

**Identifying  
citizens' values and risk perceptions  
in a coastal area in Sweden using the  
Democratic Landscape Planning tool  
(DeveLoP)**

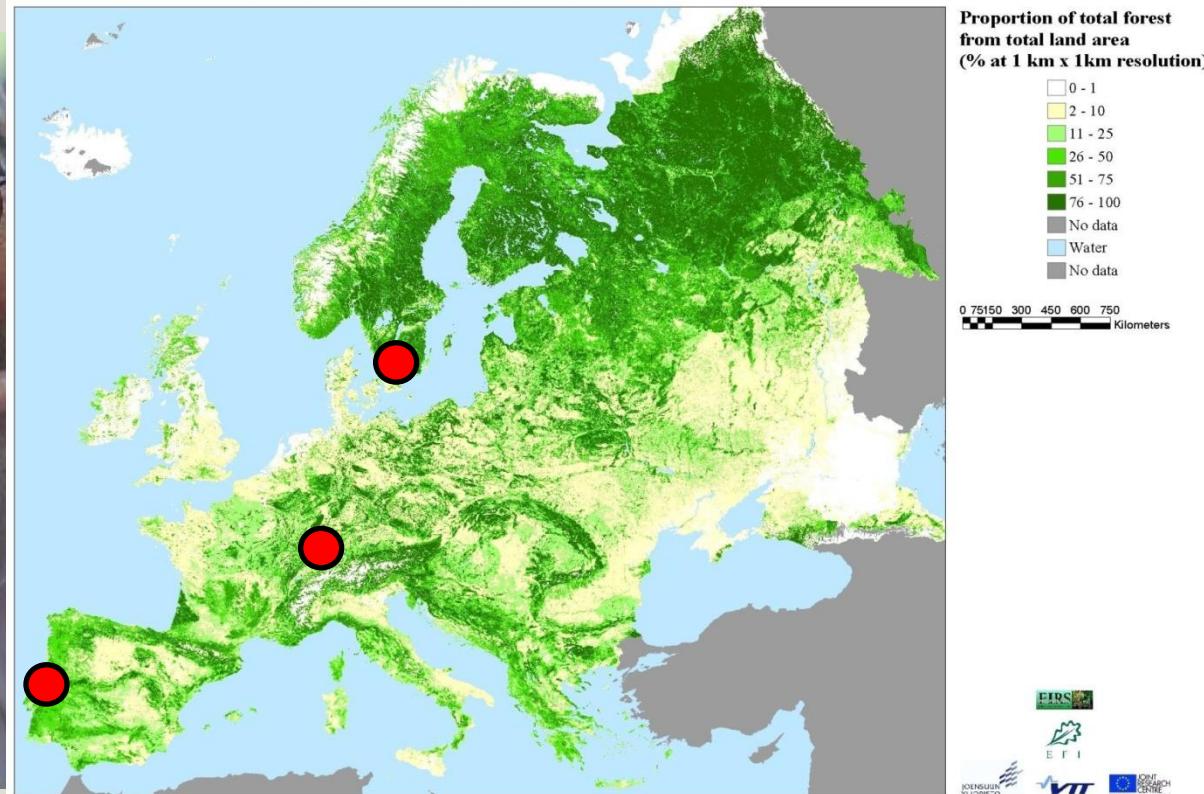
*Kristina Blennow  
Swedish University of Agricultural Sciences, Alnarp*



