MOBILIZING FINANCING FOR FORESTS - FINNISH EXPERIENCES

OLI on Forest Financing in support of UNFF
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Ministry of Agriculture and Forestry
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1. Facts about Finland's forests and forest sector
2. Historical perspectives
3. Examples of forest costs, revenues and financing
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BOREAL FORESTS

THE WORLD’S FOREST VEGETATION ZONES

Finland

Midnight sun

Winter

FORESTS ARE IMPORTANT FOR FINLAND

ECONOMIC ASPECTS
- Most important natural resource base
- Forest sector GDP 4.8%
- Harvesting 55 mill.m³/y (growth over 100 mill.m³/y)
- Stumpage earnings 2 billion €/y (30 €/m³)
- Average net income 100 €/ha/y
- 20% of exports from forest products

SOCIAL ASPECTS
- Forest sector employment 3%
- Non-industrial private forest owners 60% of area
- Multiple use, common right of access to all

ECOLOGICAL ASPECTS
- 73% of land area covered by forests
- Forest protection or under restricted use 13% of forest land
- Managed forests; over 90% certified
- Forests as a net sink: 20 - 40 million tn CO2-ekv
PRIVATE FOREST OWNERSHIP DOMINATES IN FINLAND

- **Yhteismetsät – Jointly owned forests**: 9%
- **Osakeyhtiöt – Limited companies**: 2%
- **Valtio, kunnat, seurakunnat ja muut julkiset yhteisöt**: 28%
- **State, municipalities, parishes and the other public corporations**: 7%
- **Kuolinpesät Undistributed estates**: 9%
- **Verotusyhtymät Real property partnerships**: 2%
- **Henkilö- tai perheomistus Private persons or families**: 45%

*Lähde: Verohallinto – Source: Tax Administration*
HISTORICAL PERSPECTIVE

- Exploitation of forest resources and beginning of export oriented sawmilling industry 1860’s onwards -> incomes to rural population; concerns on state of forests -> Forest Act 1886
- Building up law enforcement, land tenure, forest organizations, research, education, extension up to WWII
- Forest funding is based on law; first Forest Improvement Act 1928
- Forests programmes since 1962; loan from the WB, investments into production
- Since 1990's NFP's addressed sfm
- Broader focus since 2010's onwards; value added - value chain, bioeconomy, freedom with responsibility
ACTIVE FOREST POLICY SINCE 1960's

Increased investments into silviculture since 1965

Result: Annual growth of forests has increased from 55 to 104 million m³

Opportunity: Total harvesting can be increased by 10-15 million m³/y

Finnish Forest Research Institute
National Forest Inventory since 1920's
REVENUES, COSTS AND SUBSIDIES IN PRIVATE FORESTRY

- Despite of very long rotation of 80 - 120 years, forestry is an economic activity: total stumpage earnings in 2010 € 1.8 billion, private individuals € 1.2 billion
- Investments into silviculture and forest improvement in 2010 € 289 million, where private individuals € 206 million.
- State subsidies (incentive) to private individuals € 63 million, about 30 % of investments or about 5 % of total forest income
- Net operating profit about € 100/ha
- State incentives mainly to forest roads, tending of seeding and young stands - "seed money" for long term investments
FLOW OF GROSS STUMPAGE EARNINGS

Source: Statistical Yearbook of Finland 2011
ECONOMIC IMPORTANCE OF A FAMILY FOREST

Annual income from 35 hectares (rough estimate)

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average sales 4 m³/ha/y</td>
<td>140 m³</td>
</tr>
<tr>
<td>Stumpage price 140 x 30€</td>
<td>4200 €</td>
</tr>
<tr>
<td>Silvicultural costs</td>
<td>-700 €</td>
</tr>
<tr>
<td>Net income</td>
<td>3500 €</td>
</tr>
<tr>
<td>Tax 30%</td>
<td>-1050 €</td>
</tr>
<tr>
<td>Disposable income</td>
<td>2450 €</td>
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</tbody>
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- Forest owners sell timber every 3 years on the average
- Timber sales bring 10% of family's income
- Owners are also interested in recreation and work in the forest
- 2/3 of planting and young stand care is done by owners themselves
- As an approximation, one year income from average family forest estate is enough to buy one more hectare of forest land
WOOD IS IMPORTANT ENERGY SOURCE

Total energy production from wood as percent of the total national primary energy consumption. Source: State of Europe’s Forest 2011.
CONSUMPTION OF WOOD FUELS

Petajoule – PJ

Energian kokonaiskulutus – Total energy consumption
Puupolttoaineet – Wood fuels


Lahde: SVT: Tilastokeskus – Source: OSF: Statistics Finland
PUBLIC SUPPORT FOR WOOD ENERGY

- EU and national target to increase share of wood based energy (consistency with nfp and national climate and energy strategy)
- Subsidies to harvesting and chipping energy wood from non-industrial private forests; in 2010 € 18 million for 2 million m$^3$
- A new act under preparation for small-diameter wood for energy, subject to approval by EU Commission (state aid regulations); aim to bring onto markets wood from non-profitable sites or small dimension biomass
- Subsidy system very complicated, implications uncertain
FINLAND IS A FORERUNNER IN FOREST PROTECTION

Size of the pie chart indicates the total protected forest area in a country.

