

Conference on
Payments for Ecosystem Services
and their institutional dimension
10-12 November 2011, Berlin, Germany
Session: PES and its actors

The relevance and role of civil society actors within PES Schemes

- A case study analysis of PES schemes in Germany and the US

Bettina Matzdorf, Claudia Sattler & Sarah Schomers

Content

- Background of our research and research questions/ interesting differences between our case study countries
- Analytical framework
- Data source and methods
- Results
- Discussion and conclusions

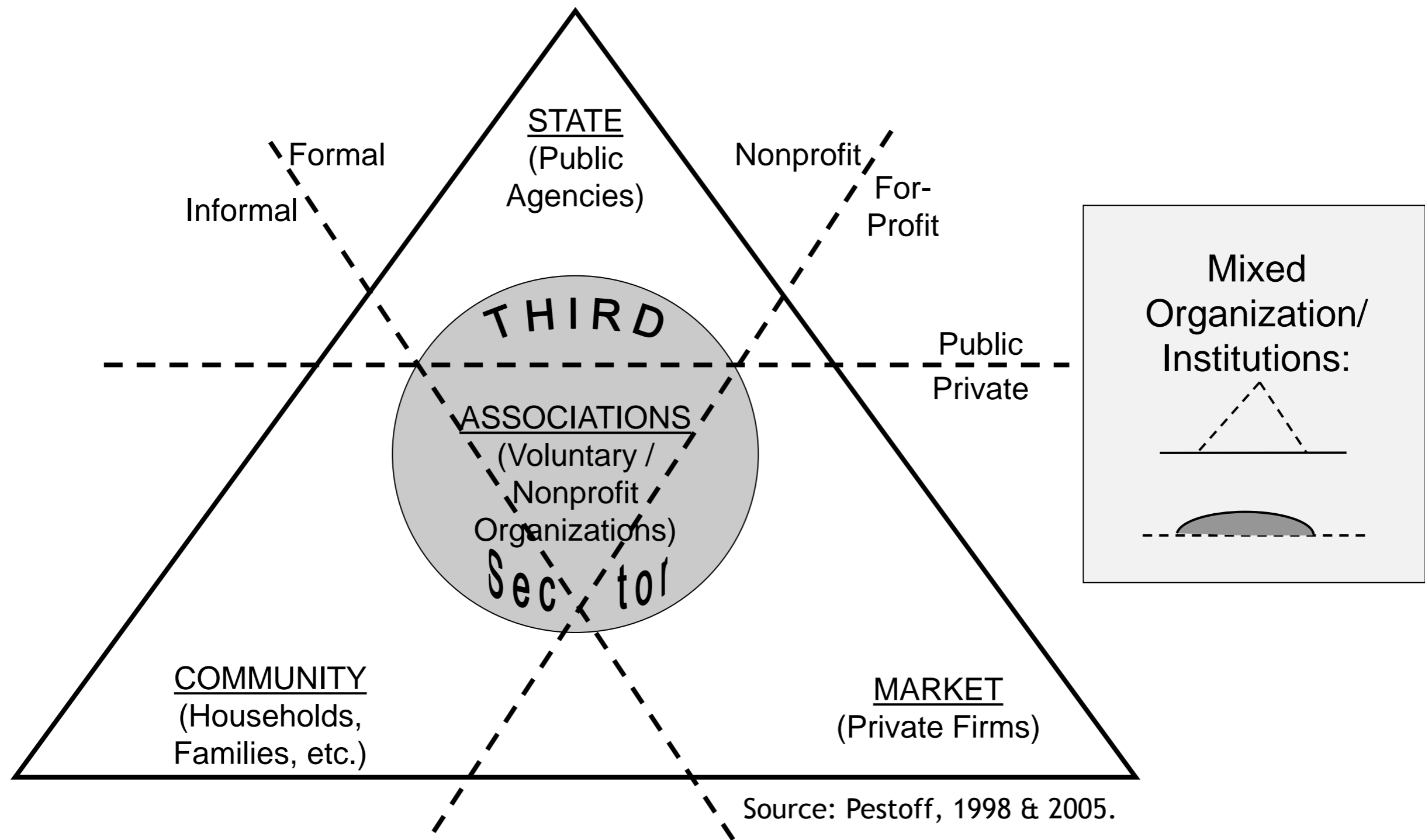
PES as an instrument for ecosystem service management has received much attention during the last years. Beside the potential of such kind of positive financial incentives there are critical aspects with regard to:

- 1.) effectiveness and efficiency of PES (in practice)
- 2.) ethical issues and questions of distributional effects.