Wikimedia: Public domain

**Has he taken  
measures to  
adapt to climate  
change?**

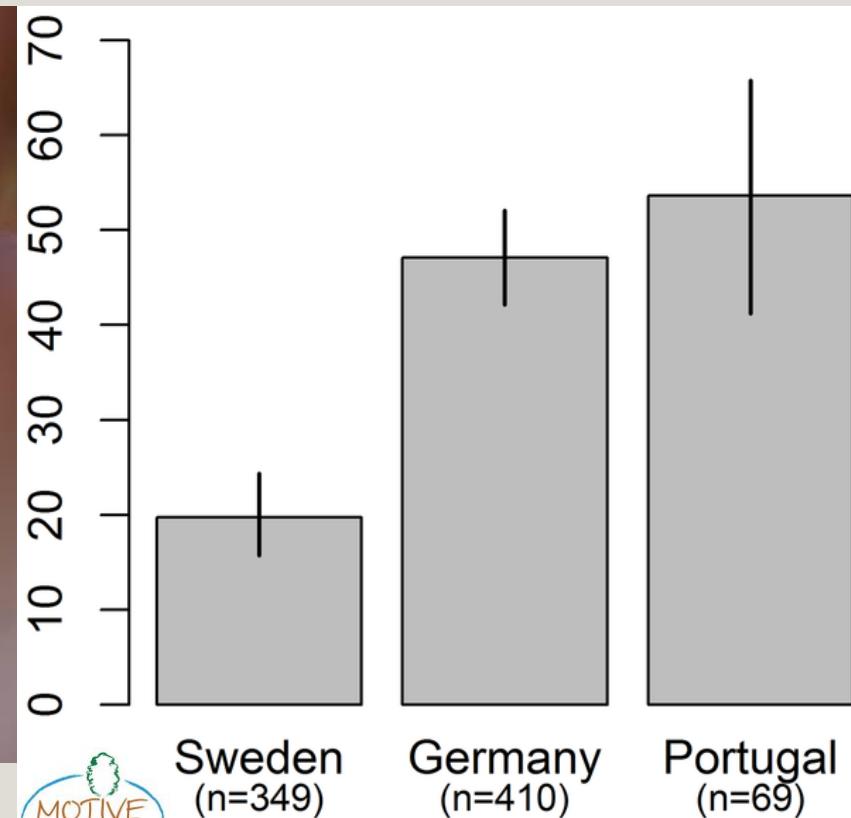
Kristina Blennow Baltic Landscape Forum  
Riga Latvia 10-11 September 2015



# Percentage of respondents having adapted forest management to climate change



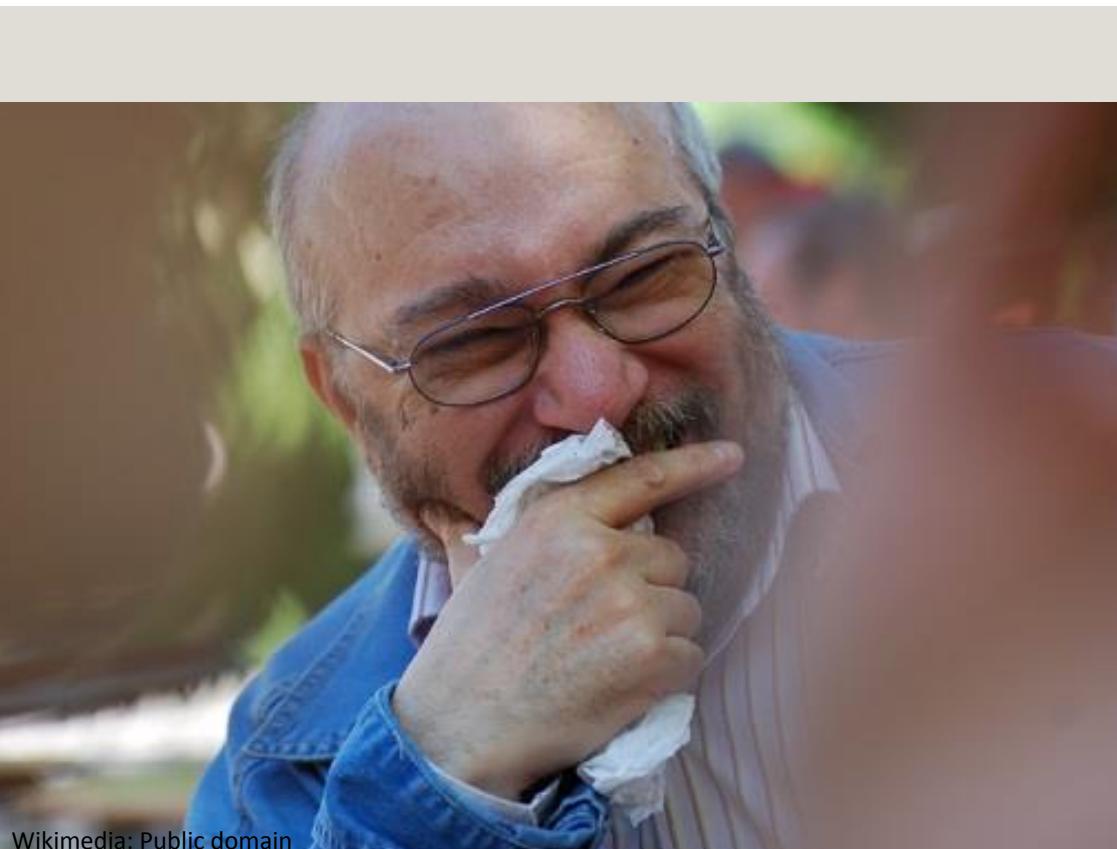
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- Strength of belief in local effects of climate change?
- Strength of belief in having experienced effects of climate change?

Accurately explains and predicts adaptation to climate change among forest owners!



