

Bernhard Osterburg, Tania Runge



**Federal Agricultural
Research Centre**

Institute of Rural Studies

Agri-environmental measures in Germany - their evolution in practice and new approaches to strengthen efficiency

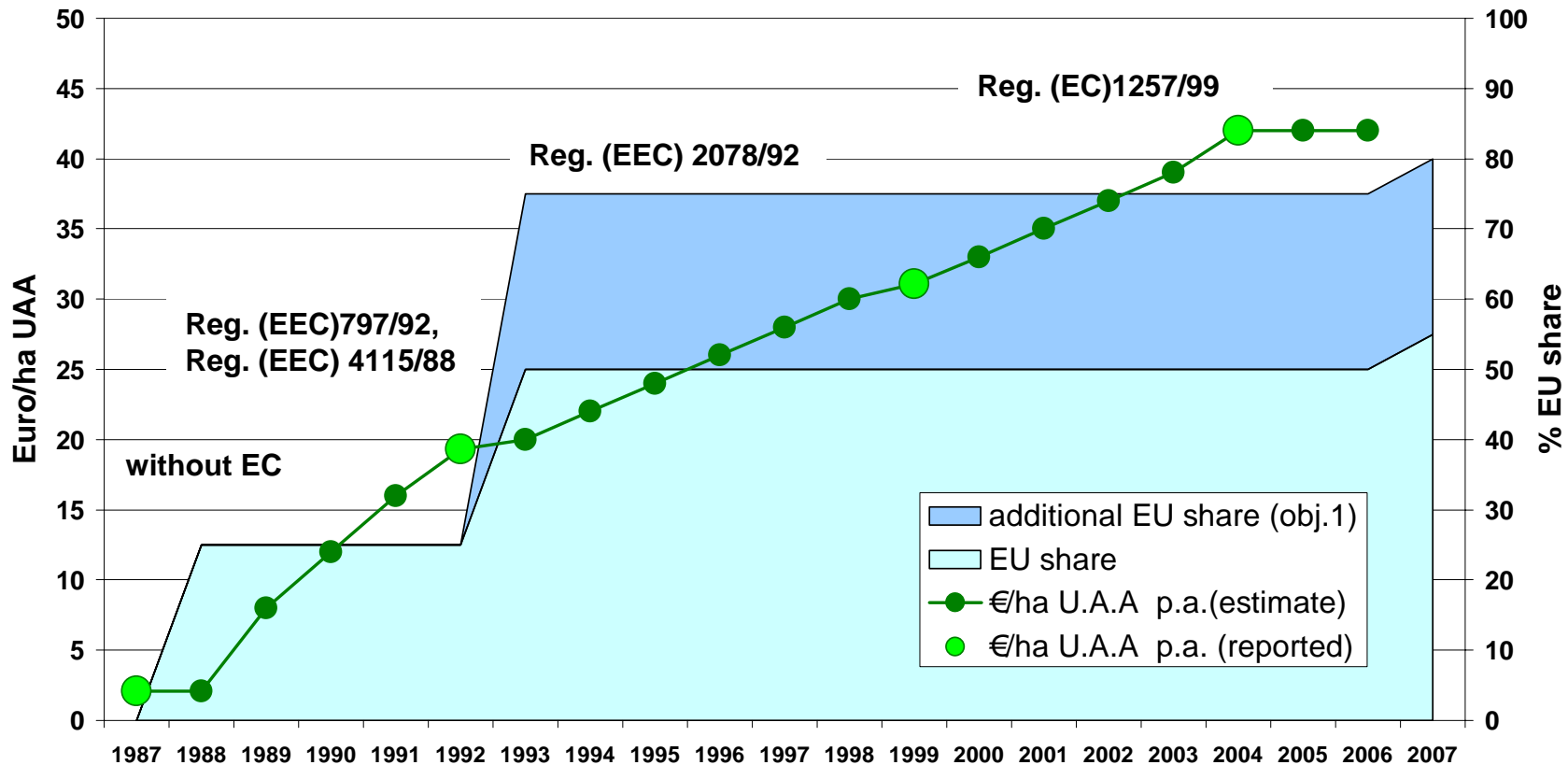
**Workshop on information deficiencies in agri-environmental
policies: supply side inefficiencies**