In our presentation we want to focus on three questions:

- What are the relevance and the roles of civil society actors within PES schemes?
- Do civil society actors have the capacity to improve the effectiveness and the efficiency of PES schemes?
- Do civil society involvement help to reduce tensions rising from the introduction of PES schemes (e.g. commodification of ES, new distributions of property rights)?

Civil society actors (third sector) in the welfare triangle



Characteristics of the three arenas

State

- governmental
- democratic
- public interest
- enforcement-driven
- justice and equality

Market

- non-governmental
- not democratic
- private interests
- profit-driven
- ownership/trading

Civil society

- non-governmental
- **not necessarily democratic**
- **public interest**
- **purpose-driven**
- **not-for profit/altruistic**

these are generalization → no arena is consistent in itself!

The fabric of modern societies rests upon the existence and development of all three arenas

taxation, fees; market income

income, occasional government subsidies

government subsidies, non-related market income

Why focus on civil society actors (CSA) engagement in PES?

PES require someone who is willing to take the initiative to promote change, to build diverse coalitions of stakeholders including reserachers and to ensure consistent financial support .

CSA can be this “someone” as they are attributed with: **compassion, creativity** (“potential”), **independence, voluntary engagement, social cohesion, public consensus building**

Interesting differences between US and Germany

- The US and the European **landscape (and related ecosystem services?)** as well as the related **nature conservation concepts** differ from each other



Segregative concept in the US

Integrative concept in Germany



Interesting differences between US and Germany

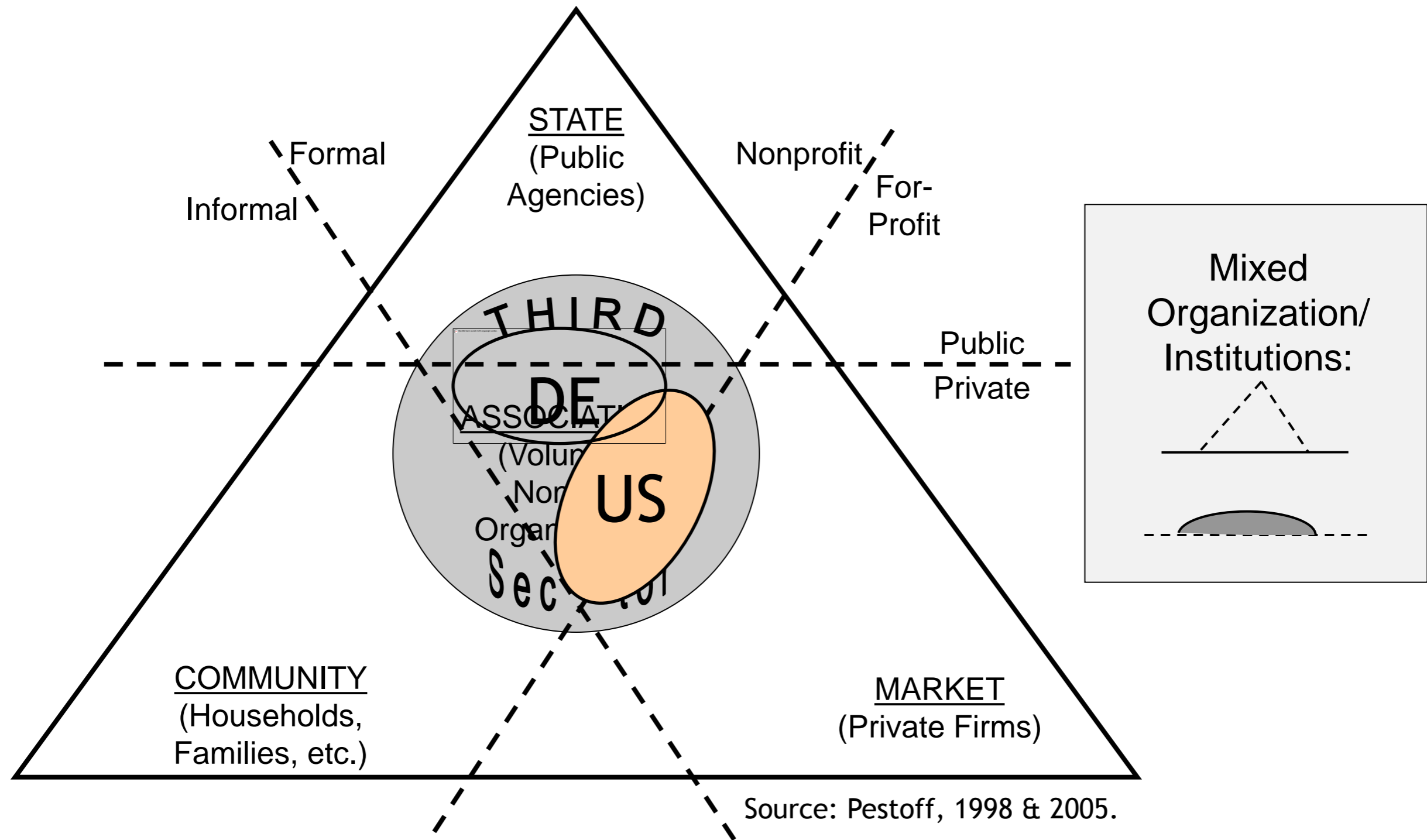
The US and the German welfare system as well as the **tradition and role of civil society actors differ**

