New Challanges for the Swedish NFI

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Demands on data-quality and deliverables

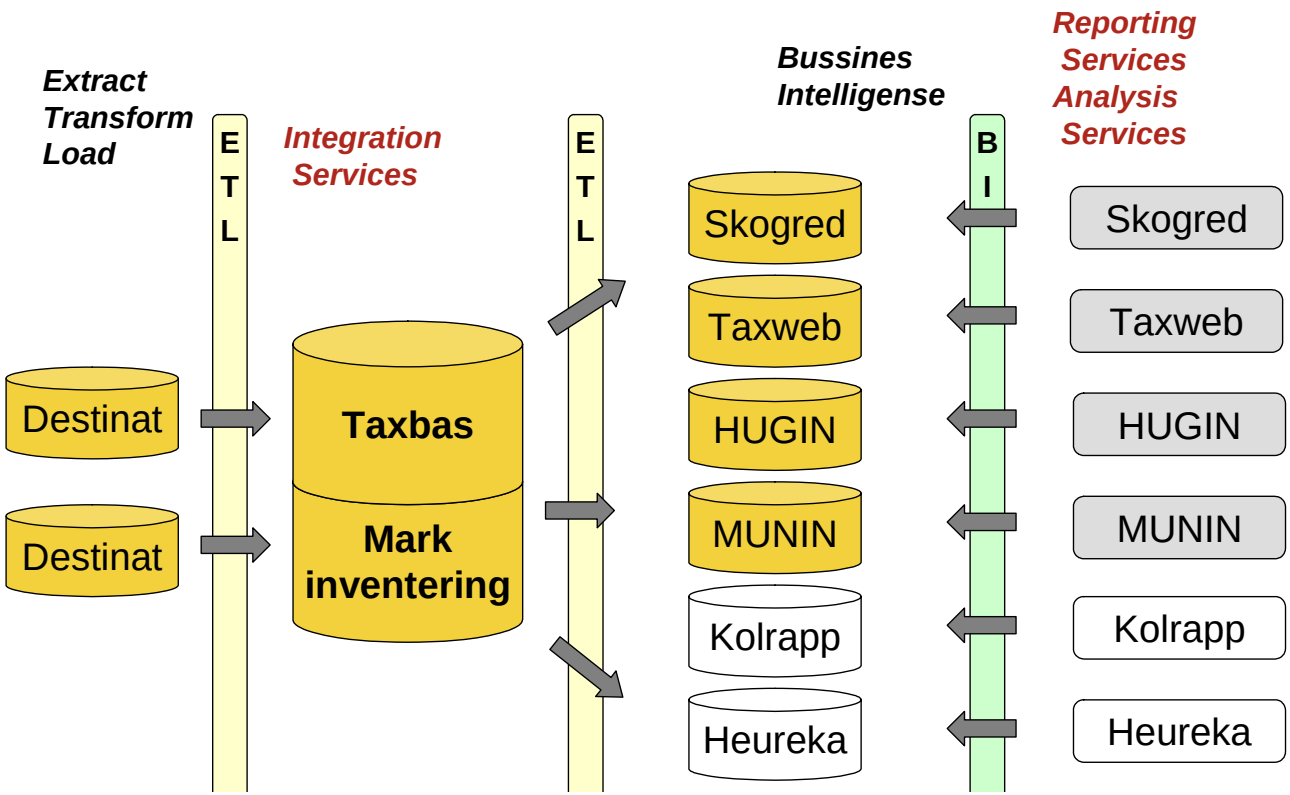
Anders Lundström
Forest Resource Scenarios and Wood Balance 2008

A general increase in the demands on data quality, content and accessibility from non-traditional clients

- Detailed meta-data
- Estimates for arbitrary areas incl. CV as well as geo-referenced raw data
- Other types of deliverables such as thematic maps or GIS-layers
- Guidelines/algorithms for estimates and CV

- ✓ International, national and regional environmental monitoring
- ✓ Researchers on other Universities than SLU

Data-warehouse solution for the Swedish NFI and the Swedish Forest Soil Inventory