**Risk perception –**  
crucial for explaining and  
predicting adaptation  
decisions!



## Heuristics and biases Knowledge risk

Wikimedia: Public domain

# What values are at risk?



A large, stylized word cloud centered on the page. The words are arranged in a roughly triangular shape, with 'nature' at the bottom left and 'experience' at the top center. Other prominent words include 'experience', 'forest', 'flora', 'biomass', 'work', 'Lynx', 'Roe', 'Fresh', 'deer', 'picking', 'investment', 'biodiversity', 'recreation', 'family', 'Carbon', 'Hunting', 'scenery', 'production', 'Hazel', 'fauna', 'Welfare', 'Twinflower', 'money', 'Paper', 'Aesthetics', 'mushrooms', 'condensation', 'dormouse', 'oxygen', 'berries', 'evaporation', 'Wood pecker', 'Timber', 'Water', 'Moose', 'air', and 'Timber'.

# How to analyse and measure values?



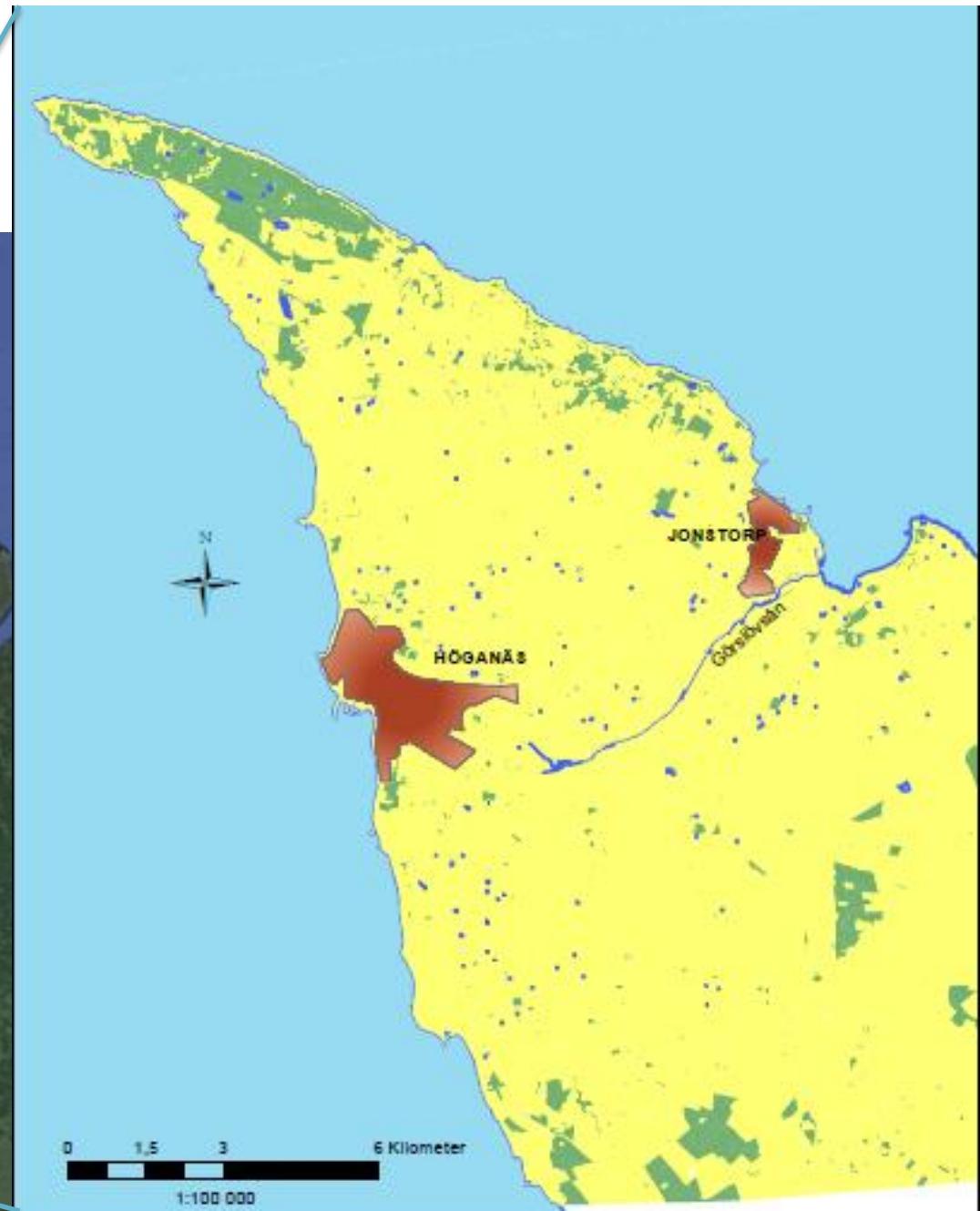
Blennow K & Persson E (2013) Societal Impacts of Storm Damage in Living with storm damage  
(eds. Gardiner et al.) EFI.