| Government social spending | Economic nonprofit Sector Size | |
|----------------------------|--|--|
| | <i>Low</i> | <i>High</i> |
| <i>Low</i> | Statist (Japan, most developing countries) | Liberal (USA , UK) |
| <i>High</i> | Social democratic (Sweden, Norway, Denmark, Finland) | Corporatist (France, Germany , Italy) |

Source: Salamon and Anheier (1998, 2006) based on Esping-Andersen 1990

The American system can be defined as a liberal state, while Germany is specified as a corporatist welfare state. **That means that the German society and the nonprofit sector is more dominated by the state than the civil society in the US.**

Civil society actors (third sector) in the welfare triangle



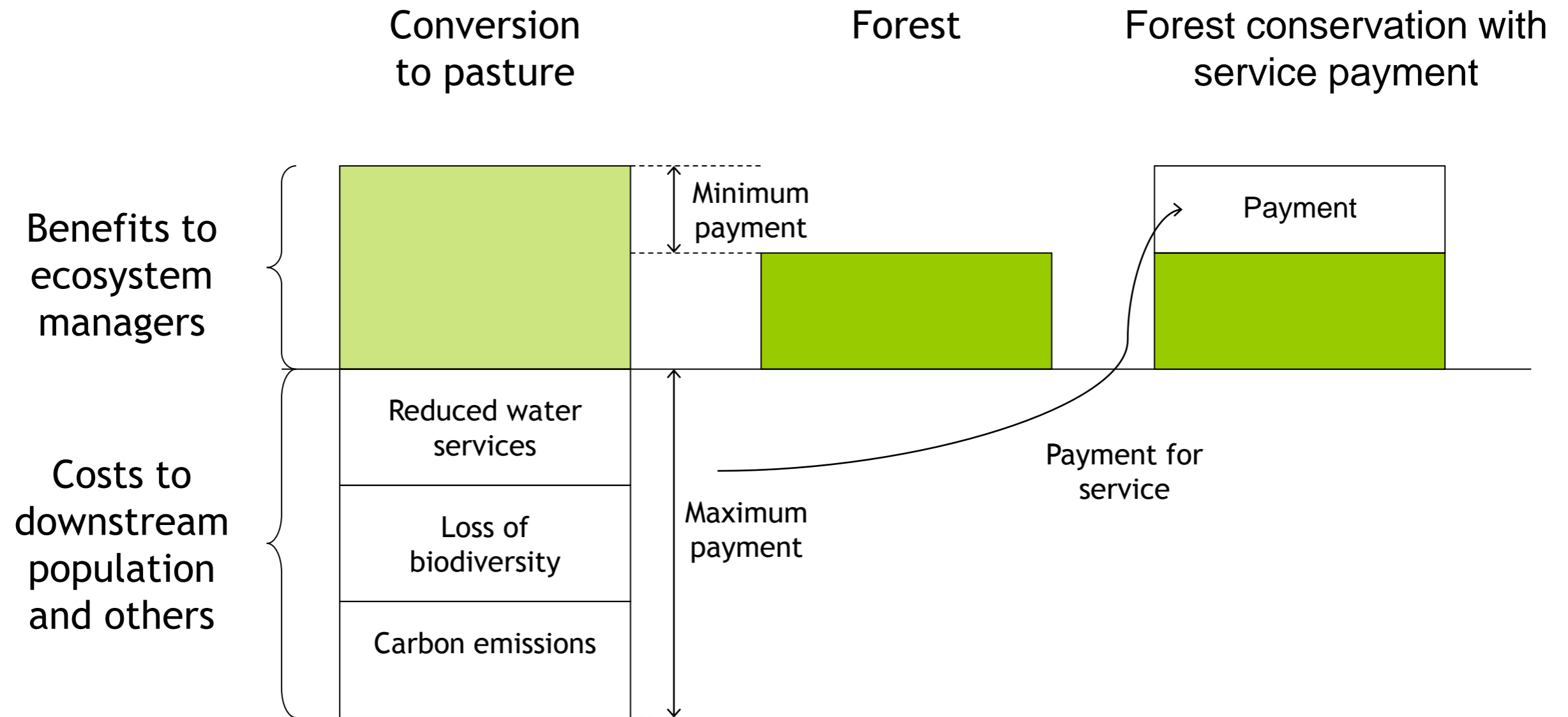
PES in our research

„... markets demand payments. However, also hierarchies and communities may use payments – e.g., in the form of state taxes and subsidies or community compensations. Hence, I find it productive to make a distinction between the wider concept of payments for environmental services (PES) and the narrower concept of markets for environmental services (MES)“ (Vatn 2009: 3).

PES, as defined by Wunder (2005), is an helpful theoretical reference point. However, it does not emphasize the specific problems involved when creating a market for environmental services, specifically how transaction costs influence the format of payments (Vatn 2009).

We use a wider concept of PES in terms of Vatn. **PES is a tool designed to use an economic incentive system for protecting, ensuring or augmenting the delivery of benefits to human from natural systems”** (see Bulte et al., 2008; Engel et al., 2008; Muradian et al., 2009) (in Fisher et al. 2009). However, we only integrate direct payments (positive financial incentives) in our understanding of payments for ecosystem services (PES).

PES in our research



Source: PAGOLIA & PLATAIS 2007

Types of PES

PES are not easy to classify. However, a classification is helpful for analyzing such a broad concept. The purpose of classification should be considered.

We want to make a classification to help analyze the role of civil society actors.

Types of PES

**Regulatory intervention
(legal driver)**

**No regulatory intervention
(no legal driver)**

**Governmental
payments**

Compensation payments

Characterized by:
regulatory restrictions for land users (legal regulation of the kind of land use) in combination with the compensation of income lost

Examples:
compensation payments for regulatory compliance in Natura 2000 areas in Europe
PES programs in China

Governmental PES

Characterized by:
governmental designed and implemented programs for environmental friendly land use (in Europe often based on CAP in the US on the Farm Bill).