6 June 2006

Agri-environmental measures in Germany

- **Regional implementation at Laender level**
- **‘horizontal’ measures offered throughout whole region, some specific measures spatially targeted**
- **Flat-rate payments dominate, few measures with payment according to soil fertility index**
- **High variety of measures** (organic farming, extensive grassland, green cover crops, reduced tillage, land management for nature conservation, set-aside, establishment of grassland) **... with different environmental objectives**
- **Flat-rate payments and self-selection leading to concentration of support in less favoured areas**

Development of agri-environmental programmes depending on EU co-financing



Source: ITAES WP3 P51 DR 01, page 9

2004: Support of 10 €/ha (Schleswig-Holstein) to >100 €/ha (Baden-Württemberg)

Involvement of different policy levels in design and implementation of AEM

	EU	National	Land	Local level
Framework regulations	X	X	C	
Design		(X)	X	(X)
Notification	X			
Financing	X	X	x	(X)
Implementation:				
- Promotion and advice		(X)	X	X
- Approval of applications			X	X
- Payments			X	
- Control and enforcement			X	X
Control of implementation	X			
Monitoring and evaluation	X	X	X	C

X: regular involvement; (X): occasional involvement ; C: consultation/participation

Source: adapted from Nitsch et al. 2005, ITAES WP4 D8 P51 P5

Laender bear most public TC, but only $\leq 50\%$ of payments
Principles of subsidiarity and fiscal equivalence in conflict?