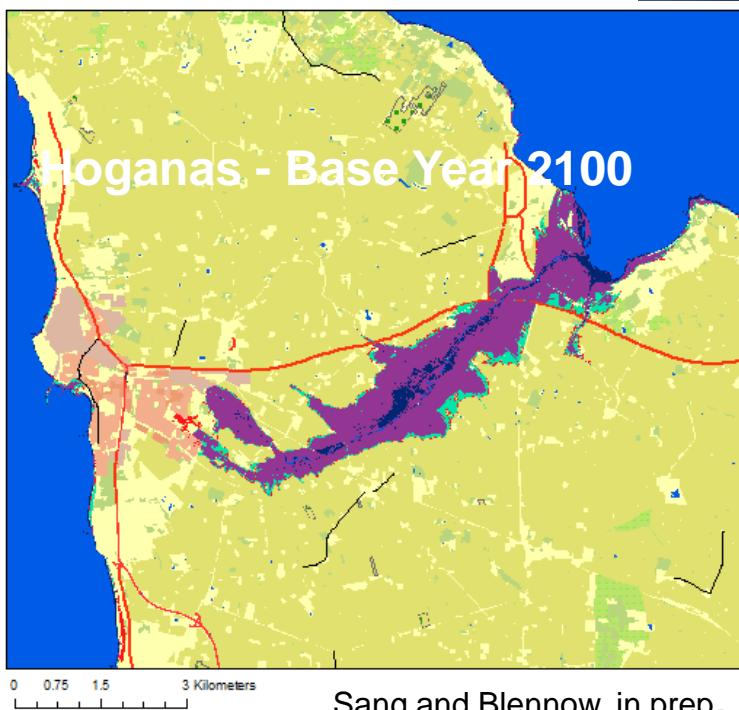
Blennow K, Persson J, Wallin A, Vareman N, Persson E (2014) Understanding risk in forest ecosystem services: implications for effective risk management, communication and planning.  
*Forestry*, 87:219-228



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# Why are these locations important to these people?

