

Northern ToSIA

Assessing sustainability of forest based activities in rural areas of the Northern Periphery



The Swedish case study – Malå

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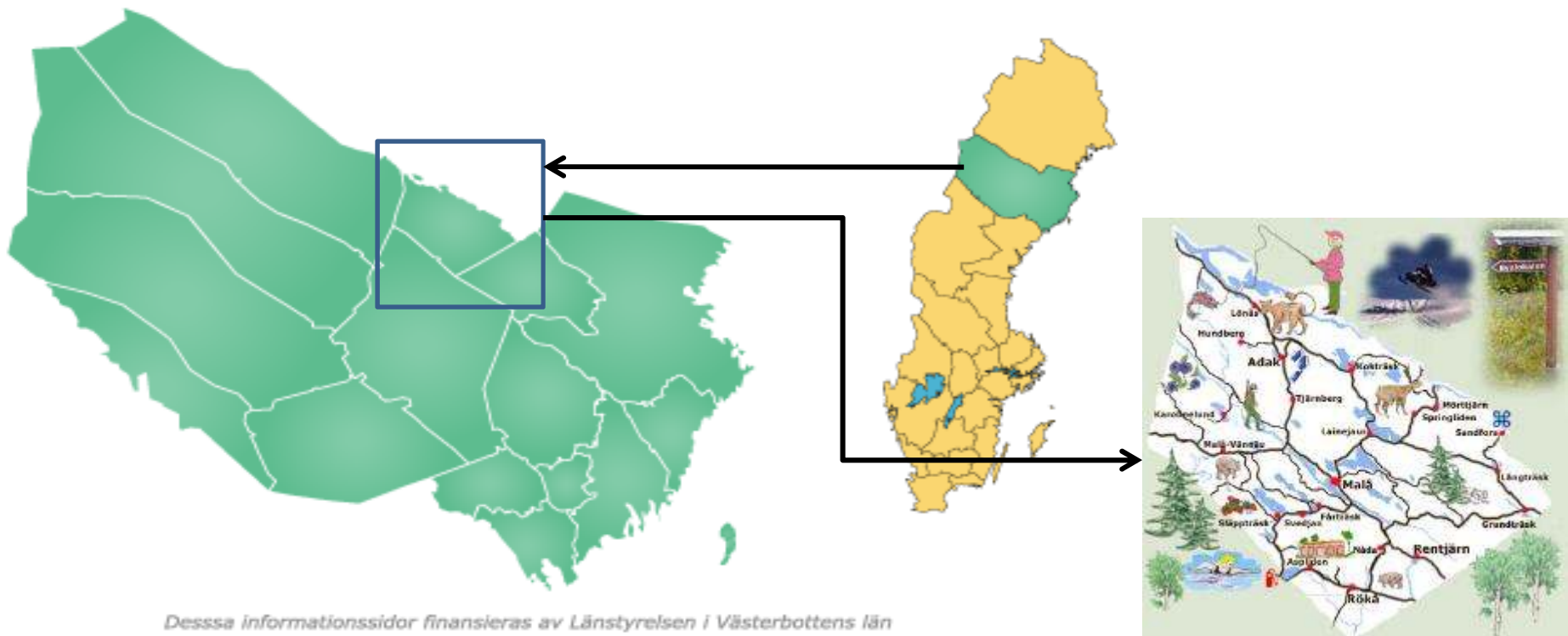
Swedish Case Study

Evaluating the effects on economical, environmental and societal values of forest management land use of the area used by Malå Sami village.

Three different scenarios that affect forest management in the area were discussed:

1. Nature conservation (key habitats and protective areas),
2. Rein deer husbandry and
3. The synergies between reindeer husbandry and forest conservation.