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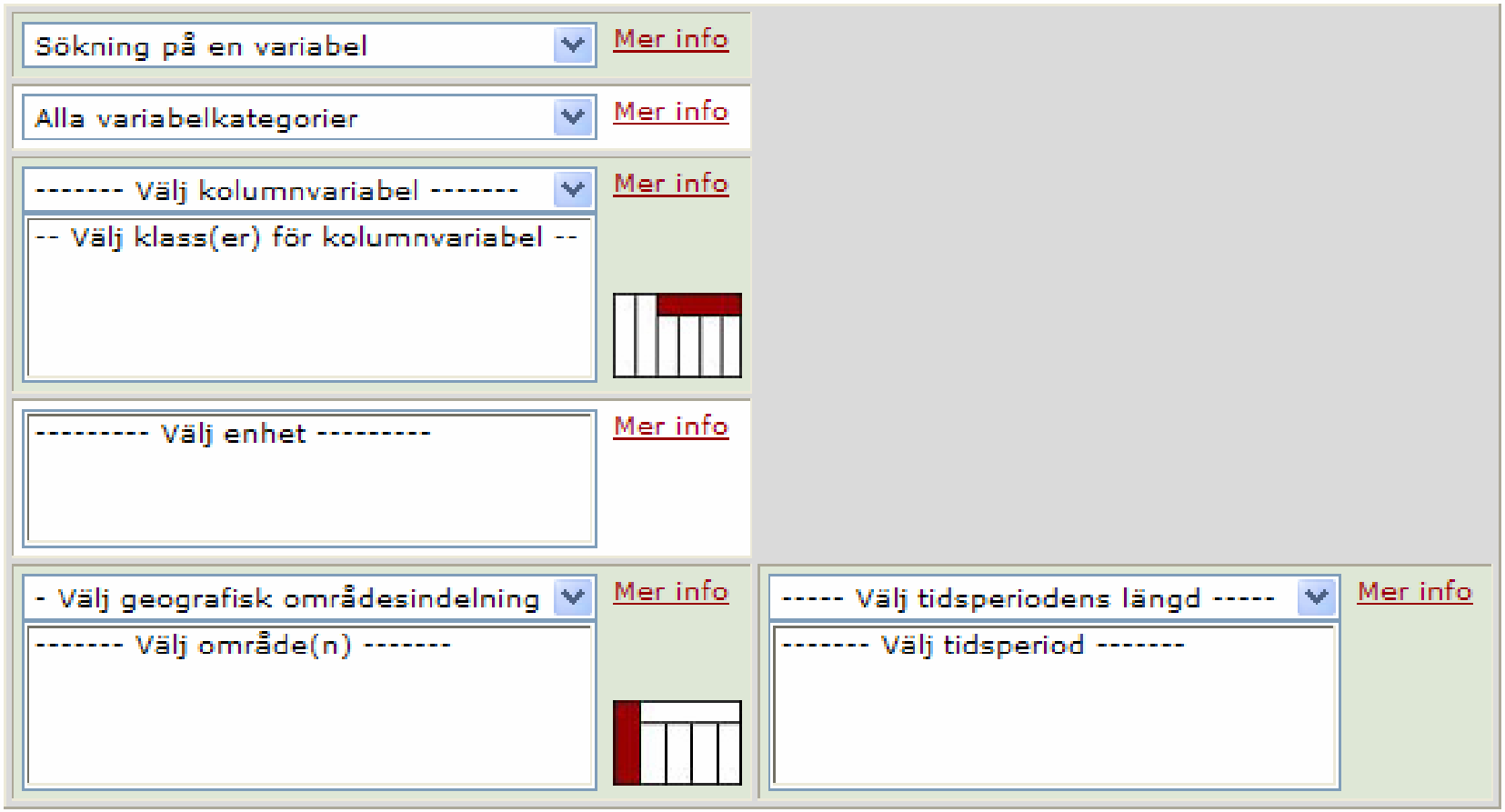
TAX-webb: An application for customised estimates on NFI-data on the web



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Integrated inventory with syncronisation into a common SQL-server DB

Team-leader FPC

SI-FPC

NFI-FPC

Prioritization of data-collection in order to meet the demands

7) Raw-data for researchers
6) Customized estimates
5) Data, estimates and analysis for ”climate change” monitoring (e.g. LULUC F)
4) Data, estimates and analysis for evaluation of the Swedish forest policy
3) Data, estimates and analysis for evaluation of the National Environmental Objectives
2) Estimates for reporting of Official Forest Statistics
1) Data as input in national and regional long-term forestry consequence analysis