n=272

Nature has value in itself  
and for relaxation **32%**

Healthy living  
**17%**

Landscape  
experiencers  
**19%**

Economic  
Maximizers  
**3%**

The place has value  
in itself **24%**

My economy and  
the place has value in itself  
**5%**

Landscape  
experiencers **19%**

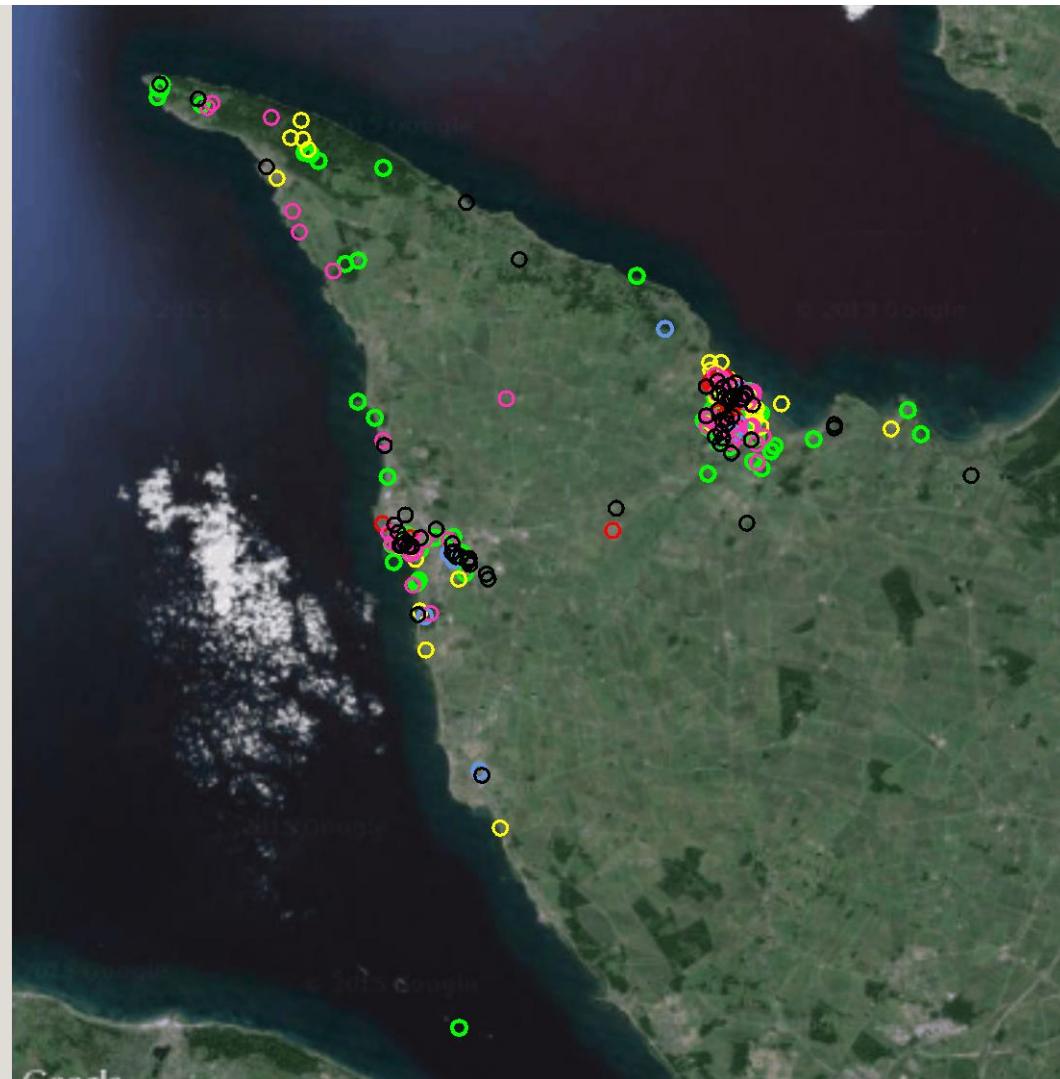
Healthy  
living **17%**

Nature as an end and  
for relaxation **32%**

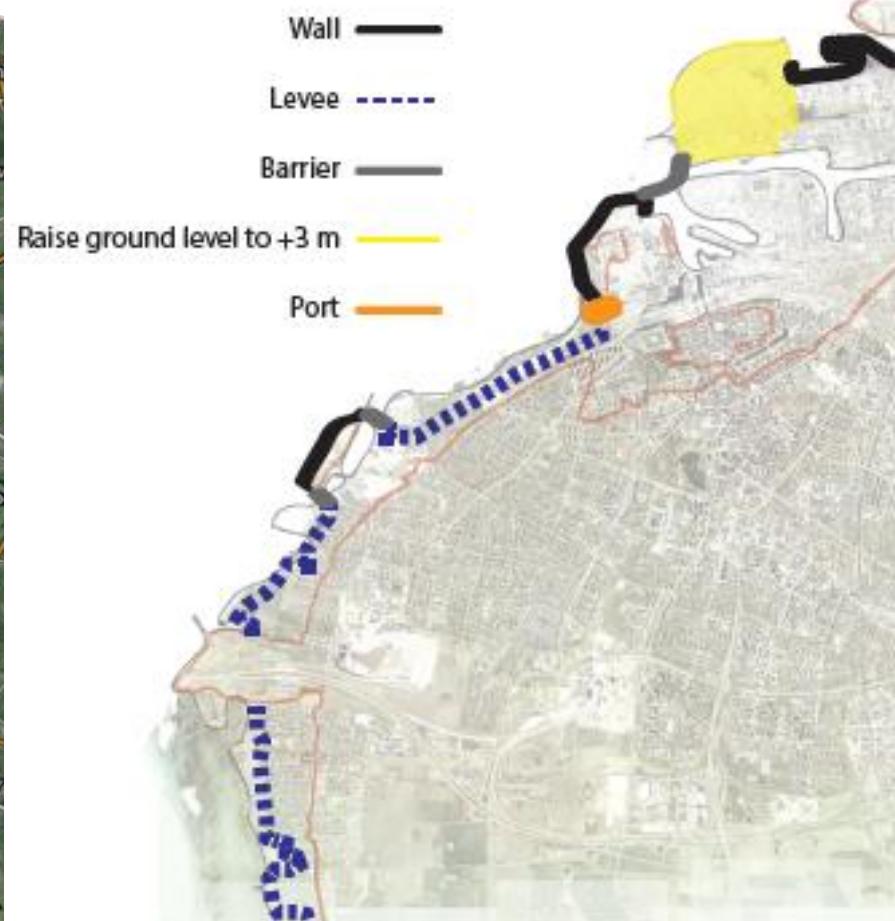
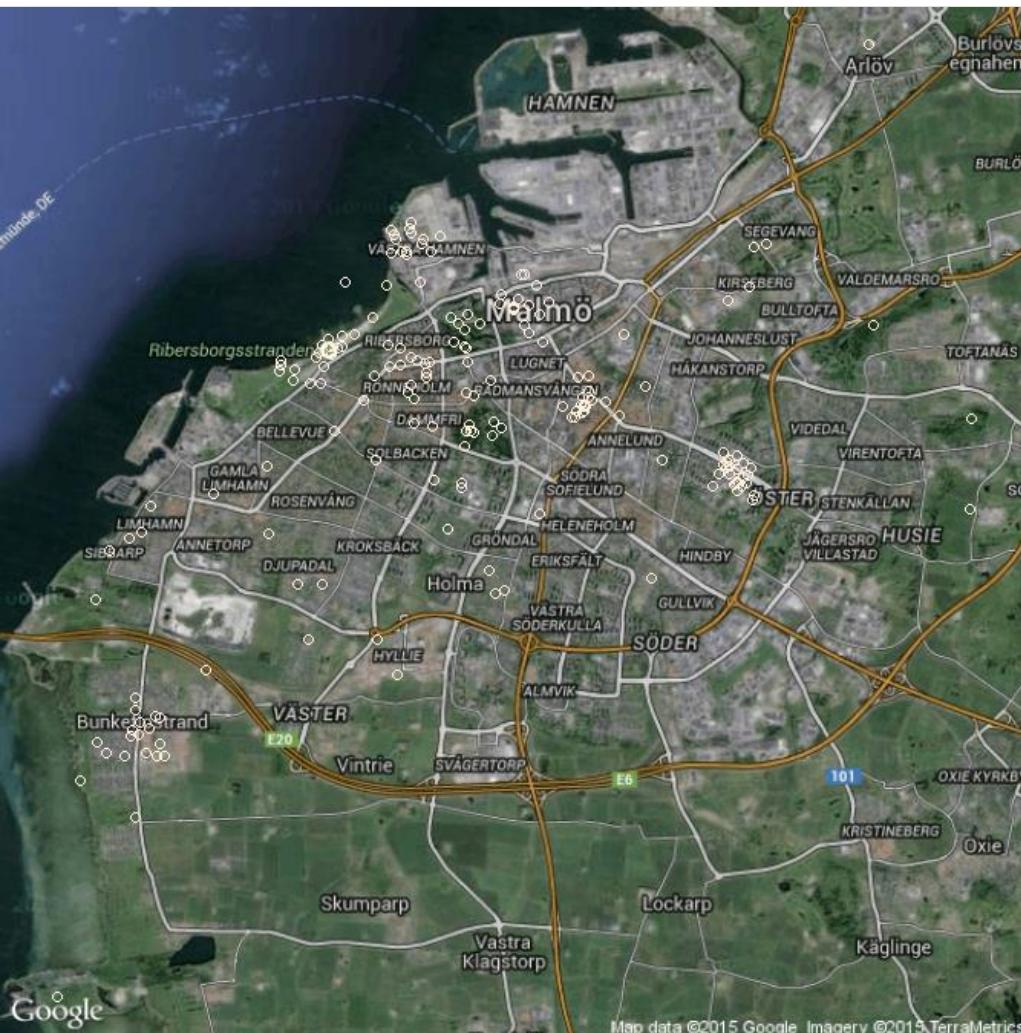
The place has value  
in itself **24%**

Own economy + the  
place has value in itself **5%**

Economic maximisers **3%**



# Most important places in Malmö, Sweden



# Who's values are at risk?



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# Understanding risk for effective risk management, communication, planning and policy

- Information on beliefs and desires
- Knowledge of decision strategies
- Open environment to promote learning
- Avoid taking knowledge risk
- Consider the distribution of risk and benefit





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# **How can we make this come true?**

