATTRIBUTES OF TRANSACTION
• Bottom-up approach, founding of LCAs on initiative of local actors

• Founding frequently takes many years

• Round tables to discuss problem

• Consensus finding between conflicting interests
IMPLEMENTATION ACTIVITIES

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PRIVATE FARMER
- SEARCH & INFO GATHERING
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ATTRIBUTES OF TRANSACTION

BROKER BETWEEN CONFLICTING INTERESTS

ACCESS TO STAKEHOLDERS & LOCAL PRESENCE

BROAD SPATIAL APPEARANCE

LOCAL KNOWLEDGE AND INFORMATION

COLLABORATIVES COMBINING THREE SOCIETAL ACTORS

SERVICE PROVIDER (MUNICIPALITY)

EXCLUSIVE INSTITUTIONAL DESIGN FEATURES

BEHAVIOUR OF ACTORS
- Self-conception of being service provider and partner to government
- Intermediary between government, farmers and nature conservationists
- Many practical actions are simply outsourced to LCAs as municipalities overburdened
- LCAS involve
  - Management of Natura 2000 areas
  - Implementation of WFD
  - Environmental Intervention Regulation
- Charitable form enables acquisition of additional funds for areas not covered in public payment schemes
IMPLEMENTATION ACTIVITIES

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- GERMAN ASSOCIATION FOR LANDCARE

EXCLUSIVE INSTITUTIONAL DESIGN FEATURES

ATTRIBUTES OF TRANSACTION
Umbrella organization of local LCAs

Connects LCAs across Germany

Bundles experiences + lessons learnt

Reflects needs and problems to political levels (national + supranational)

Increases lobby power of local LCAs
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BEHAVIOUR OF ACTORS

- SOCIAL CAPITAL:
  - Bonding social capital
  - Bridging social capital
  - Linking social capital
- TRUST
- ATTITUDE TOWARDS & UNDERSTANDING OF PES SCHEMES
- ACCEPTANCE
- SATISFACTION
- RELATIONSHIP BETWEEN ACTORS

ATTRIBUTES OF TRANSACTION

- UNCERTAINTY + COMPLEXITY
- ASSET SPECIFICITY
- FREQUENCY

IMPLEMENTATION ACTIVITIES

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- SEARCH & INFO GATHERING
- BARGAINING & DECISION TAKING
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- UNCERTAINTY + COMPLEXITY
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**IMPLEMENTATION ACTIVITIES**

**PUBLIC AGENCY**

- SEARCH & INFO GATHERING

**PRIVATE FARMER**

- SEARCH & INFO GATHERING
- BARGAINING & DECISION TAKING
- POLICING + ENFORCEMENT ACTIVITIES
<table>
<thead>
<tr>
<th>PUBLIC SEARCH &amp; INFORMATION PROCESSES</th>
<th>Efficiency</th>
<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification of relevant environmental problem</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Identification of relevant plots and fields</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Identification of relevant actors</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>New PES scheme development:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Consultation with practical actors (farmers, nature conservationists, administration)</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>- Assessing compliance of PES scheme with financing regulations (co-financing by EU, GAK etc.)</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Adjusting PES scheme to comply with institutional environment</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Negotiations on available and needed budgets for PES scheme</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Advising and making suggestions for design of PES scheme</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Ex-ante impact assessment (ecological impact assessment)</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Drafting concrete PES directives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Transaction Cost Theory

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**ATTRIBUTES OF TRANSACTION**
- UNCERTAINTY + COMPLEXITY
- ASSET SPECIFICITY
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**IMPLEMENTATION ACTIVITIES**

**PUBLIC AGENCY**
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**PRIVATE FARMER**
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## Public Bargaining & Decision Costs

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<tr>
<th>PUBLIC BARGAINING &amp; DECISION PROCESSES</th>
<th>Efficiency</th>
<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promotion that PES scheme exists; diffusion of information to relevant actors</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Clarification of doubts and questions on besides of farmers</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Processing of PES applications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approval of applications (contract signing)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provision of further information after contract signing if needed</td>
<td>-</td>
<td>+</td>
</tr>
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  - BARGAINING & DECISION TAKING
- PRIVATE FARMER
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POLICING + ENFORCEMENT ACTIVITIES

COLLABORATIVES
- Combining three societal actors

EXCLUSIVE INSTITUTIONAL DESIGN FEATURES
- Access to stakeholders & local presence
- Local knowledge and information
- Broad spatial appearance
- Broker between conflicting interests
- Service provider (municipality)
- German association for landcare

BEHAVIOUR OF ACTORS
- Social capital:
  - Bonding social capital
  - Bridging social capital
  - Linking social capital
- Trust
- Attitude towards & understanding of PES schemes
- Acceptance
- Satisfaction
- Relationship between actors