Forest Resource Scenarios and Wood Balance 2008

SKA-VB 08

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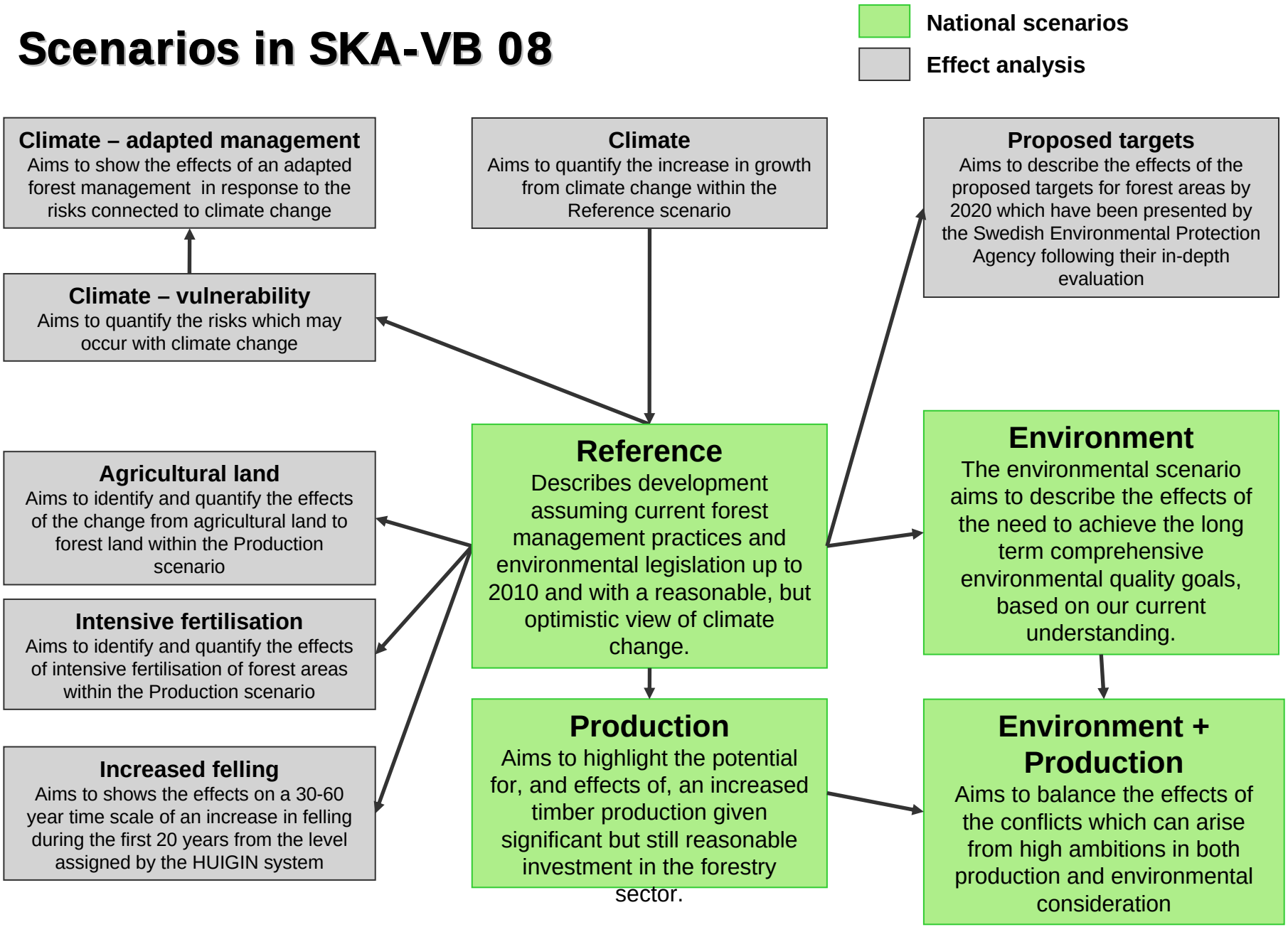
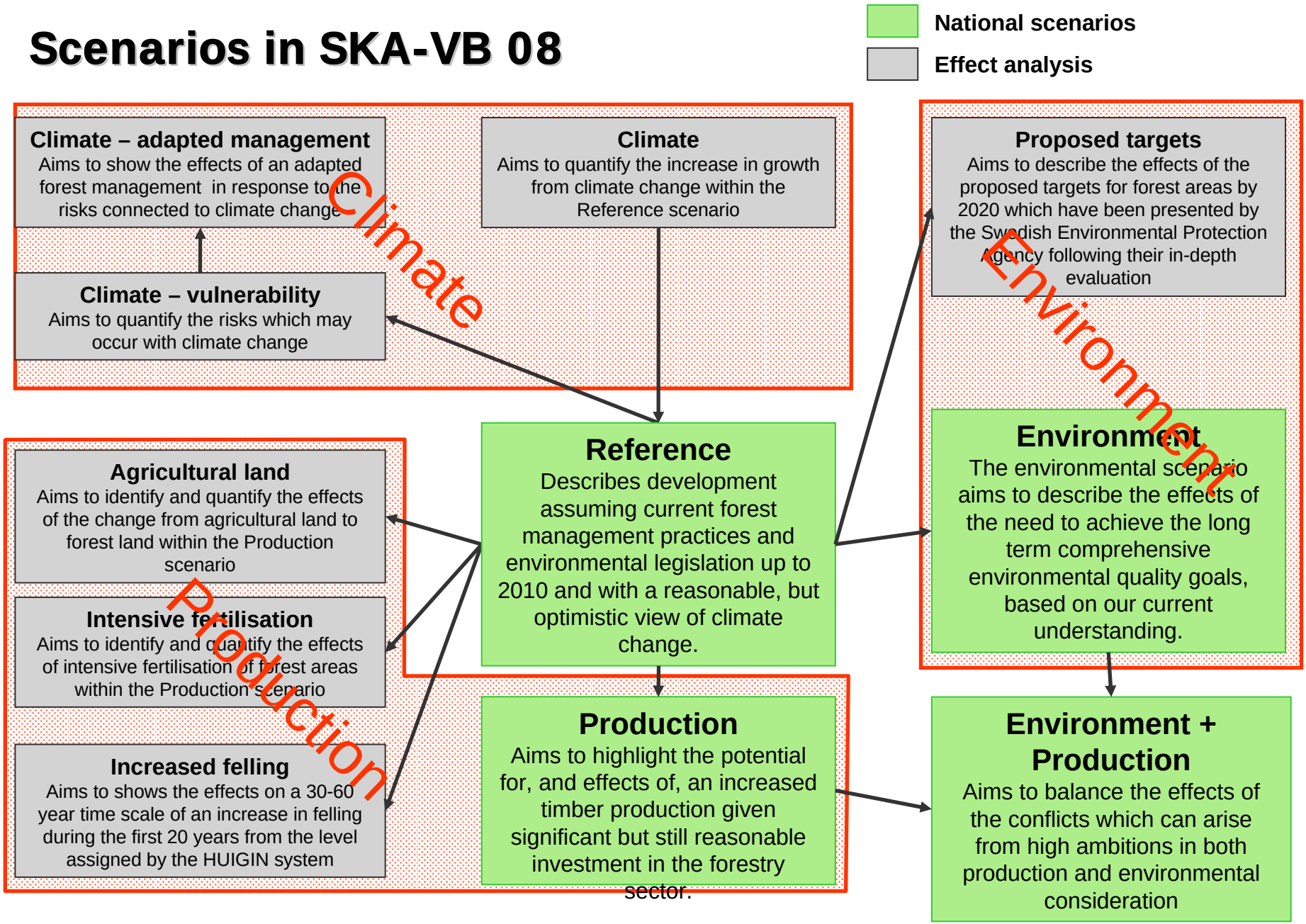
Questions to answer:

