



50 ÅR
AV NYTÄNKANDE

Adaptation to climate change in forestry: perspectives on forest ownership in policy implementation

E. Carina H. Keskitalo¹, Anna Lawrence²
& Elias Andersson³

¹ *Umeå University, Sweden*

² *University of Highlands and Islands, Scotland, UK*

³ *Swedish University of Agricultural Sciences, Sweden*

FacesMap
Vienna, Austria



50 ÅR
AV NYTÄNKANDE

National adaptation policies and strategies

- Areal land use: one sector among many
- Treated on different levels depending on country (examples from EU-27)
 - Federal/national or regional
 - Part of national strategies, or development of forest-specific strategies
 - Often relatively general and in varying stage of development
 - Existing, planned, proposed/potential
 - Not broken down for different forestry stakeholders (public, large private, small private owners)
 - Local actions may be partly independent

(Keskitalo 2011)





50 ÅR
AV NYTÄNKANDE

Purpose & aim

- Different groups of forest owners abilities to respond, manage and adapt to climate change
- The distribution of climate related risk in forestry
- How does the contextual factors contribute to produce specific types of adaptation and risk





50 ÅR
AV NYTÄNKANDE

Contextual factors

The study is based on the assumptions of that contextual factors matters, influence and differentiate adaptations in forestry, for example:

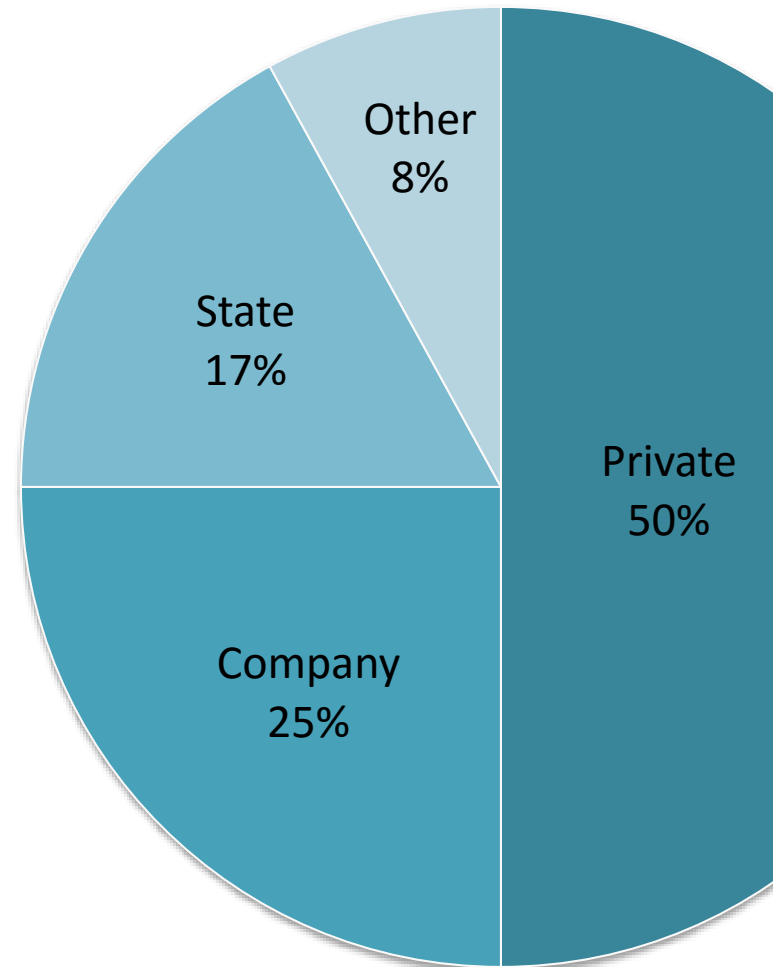
- Structure of the industry
- The role of forestry on national, regional and local level
- Constellation of forest owners