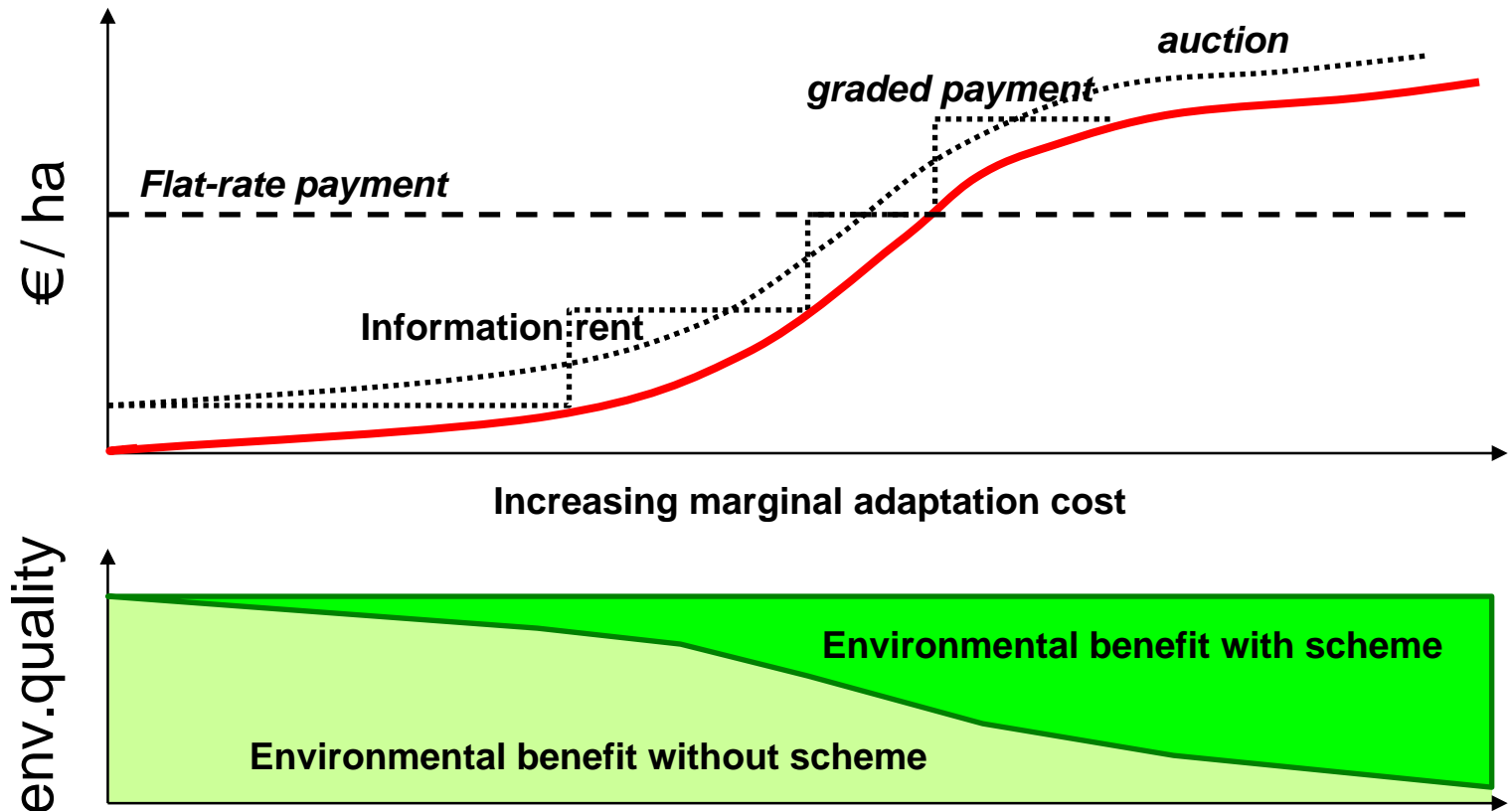
Hidden action / moral hazard

- **Control according to EU rules for Integrated Administration and Control System (IACS):**
 - Control of applications
 - On-the-spot control of $\geq 5\%$ of beneficiaries
- **EU Court of Auditors (2005): farming practices and techniques verifiable and properly verified?**
- **Limitations on inputs only if technically and economically measurable (Reg. (EC) 817/2004)**
- **Increasing sanctions not feasible for voluntary measures – verifiable standards and control rate (control rate to be increased in case of cheating)**

Hidden information / adverse selection I

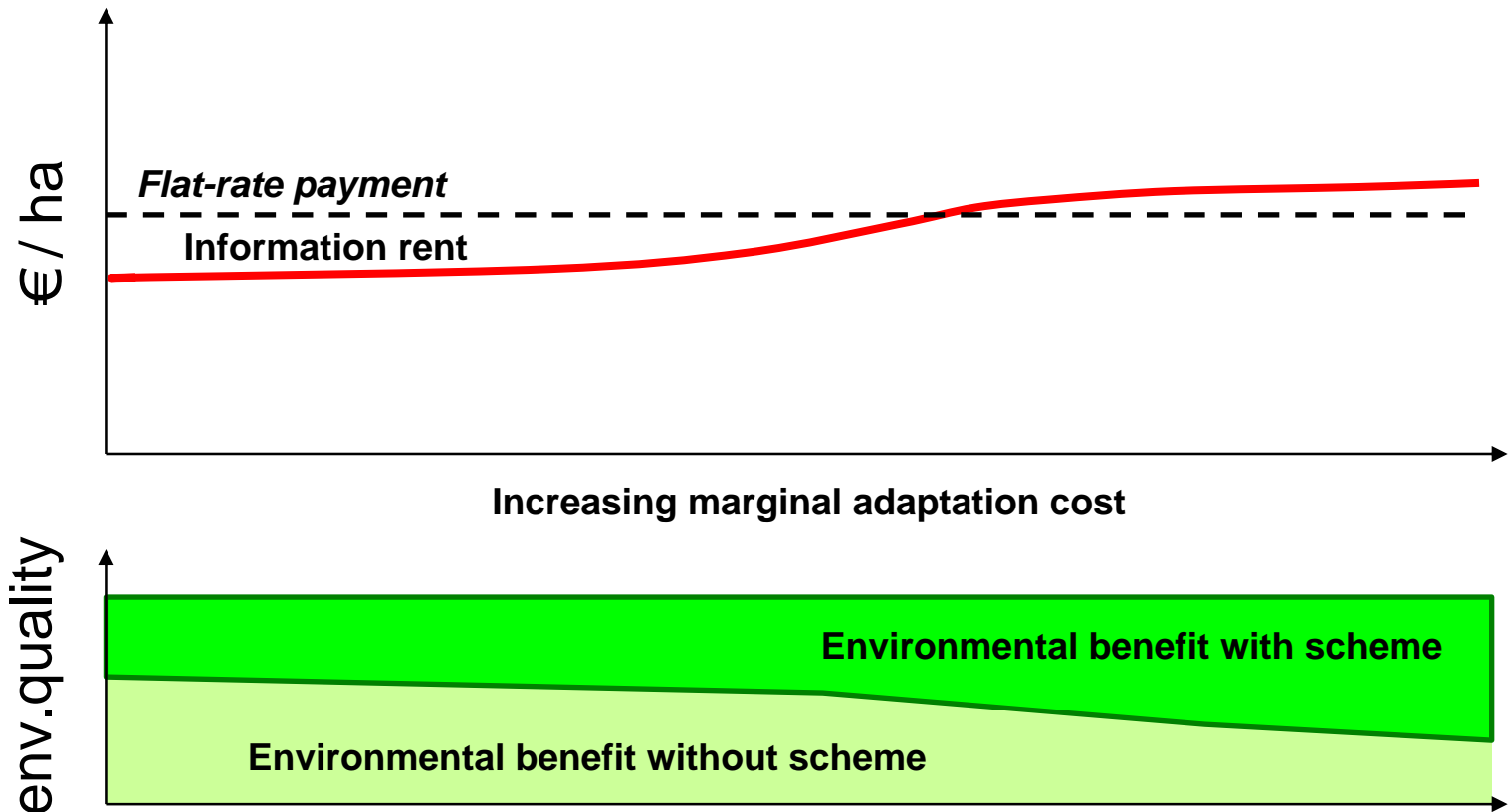
- **Flat-rate payments lead to concentration of scheme uptake in farms with low adaptation cost and thus to windfall profits**
- **Valuation problem:**
 - Economic cost or budgetary cost?
 - Compensation of additional cost and income forgone or „remuneration of ecological outputs“
 - Support for improvements or maintenance?
 - Marg. adaptation cost: distribution, ex-ante/ex-post
- **Efficiency or minimized trade distortions?**
- **Role of public TC for reducing windfall profits**