- Land use and balance between forest production, environment and other uses of forest land
- The roll of forest and forestry in energy supply and climate change
- Risk management regarding wind storms and climate change

Scenarios in SKA-VB 08



Scenarios in SKA-VB 08



Forest land use

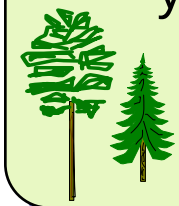
- NFI-data from 2002-2006
  - 23,4 milj ha
- Reference + Production
  - 3 milj ha protected
- Environment
  - 5 milj ha protected

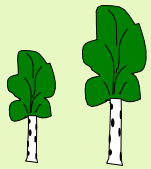
Calculations

- HUGIN
- Improvements:
  - Effect of Climate change
  - Effect of Breeding

The HUGIN system

State of the forest
year 2010

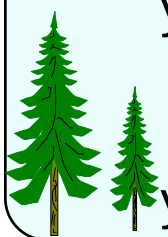


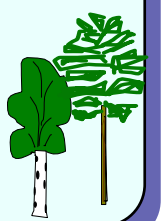


<u>Management program</u>
Silviculture
Nature conservation

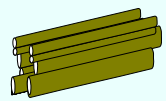
HUGIN

State of the forest
year 2010
...
...
year 2110

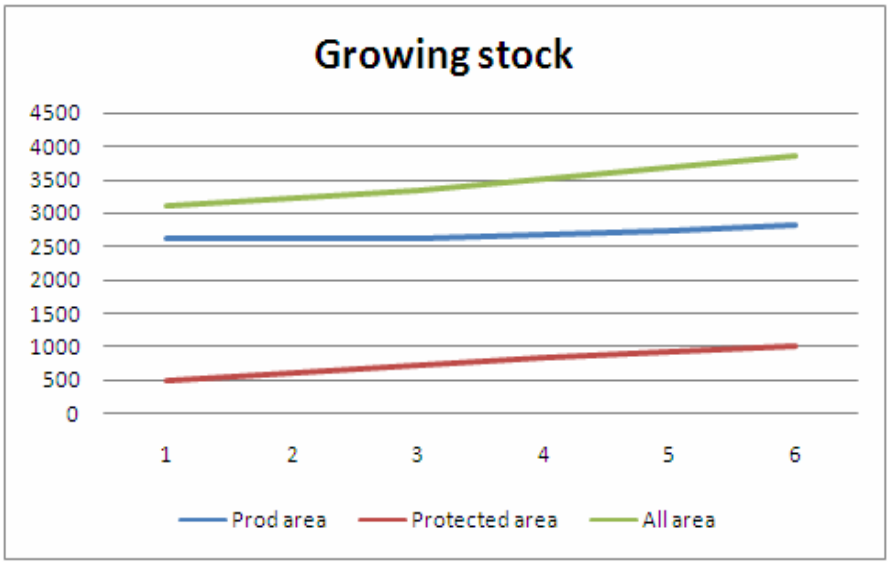


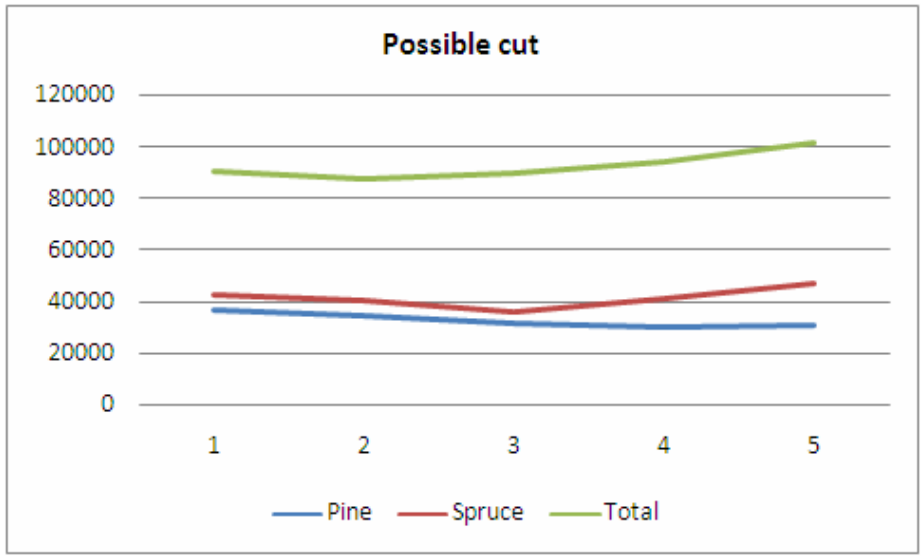


Cut volume
2010-2020
...
...
2100-2100



Preliminary Results





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Presentation

- Final report December 2008
  - Forest condition
  - Sustainable harvesting
  - Environmental aspects
  - Forest fuels
  - Carbon balances
  - Risk aspects

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