# DeveLoP

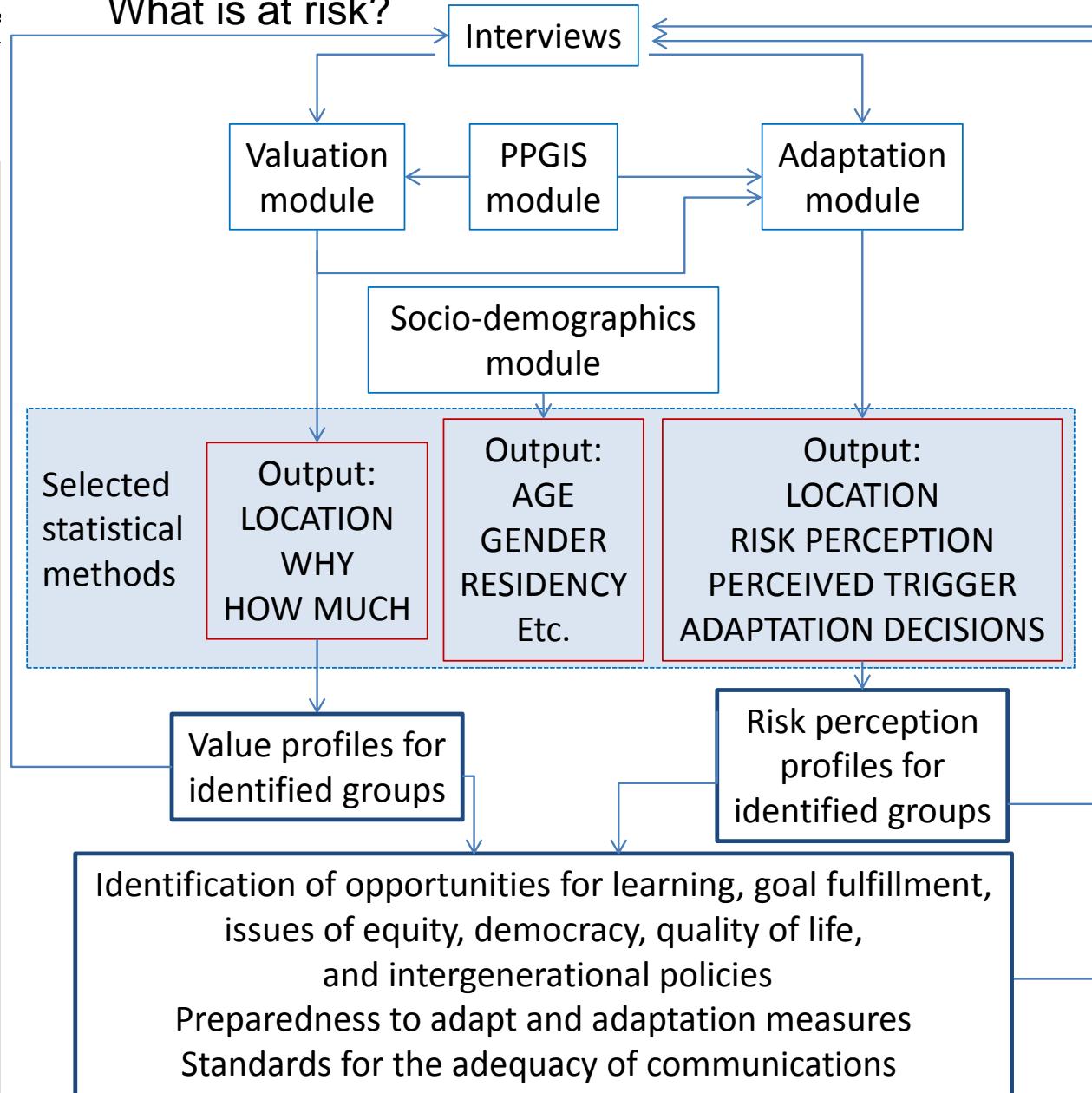
Kristina Blennow,  
Erik Persson (SLU),  
Johannes Persson  
(Lund University, Sweden),  
in prep.

Partly developed in the project *Rising sea level – the planning and design of an uncertain landscape* by the Swedish Civil Contingencies Agency (to Tomas Germundsson, Carola Wingren and Kristina Blennow)

What do we want?

What is at risk?

