RISK PERCEPTIONS AND ADAPTATION DECISION-MAKING AT NORDIC FARM-SCALE

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1 MATERIAL AND METHODS

SEMI-STRUCTURED STAKEHOLDER INTERVIEWS (n= 13) AND FOCUSGROUPS (n=8)

CODING & THEMATIZING (Atlas.ti)

CASE DESCRIPTION & SNOWBALL SAMPLING

QUALITATIVE CONTENT ANALYSIS

PROTECTION MOTIVATION FRAMEWORK

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## UUSIMAA REGION

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhabitants</td>
<td>1,644,107</td>
</tr>
<tr>
<td>Farmer population</td>
<td>2,828</td>
</tr>
<tr>
<td>Average farm size</td>
<td>50 hectares</td>
</tr>
<tr>
<td>Total land area (km²)</td>
<td>9,097</td>
</tr>
<tr>
<td>Agricultural land area (km²)</td>
<td>1,860</td>
</tr>
</tbody>
</table>
CLIMATIC VULNERABILITY & AGRICULTURE IN UUSIMAA

<table>
<thead>
<tr>
<th>The main crops (excluding fodder)</th>
<th>spring wheat, barley and oats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dominating soil types</td>
<td>clayey &amp; clayey silt soils</td>
</tr>
<tr>
<td>Coastline (with Baltic Sea)</td>
<td>1 200 km</td>
</tr>
<tr>
<td>Erosion risk degree</td>
<td>high</td>
</tr>
</tbody>
</table>
“I will continue this way until the end. It is difficult to make changes then.”
(Farmer 4)

“We should have more win-win attitude ... like in Sweden!”
(Farmer 5)

“All measures are primarily done in order to decrease labor and expenses.”
(Farmer 1)

“I will continue this way until the end. It is difficult to make changes then.”
(Advisor 2)

“sustainability and thinking beyond generations at farms is typical.”
(Advisor 2)

“First you must see that neighbor is doing something differently. If it works - you might try it.”
(Advisor 4)

“We have discussed about setting up a biogas system with my buddies, so that we could get the extra biomass into usage.”
(Farmer 9)
Climate risk perception

Contextual vulnerability & severity
Past experience & proximity of hazard
Values & preferences

Adaptation assessment

Cost & efficacy
Market & policy fluctuations
Community & networks

Adaptation intention

1) Careful
2) Profit seeking
3) Experimental

Adaptation measures

Incremental – Transformative
Adaptive capacity building
Capitalizing on CC
Potential maladaptation
PERCEPTIONS → ACTION?

AT RISK:
- Crop yield & quality
- Farm income & livelihood
- Cultivation practices
- Local economies
- Regional productivity
- Soil & water quality
- Environment
- Food production

ADAPTATION DIRECTED TO:
- New crops
- Field work measures & machinery
- Field & soil improvement
- Changing the production structure & orientation
- Water protection
5 CONCLUSIONS

NO POLICY GUIDANCE + RISK AVOIDANT/ PROFIT SEEKING RISK RESPONSES = RISK REDUCTION, INCREMENTAL ADAPTATION & MALADAPTATION

PARTICIPATORY POLICIES + EXPERIMENTAL RISK RESPONSES = ADAPTIVE CAPACITY BUILDING & TRANSFORMATIONAL ADAPTATION

THANK YOU!

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