50 ÅR
AV NYTÄNKANDE

Sweden

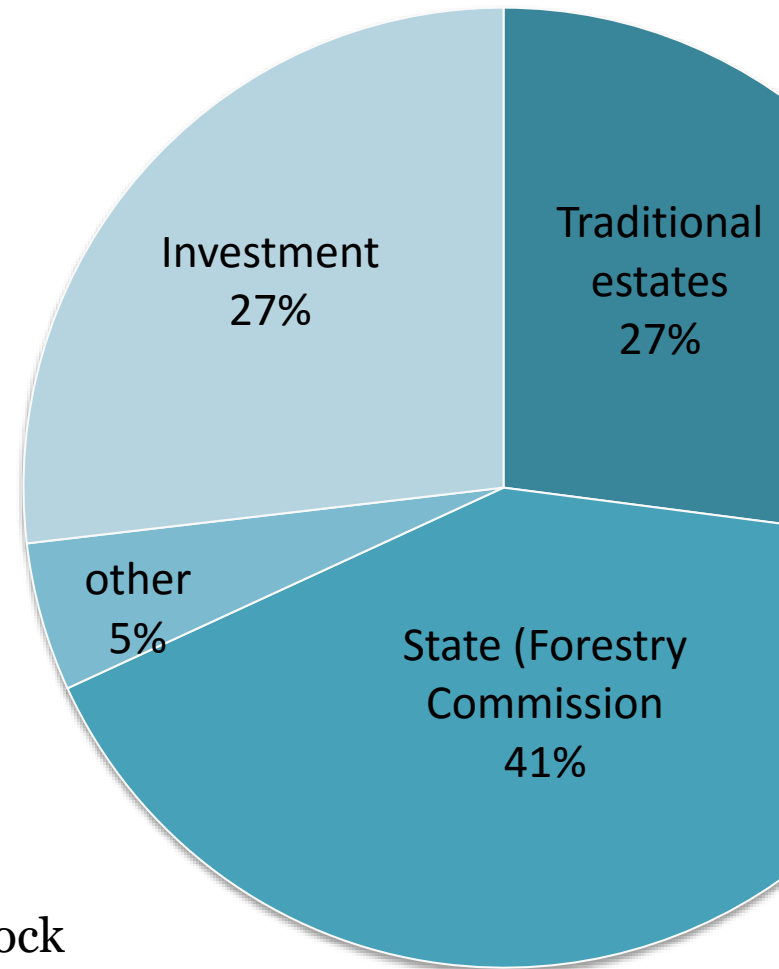
- 60% of total land area is productive forest land
- 42 % Norway spruce, 39 % Scots pine & 12 % birch
- Forestry and forest industry is important for the economy and employment
- Active forest management with clear-felling and restocking
- Forest governance relies on social norms and guidance



Forest ownership

Scotland

- 18% of total land area is forest land (incl. both productive, conservation status, and unmanaged forest)
- 43 % Sitka spruce, 13 % Scots pine & 11 % birch
- Forestry and forest industry is only moderately important for the rural economy but this is increasing
- 75% is planted conifer, of which 82% is non-native, and predominant silviculture system is clearfell and restock
- Forest governance relies on financial incentives and certification standards



Forest ownership

* Based on official statistics and Wightman 2012.



50 ÅR
AV NYTÄNKANDE

Method & Material

Comparative study

- Literature of adaptation strategies, published statistical, policy and legal research
- “*focused comparison*” (Hague 2013) of Sweden and Scotland in a “*most similar system design*” (MSSD) (Przeworski & Teune 1970)
 - Design suited for contextual studies to, based on some inherently geographical and political similarities, explore the contextual features of the different countries.





50 ÅR
AV NYTÄNKANDE

Findings

- Meaning of adaptation and climate change in forestry
- Public/wider interest in forestry
- The role of industry and the state
(governance system)
- Concentration of land, knowledge and interests
- Differentiation & social vulnerability
- Big events *(attention driven)*





50 ÅR
AV NYTÄNKANDE

Discussion

- Area in need of further attention and research
- Risk of increased differentiations in knowledge, adaptation capacities, risks and vulnerability
- Depoliticization of climate change and a shrinking state (technical issue)
- Masking power and inequalities





50 ÅR
AV NYTÄNKANDE

Thank you for your attention!