Preparedness to take measures to adapt



# **DeveLoP**

## **provides information for effective communication, planning and policy**

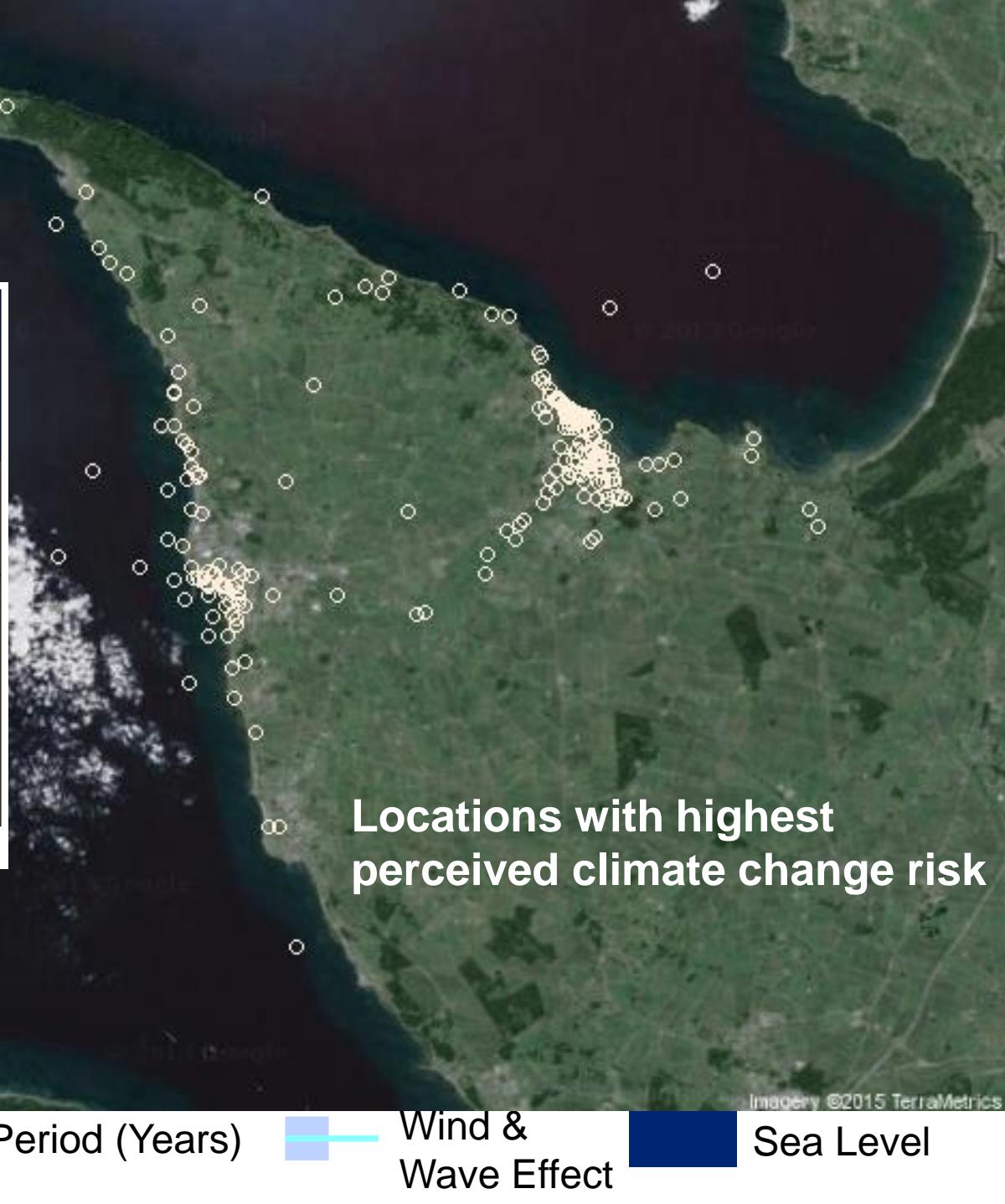
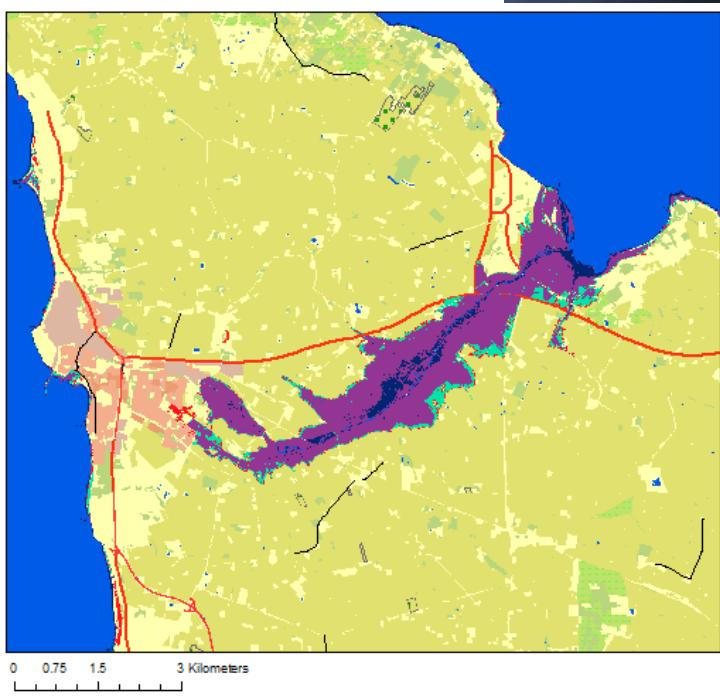
- Assesses peoples' preparedness for adaptation
- Identifies what information people need to make wiser decisions
- Assesses peoples' values and provides support for planning



A photograph of a severe coastal erosion event. A large, steep bank of earth and sand has collapsed into the water, exposing tree roots and debris. A wooden fence runs along the edge of the remaining land. In the background, houses are visible across a grassy area. The text "Thank you!" is overlaid in white, bold, sans-serif font in the lower-left quadrant of the image.

**Thank you!**

Hoganas - Base Year 2100



10

50

100

Return Period (Years)

Wind & Wave Effect

Sea Level