More need for regional decision making when dealing with coexistence issues?

First results from the field

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Agenda

I. Coexistence vs. Safety
II. Ex-ante coexistence measures in the EU
III. The case study
IV. Results
V. Discussion and outlook

I. Coexistence vs. Safety

“The GMO Dichotomy”

GMO
Safety of GM crop Coexistence of GM crops
- Pre-market approval
- Risk assessment
- Post-market monitoring
- Ex-ante regulations
- Ex-post liability

II. Ex-ante coexistence measures

Coexistence in the EU
- EU member states to design and implement coexistence rules
- Basic recommendations from EC (2003/556/EC)
- Ex-ante regulation includes different approaches:
  - Fixed isolation distances (25 m to 600 m)
  - Buffer zones
  - Private agreements among farmers
- Very heterogeneous implementation among member states

Coexistence in the EU – the scientific perspective
- Coexistence rules are not in line with 2003/556/EC
- Isolation distances are (Devos et al., 2008):
  - NOT appropriate according to scientific knowledge
  - NOT feasible from the farm perspective
  - NOT proportionate to agricultural structures
  - NOT proportionate to economic incentives

The same transaction has two different faces
Different actors are involved

The same transaction has two different faces
Different actors are involved
II. Ex-ante coexistence measures

Decision making at the lowest level

- Let farmers decide about implementation of measures
- Installation of flexible buffer zones

Recent approach of German coalition:
"Wir schaffen die rechtlichen Voraussetzungen, damit die Bundesländer innerhalb eines bundeseinheitlichen Rahmens von Kriterien flexibel eigenständig Abstände festlegen können, die zwischen Feldern mit genetisch veränderten Pflanzen und solchen mit konventionellem oder ökologischem Anbau einzuhalten sind."

Regional approaches are intended by the government

Research question

How do different actors perceive the current ex-ante coexistence measures?

Do they prefer hierarchical or cooperative forms of governance?

III. The case study

Selecting the regions and interviewees

- Bt maize cultivation
- Different agricultural structures (East and West Germany)

<table>
<thead>
<tr>
<th>Anzahl Betriebe</th>
<th>Märkisch-Oderland</th>
<th>Kitzingen</th>
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<tbody>
<tr>
<td>547</td>
<td>211</td>
<td>1932</td>
</tr>
<tr>
<td>Ø Größe</td>
<td>231 ha</td>
<td>21 ha</td>
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<tr>
<td>42</td>
<td>7,6%</td>
<td>36</td>
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<td>Ø Größe</td>
<td>146 ha</td>
<td>16 ha</td>
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GM Anbau

<table>
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<th>Bt (2007)</th>
<th>Märkisch-Oderland</th>
<th>Kitzingen</th>
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<tr>
<td>551 ha</td>
<td>2,9 ha</td>
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<td>3635 ha (83,6 dt/ha)</td>
<td>2,8%</td>
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<td>194 ha (94,6 dt/ha)</td>
<td>0,5%</td>
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<td>9633 ha (408,1 dt/ha)</td>
<td>7,6%</td>
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</tr>
<tr>
<td>3352 ha (530,6 dt/ha)</td>
<td>8%</td>
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II. Ex-ante coexistence measures

Selecting the regions and interviewees

- Interviews with actors involved in GMO in Germany
  - Administrative level Bund, Bundesland and Landkreis
  - BMELV, BVL, JKI, BfR, MLUV, StMuG
  - Stakeholders (DBV, LBV, KBV, BDP, Innoplanta)
  - Farmers (GM farmers and their neighbours)
  - 16 interviews evaluated so far

III. The case study

Selecting the regions and interviewees

- Interviews with actors involved in GMO in Germany

IV. Results

Interview evaluation

- Isolation distances at the head
- From scientific perspective less would also do
- Incorporation of "safety margin"

Organic farmers in MOL:
  - Need higher isolation distances or general ban

GM farmers in Kitzingen:
  - Realization of high isolation distances not feasible!

Main reason: mistrust in political decision making
IV. Results

Interview evaluation

- Implementation of isolation distances not possible in Kitzingen
- This can be explained by agricultural structure (small farms, fields)
- Cooperation via private agreements necessary for GMO cultivation

Example:
Farmer collected permissions from all farmers in the village
He did not have to keep any isolation distances
Offered to buy neighboring maize in case of cross pollination

IV. Results

Interview evaluation

- Isolation distances no problem in Märkisch-Oderland
- This can be explained by agricultural structure (large farms, fields)
- Cooperation not necessary

Example:
Organic neighbor planted “Bantam” maize at frontier to GM maize
Tried to effect plough-in of adjacent GM maize
Launched a court action without success

V. Discussion

Mistrust in political decision making

- Actors were well aware of political dimension
- Rigid coexistence measures to impede GMO adoption
- Cooperative solutions are still necessary in small scale areas
- They probably work when actors have similar attitudes
- How to deal with organic farming?

V. Outlook

Next research steps

- Continue interviews
- Get deeper insights into cooperation mechanisms at farm level
- Elucidate the GMO-Organic conflict
- Draw more attention to the Safety-Coexistence nexus

Thank you for your attention!