ATTRIBUTES OF TRANSACTION
- Uncertainty + complexity
- Asset specificity
- Frequency
### PUBLIC POLICING & ENFORCEMENT PROCESSES

<table>
<thead>
<tr>
<th>Process</th>
<th>Efficiency</th>
<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitoring and control of signed PES contracts on farm (farm level)</td>
<td>🚫</td>
<td>🚫</td>
</tr>
<tr>
<td>Evaluation of actual demand for PES schemes (scheme level)</td>
<td>🚫</td>
<td>🚫</td>
</tr>
<tr>
<td>Evaluation of acceptance and satisfaction with scheme (scheme level)</td>
<td>🟢</td>
<td>🟢</td>
</tr>
<tr>
<td>Ex-post feasibility analysis of PES scheme (scheme level)</td>
<td>🟢</td>
<td>🟢</td>
</tr>
<tr>
<td>Feedback on scheme adaptation needs (changes to be made in the future)</td>
<td>🟢</td>
<td>🟢</td>
</tr>
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Transaction Cost Theory

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- RELATIONSHIP BETWEEN ACTORS

**IMPLEMENTATION ACTIVITIES**
- PUBLIC AGENCY
  - SEARCH & INFO GATHERING
- PRIVATE FARMER
  - SEARCH & INFO GATHERING
  - BARGAINING & DECISION TAKING
  - POLICING + ENFORCEMENT ACTIVITIES
### Private Search & Information Costs

<table>
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<tr>
<th>PRIVATE SEARCH &amp; INFORMATION PROCESSES</th>
<th>Efficiency</th>
<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge that PES scheme exists and is equipped with funds</td>
<td><img src="https://i.imgur.com/123.png" alt="+" /></td>
<td><img src="https://i.imgur.com/123.png" alt="+" /></td>
</tr>
<tr>
<td>Knowledge why PES scheme is important and which environmental goal is pursued (which ES are preserved)</td>
<td><img src="https://i.imgur.com/123.png" alt="+" /></td>
<td><img src="https://i.imgur.com/123.png" alt="+" /></td>
</tr>
<tr>
<td>Identification of relevant and important areas on farm</td>
<td><img src="https://i.imgur.com/123.png" alt="+" /></td>
<td><img src="https://i.imgur.com/123.png" alt="+" /></td>
</tr>
<tr>
<td>Knowledge on content of PES scheme and how it should/can be implemented on own plots</td>
<td><img src="https://i.imgur.com/123.png" alt="+" /></td>
<td><img src="https://i.imgur.com/123.png" alt="+" /></td>
</tr>
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Transaction Cost Theory

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**IMPLEMENTATION ACTIVITIES**

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**PRIVATE FARMER**
- SEARCH & INFO GATHERING
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# Private Bargaining & Decision Costs

<table>
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<tr>
<th>PRIVATE BARGAINING &amp; DECISION PROCESSES</th>
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<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filling out of PES application forms</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Documentation of PES implementation</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Obtaining additional information during application process</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>
Transaction Cost Theory

**EXCLUSIVE INSTITUTIONAL DESIGN FEATURES**
- Collaboratives combining three societal actors
- Access to stakeholders & local presence
- Local knowledge and information
- Broad spatial appearance
- Broker between conflicting interests
- Service provider (municipality)
- German Association for Landcare

**BEHAVIOUR OF ACTORS**
- Social capital:
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- Trust
- Attitude towards & understanding of PES schemes
- Acceptance
- Satisfaction
- Relationship between actors

**ATTRIBUTES OF TRANSACTION**
- Uncertainty + complexity
- Asset specificity
- Frequency

**IMPLEMENTATION ACTIVITIES**
- Public agency
  - Search & info gathering
  - Bargaining & decision taking
  - Policing + enforcement activities
- Private farmer
  - Search & info gathering
  - Bargaining & decision taking
  - Policing + enforcement activities
### Private Policing & Enforcement Costs

<table>
<thead>
<tr>
<th>PRIVATE POLICING &amp; ENFORCEMENT PROCESSES</th>
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<tbody>
<tr>
<td>Ex-ante monitoring on farm if implemented activities will pass control of public agency (are needed documents in place? Is scheme implemented correctly?)</td>
<td>🟥</td>
<td>🟦</td>
</tr>
</tbody>
</table>
Conclusion

LCAs can improve economic efficiency + environmental effectiveness for many activities

Findings are generalizations on the potential of LCAs!
Potential of LCAs is inhere in their institutional design! Degree of exploitation depends on quality of local staff!!

Experts agreed that LCAs cannot and shall not replace private agricultural extension services!

Cooperation between those two might be fruitful and is done for instance in a pilot project in Mecklenburg-Western Pomerania (Germany).
THANK YOU VERY MUCH!!!

Contact: sarah.schomers@zalf.de

Further Information can be found at:

www.civiland-zalf.org