

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

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UUSIMAA REGION

2 STUDY SITE

Inhabitants	1 644 107
Farmer population	2 828
Average farm size	50 hectares
Total land area (km ²)	9 097
Agricultural land area (km ²)	1 860



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CLIMATIC VULNERABILITY & AGRICULTURE IN UUSIMAA



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"I will continue this way until the end. It is difficult to make changes then." (Farmer 4)

Habits "All measures are primarily done in order to decrease labor and expenses."

(Farmer 1)

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

Values

Norms

"We should have more winwin attitude ... like in Sweden!" (farmer 5)

Profit

Costs

"First you must see that neighbor is doing something differently. If it works - you might

try it." (Advisor 4)

Risk aversion

Efficiency

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

Experimentation

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3 RESULTS

Adaptation neasures **Climate risk perception Adaptation assessment Contextual Adaptation** vulnerability & intention **Cost & efficacy** severity Market & policy **Past experience &** 1) Careful Incremental fluctuations proximity of hazard Transformative 2) Profit seeking **Community &** Values & preferences Adaptive capacity networks building 3) Experimental **Capitalizing on CC Potential**

HELSINGIN YLIOPISTO HELSINGFORS UNIVERSITET UNIVERSITY OF HELSINKI maladaptation



$\mathsf{PERCEPTIONS} \rightarrow \mathsf{ACTION?}$

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

HELSINGIN YLIOPISTO HELSINGFORS UNIVERSITET UNIVERSITY OF HELSINKI NO POLICY GUIDANCE + RISK AVOIDANT/ PROFIT SEEKING RISK RESPONSES = RISK REDUCTION, INCREMENTAL ADAPTATION & MALADAPTATION

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



5 CONCLUSIONS

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