Hidden information / adverse selection II



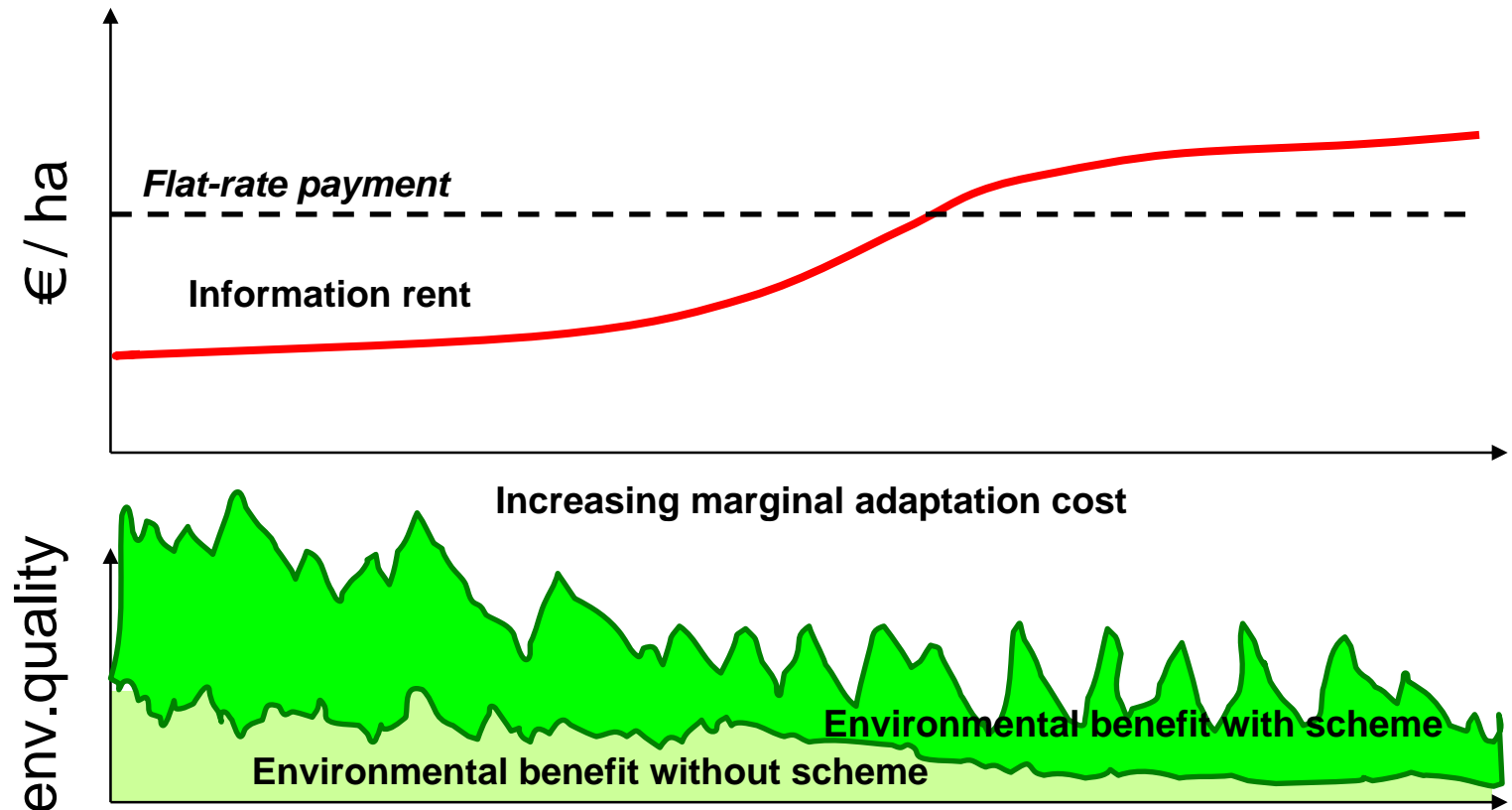
Crucial assumption on marginal cost distribution and environmental benefits