Legend:
- **Green**: No active intervention (MCPFE class 1.1)
- **Brown**: Minimum intervention (MCPFE class 1.2)
- **Blue**: Conservation through active management (MCPFE class 1.3)

Total forest area protected (size of the pie) and the share of the protected area by MCPFE Classes 1.1–1.3 (1.1 no active intervention, 1.2 minimum intervention, 1.3 conservation through active management) for biodiversity by countries in Europe (1,000 hectares and percent), 201012. Germany and Spain: included Natura 2000 forest areas in the MCPFE class 1.3. Source: State of Europe’s Forests 2011.
BIODIVERSITY CONSERVATION

- Nature Conservation Act, Forest Act and Act on Financing of Sustainable Forestry safeguard forest biodiversity on private lands
- BD concerns incorporated in everyday sfm including through forest certification
- E.g. retention trees after final felling -> estimated loss of earning in private forests €13 million/yr
METSO - AN INNOVATIVE APPROACH TO BD CONSERVATION

• New areas and networks created and existing conservation areas improved
• New protection methods include voluntary participation by forest owners, preservation of ownership and full compensation of economic losses (PES)
• "An ecological shopping list" -> areas to be selected
• Support to voluntary protection agreements amounted € 11 million in 2011
NO FINANCING FOR FOREST CARBON SEQUESTRATION

- Forest management generates significant environmental service through carbon sequestration; 20 - 40 million tn CO2-ekv/yr; compensating approx. 30 - 60 % of other sectors' emissions; estimated value € 100 - 400 million /yr
- Due to international accounting rules, only a small portion is accounted for -> monitoring and verification costs are high -> not feasible to develop an incentive system in Finland
- However, public policies promote sfm and use of wood in construction and bioenergy -> sequestration, storage and substitution
METSÄHALLITUS
(State Forest Enterprise)

- Manages and uses State lands and waters:
  - Production forests 3.4 mill. ha
  - Protected areas 4.1 mill. ha
  - Unproductive lands 1.5 mill. ha

  Total 9.0 mill. ha

- Timber production 6.0 mill. m³/yr

- Personnel 1900

State forests and lands mainly in the north
MANAGEMENT OF PUBLIC FORESTS IS ECONOMICALLY PROFITABLE

- Metsähallitus, state forest enterprise, business activities generate financial revenues to Treasury of approx. €100 million/yr
- In addition, due to restrictions set by legal obligations related to conservation, recreation, employment, reindeer herding and Sami culture, created additional costs/loss of earnings €53 million in 2010
IMPROVING PROFITABILITY AND COMPETITIVENESS

- MoEE, consistent with Strategic Programme for Forest Sector, has some minor subsidies for mechanical woodworking industries (SME), €20 million in 2012
- Finnish Funding Agency for Technology and Innovations, TEKES, has granted about €25 million for wood industry know-how and innovations (products, processes, services and business concepts) -> "seed money"
- Private sector inputs to forest related R&D&I and investments are key
FINANCING RESEARCH, EDUCATION AND ADVISORY SERVICES

- Forest related research dependent on state budget funding, share of other sources has increased to about 30%
- Finnish Forest Research Institute, Metla, state funding €43 million in 2012; research also in Universities and other units
- Government funding to forest education (vocational and universities) about €110 million/yr
- Forestry Centre is responsible of law enforcement and promote sfm: state budget €48 million in 2012, of which €9 million allocated to extension and advisory services and training
- Forest management associations provide extension and forest planning services to private forest owners; tax-like forest management fee
EU FUNDING

- Finland is a net payer in the EU scale
- EU's Rural Development regulation includes some forestry measures, an opportunity for a country to make use of (9% at the EU level)
- In Finland, this opportunity has been used only in limited manner; more needed in other rural development activities, and as administrative costs are high.
- Preference on national level subsidy systems (transaction costs lower). EU state aid regulations have an influence.
OVERALL POLICY FRAMEWORKS NEEDED

- Need to look on and make use of whole policy framework; regulations, institutions, economic incentives (subsidies and taxation), information means, etc.
- NFP has been useful to identifying priorities, getting political attention and consensus building -> what do we want to achieve?
- Need to ensure coherence and good coordination between different policy strategies, programmes and instruments
- A number of new and emerging issues (bd, bioenergy) lead to a variety of new needs and tools -> financing instruments need to be assessed and adjusted regularly
KEY MESSAGES

- SFM and forest sector activities should be economically viable and profitable
- Coherent national policies need to address variety of priorities and all types of policy instruments
- There is not a single solution/source of forest related financing in a country
- Role of private sector funding fundamental, government to keep up basic infrastructure and provide "seed money" for long term investments or time bound policies
- Enabling conditions and good governance are prerequisites
- Financial crises and new developments affect potentials for forest financing
THANK YOU!