Examples:
- agri-environmental schemes in Europe, US
- PES program in Costa Rica

**No
governmental
payments**

Mitigation Payments

Characterized by:
Cap and trade mechanism

Examples:
- Habitat Banking (US)
- Wetland mitigation banking (US)
- Eco-accounts in context of the Impact Mitigation Principle (Germany)
(- REED+ based on legal defined Caps)

Non-governmental-financed (user-financed) PES

Characterized by:
Coase solution, market-based instruments

Examples:
- Voluntary payments improve the provision of drinking water (Vittel)
- Voluntary payments for restoration and conservation of peat land/ moors
(- Voluntary carbon markets)

Types of PES

| | Regulatory intervention (legal driver) | No regulatory intervention (no legal driver) |
|--------------------------------|--|---|
| Governmental payments | <p>Compensation payments</p> <p>Characterized by: regulatory restrictions for land users (legal regulation of the kind of land use) in combination with the compensation of income lost</p> | <p>Governmental PES</p> <p>Characterized by: governmental designed and implemented programs for environmental friendly land use (in Europe often based on CAP in the US on the Farm Bill).</p> |
| No governmental payments | <p>Mitigation Payments</p> <p>Characterized by: Cap and trade mechanism</p> | <p>Non-governmental-financed (user-financed) PES</p> <p>Characterized by: Coase Solutions, market-based instruments</p> |

Analytical framework

| | Regulatory intervention (legal driver) | No regulatory intervention (no legal driver) |
|---------------------------------|---|---|
| Governmental payments | <p>Compensation payments</p> <ol style="list-style-type: none"> 1. Relevance of the instrument 2. Relevance of CSA within the instrument 3. Role of CSA within the instrument <ul style="list-style-type: none"> • Effectiveness and efficiency • Watchdog/ mediator | <p>Governmental PES</p> <ol style="list-style-type: none"> 1. Relevance of the instrument 2. Relevance of CSA within the instrument 3. Role of CSA within the instrument <ul style="list-style-type: none"> • Effectiveness and efficiency • Watchdog/ mediator |
| No governmental payments | <p>Mitigation Payments</p> <ol style="list-style-type: none"> 1. Relevance of the instrument 2. Relevance of CSA within the instrument 3. Role of CSA within the instrument <ul style="list-style-type: none"> • Effectiveness and efficiency • Mediator/ watchdog | <p>Non-governmental-financed (user-financed) PES</p> <ol style="list-style-type: none"> 1. Relevance of the instrument 2. Relevance of CSA within the instrument 3. Role of CSA within the instrument <ul style="list-style-type: none"> • Effectiveness and efficiency • Mediator/ watchdog |