Hidden information / adverse selection III



Modest differentiation of marginal cost

“Hidden impact” as the central problem



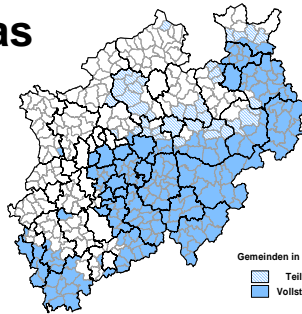
High differentiation of environmental impacts

Hidden information and “hidden impact”

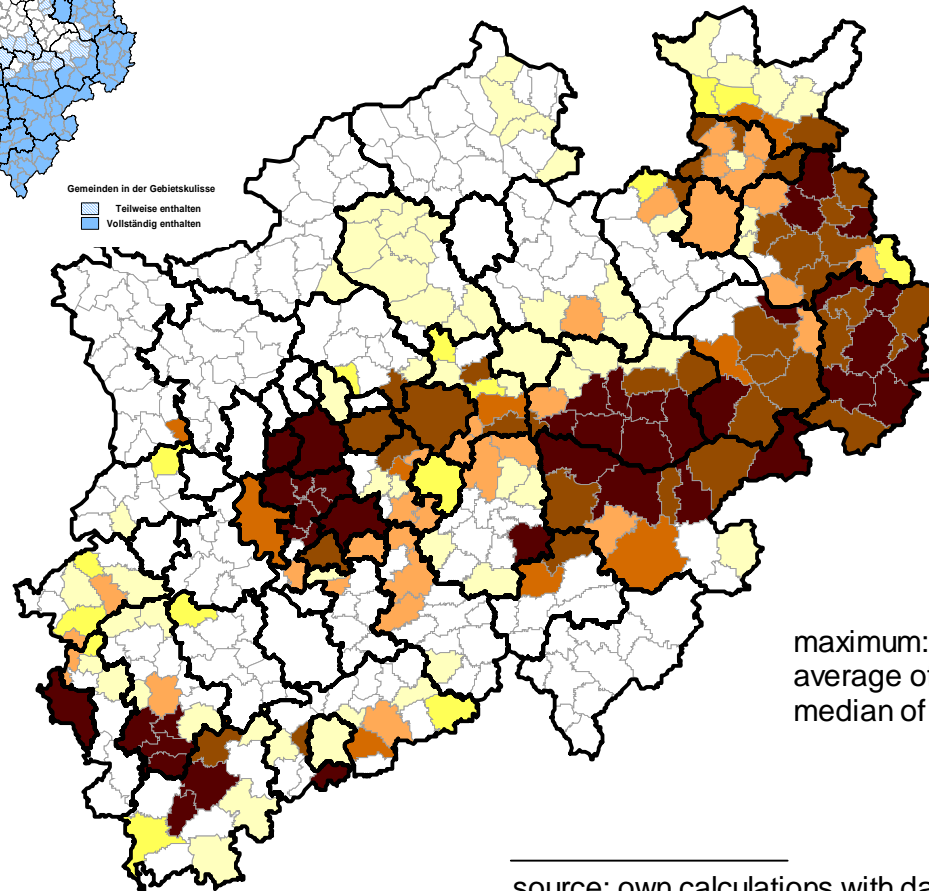
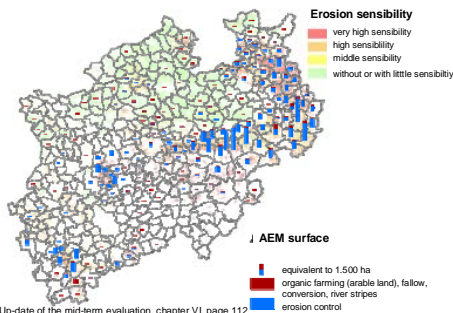
- **Do farmers always know more about marginal adaptation cost than administrations?**
- **Environmental impacts crucial for efficiency but difficult to assess and to value**
- **‘Information rent’ or ‘rent for providing ecological assets’?**
- **Is self-selection always ‘adverse’?**
- **Two routes for increasing budgetary efficiency – lower windfall losses + increasing env. impacts – while considering increase of public TC**