The location of the case study



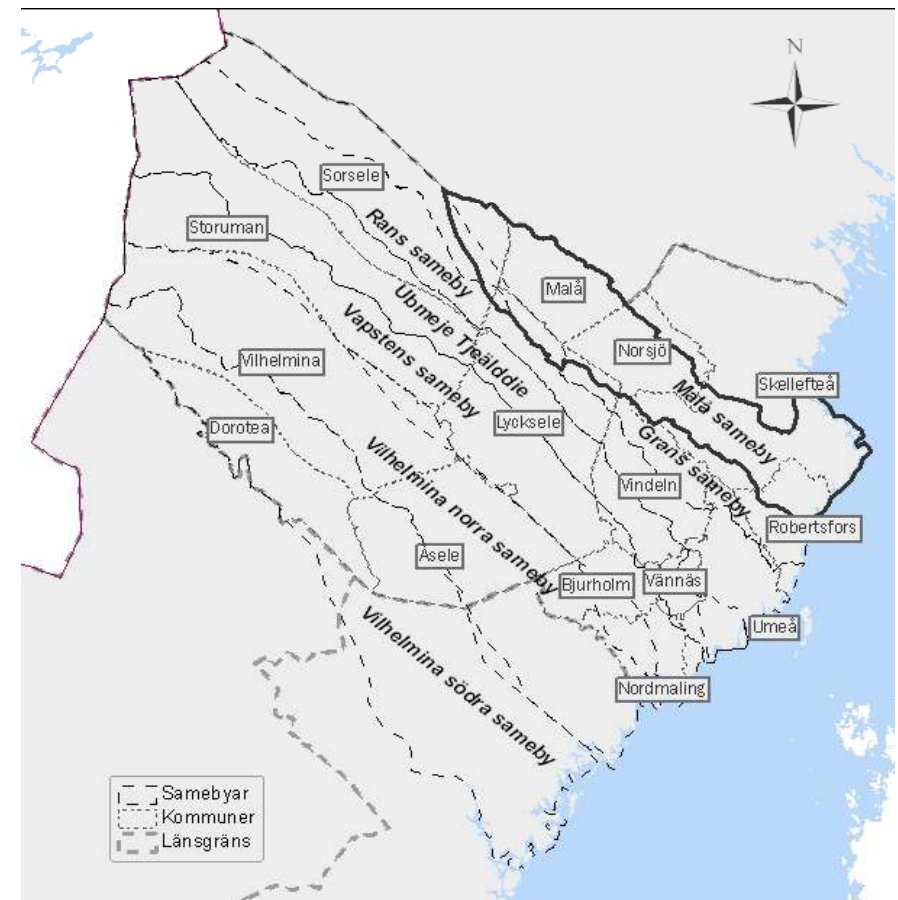
The city of Malå

- 3330 inhabitants
- A good infrastructure, e.g.: fast internet access, health-care-centre, pharmacy, library, town-hall, hotel, museum of local history, adult education centre's, repair shops for cars and freight vehicles, 2 filling stations, and miscellaneous businesses that operate on the international markets (eg. Geoscience, Huldtins, Setra, etc.).
- Good shopping facilities, e.g. 2 big supermarkets and many other specialized shops.



Malå sami village

- Swedens most southern forest sami village and the only one in Västerbotten
- Whole year: Malå, Sorsele and Lycksele.
- Winter: Lycksele, Norsjö, Skellefteå and Robertsfors.





Malå sami village

- In 2006 there were approximately 11 reindeer husbandry companies.
- Highest number of reindeers is 3000, calves not counted.



Compeeting land use in the area

- Forestry
- Tourism
- Industries
- Water power plants
- Wind power
- Mining
- Peat digging, gravel pits, etc.
- Farming
- Other sami villages

New processes reflecting reindeer husbandry

- Calving
- Transport to grazing land
- Grazing
- Transport to slaughter
- Slaughter
- Transport to market.



New indicators

- Social cohesion (reindeer husbandry)
- The creation of tourist capital and visitors' spending (reindeer husbandry)

Indicators under consideration

- Amount of lichens/reindeer/year,
- Height of lichens, accessible amount of lichens
- Amount of Wavy Hair Grass (*Deschampsia Flexuosa*)
- Area of winter grazing land, reindeer husbandry value/year/ha,
- Production cost for the reindeer.
- Income indicators taxes to the municipality,
- transport cost/reindeer/year,
- Helicopter transport cost

Identification of indicators and descisions

- Several indicators to be used for evaluating economic, environmental and social impact of forestry and reindeer husbandry were discussed.
- An indicator which reflects the marginal utility for increasing the area of reserved land was mentioned.
- We should aim at a few indicators
- The chosen indicators should be indicators easily collected for the area.



Potential indicators:

- Economic; GVA, production cost, total production
- Environmental; GHG emissions, energy use, forest resources, presence of lichens, biodiversity (coarse dead wood of pine and spruce, share of set aside areas)
- Social; Employment, Wages and Salaries, An indicator that reflects economic activity in the area (e.g. road network and number of ICA and/or COOP food supplier)



Swedish Case Study

Economical

Gross Value Added

Production cost

Total Production

Social

Employment

Wages and Salaries

*Occupational safety
and health*

*Consumer behaviour
and attitudes*

*Provision of public
forest services*

Biological

GHG emissions

Energy use

Water use

Forest resources

Generation of waste

Biodiversity