Mixed data sources and methods

- Literature review (papers: 485),
- internet research,
- online-survey (foundations and charities in US and Germany),
- qualitative face-to face interviews (24 administration experts, 26 civil society representatives from the US and Germany),
- semi-structured telephone interviews (36 German NGO representatives)

Case study projects are identified based on these sources

Overview on the relevance (extent) of the PES instrument types all over the world

| | Regulatory intervention (legal driver) | No regulatory intervention (no legal driver) |
|--------------------------|---|--|
| Governmental payments | <p>Compensation payments</p> <p style="text-align: center;">++</p> | <p>Governmental PES</p> <p style="text-align: center;">+++++</p> |
| No governmental payments | <p>Mitigation Payments</p> <p style="text-align: center;">+</p> | <p>Non-governmental-financed (user-financed) PES</p> <p style="text-align: center;">+++</p> |

based on literature review (n=485), key words: payments for ecosystem services, environmental services

Overview on the relevance (extent) of the PES instrument types

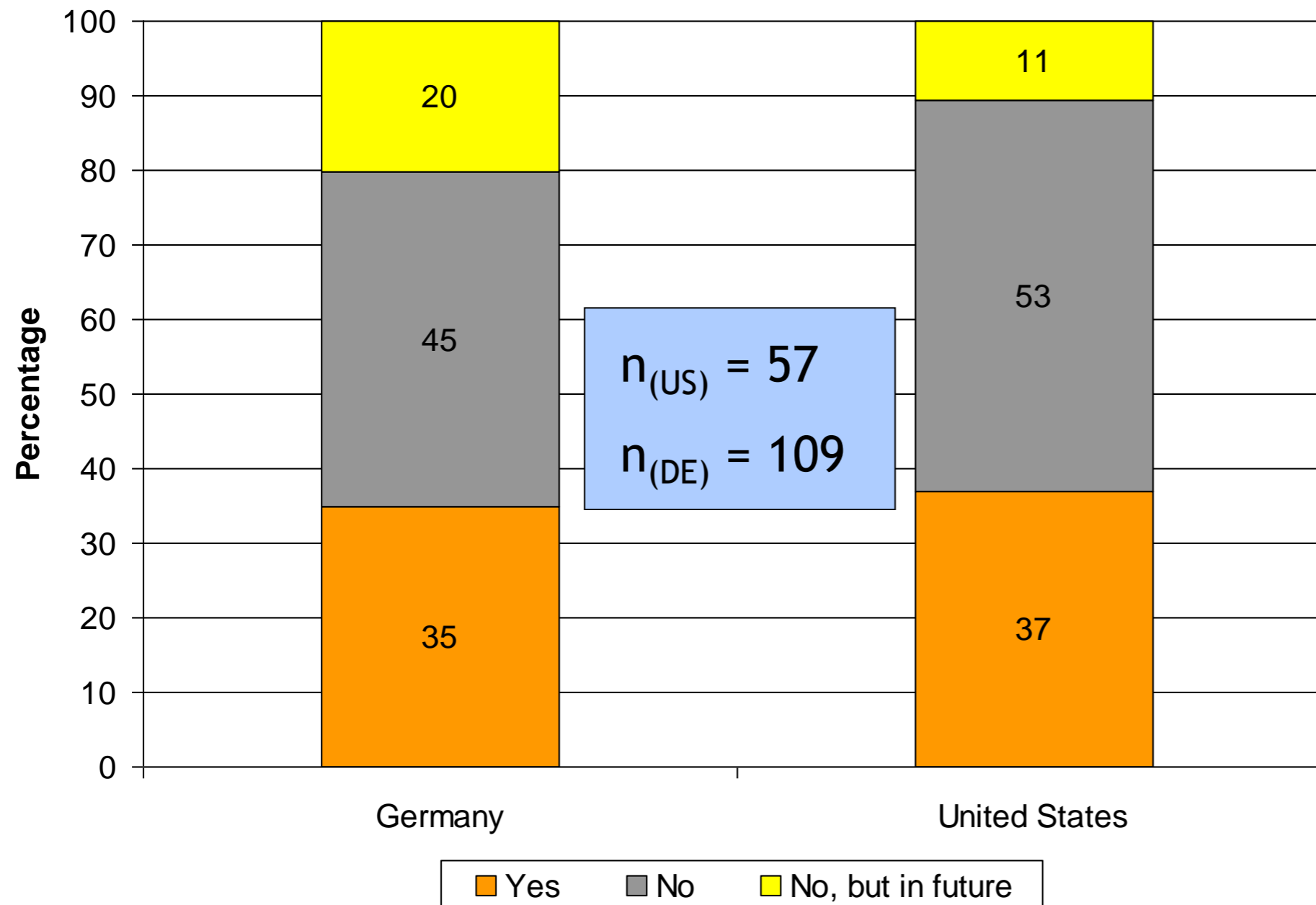
| | Regulatory intervention (legal driver) | | No regulatory intervention (no legal driver) | |
|--------------------------------|---|----|--|-----|
| Governmental payments | Compensation payments | | Governmental PES | |
| | + | - | +++ | +++ |
| No governmental payments | Mitigation Payments | | Non-governmental-financed (user-financed) PES | |
| | + | ++ | + | ++ |
| | Germany | US | | |