Spatial targeting for increasing desired environmental impacts

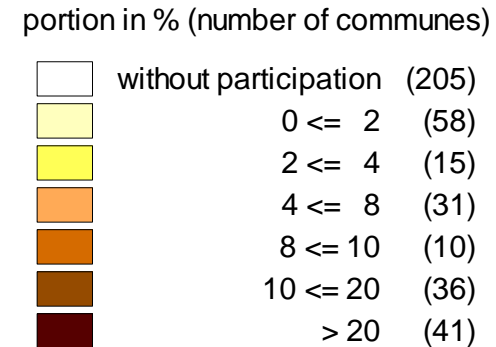
Target areas



Vulnerability



Erosion control in North Rhine-Westfalia: % of total arable land



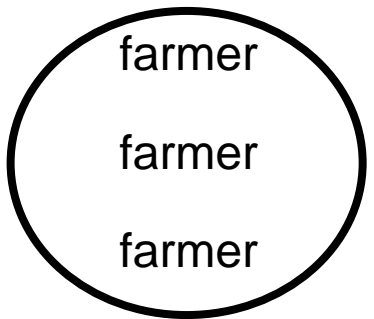

maximum: 65.31 (Haan)
 average of North Rhine-Westphalia: 6.02
 median of the communes with participation: 6.14

source: own calculations with data from IACS (2004).

Source: Up-date of the mid-term evaluation NRW, chapter VI, page 63

Action-oriented versus result-oriented measures

Both approaches are „success-oriented“!

	action-oriented	result-oriented
Target definition	administration	administration
Choice of measures	administration	
Realisation	↓ farmer	
Check of results	↓ administration 	
On-the-spot control	administration	administration
Farmer as	„employee“	„entrepreneur“
Measures are	clear-cut/transparent	flexible, but risky
Crucial:	correct requirements	correct indicator

Result-oriented approach: Remuneration of species-rich grassland

- Measure since 2000 in Baden-Württemberg
- Better targeting to remaining high-nature-value land
- Clear indicators appropriate for self-assessment, steady and bound to management
- Low administration cost compared to action-oriented
- Difficulty to determine payment



Co-operative approaches for development and implementation of schemes

- **Use of local knowledge, social commitment**
(not always compatible with top-down implementation and control)
- **Improvement of acceptance for measures**
- **Scope for better ecological targeting**
- **Examples:**
 - **Co-operative Groundwater Protection in Lower Saxony – development of measures, advice**
 - **Regionen Aktiv – participatory, bottom-up approach for integrated rural development with regional partnerships competing for support**



Pilot auction schemes in Germany

- **Siebenberge/Sackwald (Lower Saxony):** Tender failed because of strategic bidding at the bid cap
- **Extensive grassland (North Rhine-Westfalia):** Top-up payments for entering into more intensive regions; limited acceptance, farmers were not always able to estimate their cost
- **Result-oriented support for species-rich grassland (Nordheim, Lower Saxony):** acceptance and differentiated bids
- **Path-dependency (friction with the dominant flat-rate system), public TC and acceptance crucial**

Discussion

Hidden action

- **Appropriate indicators for on-the-spot control**

Hidden information

- **Is self-selection always ‚adverse‘ ?**
- **Remuneration vs. compensation, maintenance vs. improvements**
- **‚Hidden impact‘–problem deserves more attention**
- **Dominant strategy: Spatial targeting
Innovative elements: Result-oriented and co-operative measures; role of auctions?**