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 Länder 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

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

Source: ITAES WP3 P51 DR 01, page 9
Involvement of different policy levels in design and implementation of AEM

<table>
<thead>
<tr>
<th>Framework regulations</th>
<th>EU</th>
<th>National</th>
<th>Land</th>
<th>Local level</th>
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<tbody>
<tr>
<td>Design</td>
<td>X</td>
<td>(X)</td>
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<td>Notification</td>
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<td>Financing</td>
<td>X</td>
<td>X</td>
<td>x</td>
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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 <=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 >=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

- Information rent
- Flat-rate payment
- Increasing marginal adaptation cost

Environmental benefit with scheme

Environmental benefit without scheme
“Hidden impact” as the central problem

High differentiation of environmental impacts

- Increasing marginal adaptation cost
- Flat-rate payment
- Information rent
- Environmental benefit without scheme
- Environmental benefit with scheme
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 valuate
- ‘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

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

portion in % (number of communes)

- without participation (205)
  - 0 <= 2 (58)
  - 2 <= 4 (15)
  - 4 <= 8 (31)
  - 8 <= 10 (10)
  - 10 <= 20 (36)
  - > 20 (41)

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).
# Action-oriented versus result-oriented measures

Both approaches are 'success-oriented'!

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<tr>
<th></th>
<th><strong>action-oriented</strong></th>
<th><strong>result-oriented</strong></th>
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<tbody>
<tr>
<td><strong>Target definition</strong></td>
<td>administration</td>
<td>administration</td>
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<tr>
<td><strong>Choice of measures</strong></td>
<td>administration</td>
<td>farmer</td>
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<td><strong>Realisation</strong></td>
<td>farmer</td>
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<td><strong>Check of results</strong></td>
<td>administration</td>
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<td><strong>On-the-spot control</strong></td>
<td>administration</td>
<td>administration</td>
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<tr>
<td><strong>Farmer as</strong></td>
<td>„employee“</td>
<td>„entrepreneur“</td>
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<td><strong>Measures are</strong></td>
<td>clear-cut/transparency</td>
<td>flexible, but risky</td>
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<tr>
<td><strong>Crucial:</strong></td>
<td>correct requirements</td>
<td>correct indicator</td>
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</table>
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?