Overview on the relevance (extent) of CSA engagement within the PES instrument types

| | Regulatory intervention (legal driver) | | No regulatory intervention (no legal driver) | |
|--------------------------------|---|----|--|-----|
| Governmental payments | Compensation payments | | Governmental PES | |
| | (+) | - | +++ | +++ |
| No governmental payments | Mitigation Payments | | Non-governmental-financed (user-financed) PES | |
| | ++ | ++ | + | ++ |
| | Germany | US | | |

Relevance (extent) of CSA engagement within PES

Results of online-survey (foundations and charities)
- Involvement in PES?



Results of telephone interviews (25 environmental NGOs)

- Involvement in PES?

76% of German NGOs use/are involved in PES

Overview on the potential role of CSA within PES types

| Roles of CSA | Compensation payments | Governmental PES | Mitigation Payments | Non-governmental PES (user-financed) |
|--|-----------------------|------------------|---------------------|--------------------------------------|
| Watch dog | | | | |
| Buyer | | | | |
| Seller | | | | |
| Facilitator within the PES (reduction of transaction cost/ financing (including voluntary work) of transaction costs) | | | | |
| Initiators | | | | |
| Design of PES schemes - Innovator | | | | |
| Implementing of PES schemes - Broker | | | | |
| Monitoring | | | | |

- Social entrepreneurs

Pioneers and Innovators

Role of CSA within PES schemes –

1 The Innovator - Commodification of ES

PES Type

| | |
|--|--|
| | |
| | |

Country: US (Iowa, Vermont (pilot-testing))

Duration: Started in 2002

ES: Water quality

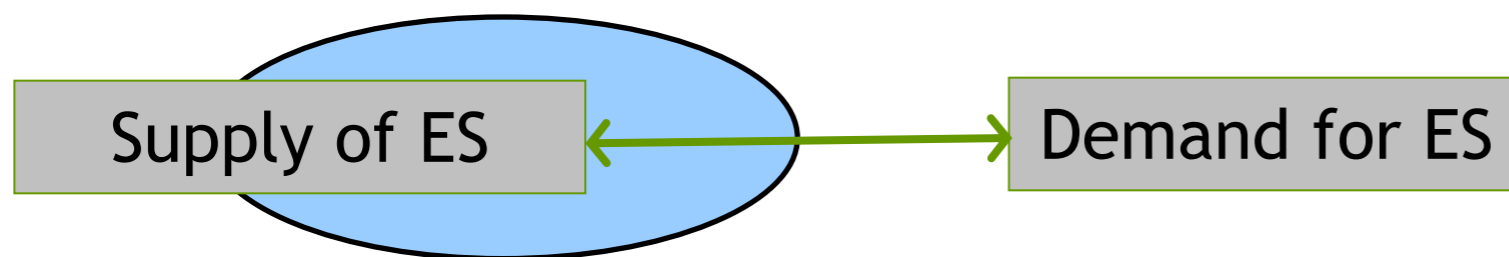
Fin. incentive for: Pay-for-Performance - reduction of N and P

Provider of ES: Farmers

Buyer: USDA - NRCS (state)

Role of CSO: Finance development and implement performance-based payments (Winrock International and others)

PEPA

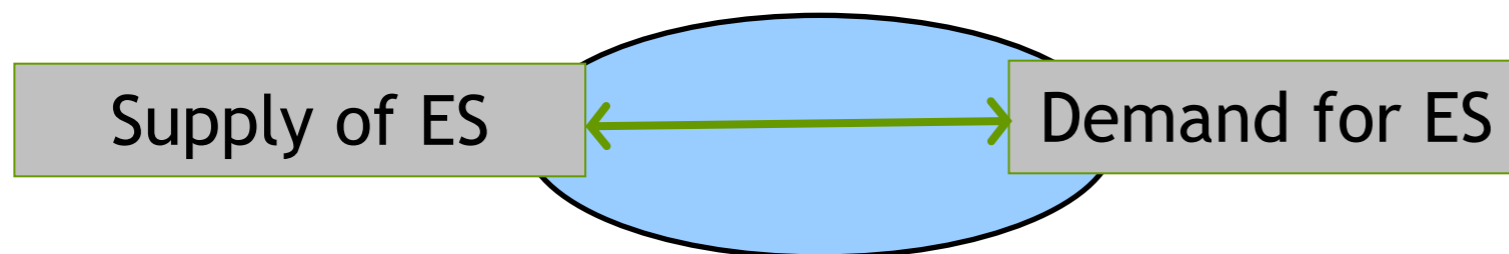


Role of CSA within PES schemes – 2 The Broker

PES Type

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| | |

| | | |
|---------------------|--|--------------------------|
| Country: | US/ North America | <h2>Ducks unlimited</h2> |
| ES: | Wetland based ES (biodiversity, water regulation ...) | |
| Fin. incentive for: | Conservation (restoring grasslands, forests, watersheds) | |
| Provider: | Landowners/ farmers | |
| Buyer: | Government (Wetland Reserve Program) | |
| Role of CSO: | Finance Brokers - they go out and find land owners of identified potential wetland restoration sites and try to bring them into the program | |



Role of CSA within PES schemes – 2b The Broker

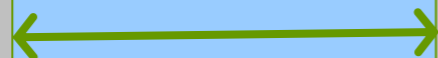
PES Type

| | |
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| | |

| | | |
|---------------------|--|---|
| Country: | Germany | Foundation „Rheinische Kulturlandschaft“ |
| Duration: | Founded in 2003 | |
| ES: | Maintaining and promoting cultural landscapes | |
| Fin. incentive for: | Providing and maintaining areas for nature conservation | |
| Provider: | Farmers | |
| Buyer: | Project sponsors | |
| Role of CSO: | Coordinator for compensation measures in cooperation with agricultural and forestry sectors; plan, implement and finance nature conservation measures; care of nature conservation areas; consulting; research and development projects etc. | |



Supply of ES



Demand for ES

Role of CSA within PES schemes – 3a The Social Entrepreneur

PES Type

| | |
|--|--|
| | |
| | |

Country: US (Maryland and Delaware)

Duration: Founded in 2009

ES: Carbon sequestration, Forest conservation, Habitat conservation, Water quality protection, Wetland conservation

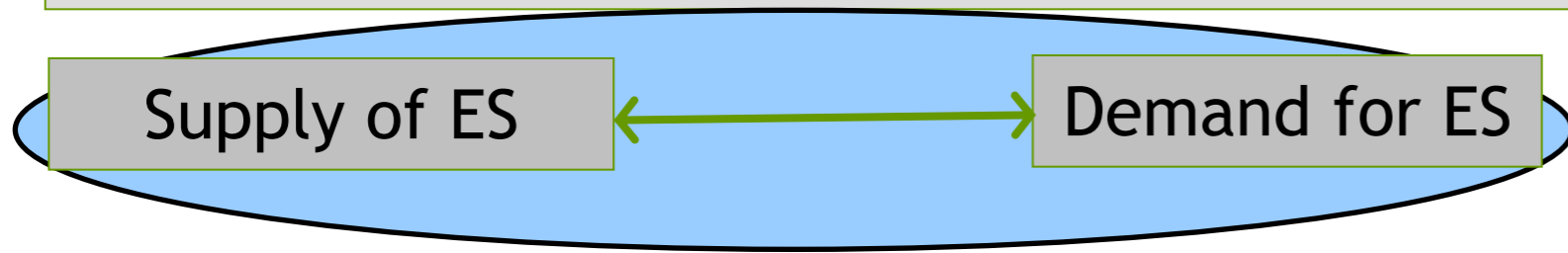
Fin. incentive for: different ES (using credits)

Provider of ES: Landowners

Buyer: Cities, industries, businesses and non-profit organisations

Role of CSO: Develop credits (commodification), Provide online conservation platform („Ecosystem Service Marketplace“) for connecting buyers and sellers, project education, project development

Bay Bank

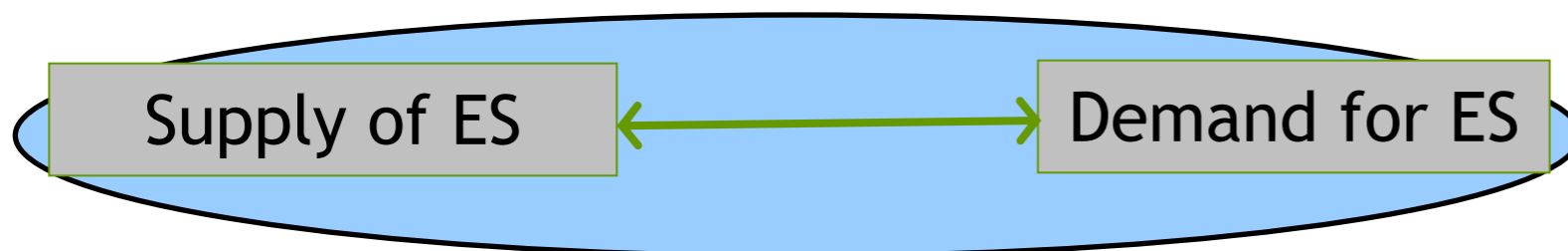
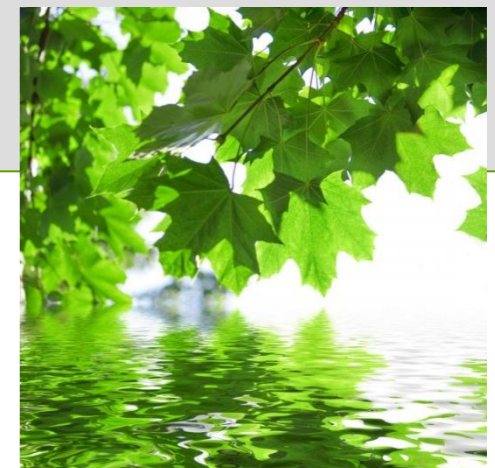


Role of CSA within PES schemes – 3b The Social Entrepreneur

PES Type

| | |
|--|--|
| | |
| | |

| | | |
|---------------------|---|--------------------------|
| Location: | Germany | <h2>Trinkwasserwald</h2> |
| Duration: | Association was founded in 1995 | |
| ES: | Drinking water | |
| Fin. incentive for: | Forest restoration („Drinking water forest“) | |
| Provider: | Land users, landowners | |
| Buyer: | Sponsors, investors | |
| Role of CSO: | Forest restoration is organised by Trinkwasserwald e. V., cooperation partners are companies (e. g. BIONADE GmbH, Deutsche Bank AG) and local politicians, projects are supported by voluntary work and donations | |



Discussion and conclusion

Governmental engagement is for the most types of PES necessary (legal driver, create markets or support to create markets, as buyer for ES)

- CSA are not an important group of buyers for ES
- CSA are often pioneers/ innovators - they develop pilot projects

However, for PES the cooperation of the different societal actors seems to be much important!

The governmental PES should be more open to use the capacity of CSA.

... but often hidden agenda (distributional reason/ subsidies)

Online-survey on Foundations and Charities

- addressed to: environmentally engaged foundations/charities (Germany + US)
- 45 questions on CSI structures + their engagement in PES
- conducted in: winter 2010
- data basis: DE = Maecenata institute, Bundesverband Deutscher Stiftungen; US = Foundation Center NYC, GuideStar US
- invited: DE = 1274; US = 910
- response: DE = 444 (34.5%); US = 107 (11.8%)
- analyzable: DE = 203 (16.0%); US = 79 (8.7%)

Role of CSA within PES schemes – 1b The Innovator – Commodification of ES

| PES Type | |
|----------|--|
| | |
| | |

| | |
|---------------------|---|
| Country: | US (Oregon) |
| Duration: | Founded in 1993 |
| ES: | Water management |
| Fin. incentive for: | Pay-for-Performance |
| Provider of ES: | Landowners |
| Buyer: | Companies |
| Role of CSO: | Determine how much mitigation credit companies must buy |

