Implementing pan-European Criteria and Indicators for Sustainable Forest Management – case study Finland

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Monitoring of SFM by Pan-European criteria and indicators

1. Forest Resources
   - Forest area
   - Growing stock
   - Age structure/diameter distribution
   - Carbon stock

2. Forest Health
   - Deposition of air pollutants
   - Soil condition
   - Defoliation
   - Forest damage

3. Productive Functions
   - Increment and fellings
   - Roundwood
   - Non-wood goods
   - Forests under management plans
   - Services

4. Biological Diversity
   - Tree species composition
   - Regeneration
   - Naturalness
   - Introduced tree species
   - Dead wood
   - Genetic resources
   - Landscape pattern
   - Threatened forest species
   - Protected forests

5. Protective Functions
   - Area of protective forests
   - Infrastructure

6. Socio-economic
   - Forest holdings
   - Contribution of forest sector to GDP
   - Net revenue
   - Expenditures for services
   - Wood consumption
   - International trade in wood
   - Workforce
   - Employment (incl. safety and health)
   - Accessibility for recreation
   - Cultural values
   - Energy from wood resources

37 QUANTITATIVE INDICATORS with 12 DESCRIPTIVE INDICATORS
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Facts of Finland’s Forests

- 23 Mio ha forest (76% of land area)
- Growing stock **increased** for past 50 years, cuttings 60% from annual growth
- Forest ownership structure, 67% privately owned
- The forest sector contributes 5% of Finland’s GDP
- In Finland 13,0% of the forests protected for the biological diversity
National Criteria & Indicator set

Four national **reports** on SFM 1997-2011

1997  in Total 160 quantitative indicators with policy explanations

2000  in Total 48 indicators (qualitative and quantitative)

2007  in Total 37 quantitative and 12 qualitative indicators
   - Finland’s Forests in nutshell, evaluation on the status

2011   In Total 37 quantitative and 12 qualitative indicators
   - country specific indicators: impacts of FM on water, building with wood, potential impact of climate change and ecosystem services
   - Finland’s Forests in nutshell, evaluation on the status
   - Comparison to European situation (key indicators)
Information sources for the report

Principal up-to-date sources

• The National Forest Inventory by Metla

• The Finnish Statistical Yearbook of Forestry (Metla)

• Metinfo services and other statistics of various actors, special research results,

• Monitoring on the threatened species of SYKE (Finnish Environmental Institute) (RED BOOK every 10 years, 2000, 2010)

• Result reported for the whole country, and partially also by Forestry Centre Districts (13 districts)
Compilation of the National reports

**Stakeholder group** nominated by the Finnish Ministry of Agriculture and Forestry:

**Members:** Ministries of Agriculture and Forestry, Environment, Trade and Industry; Central Union of Agricultural Producers and Forests Owners, Forest Industries Federation, Association for Nature Conservation, Forest Labor organization

**Chairmanship and secretary with data collection duties** by Metla

Report discussed and commented by the **Advisory board for International Forest Policy of Finland**

Report undersigned and approved by **the Minister** of Agriculture and Forestry

Released by the occasion of FOREST EUROPE Conferences
Use/audiences of C&I set

Policy and decision makers
   Basic information on the forests for decisions
   Important users are governmental officials for international discussions

Forest sector
   Forest management and certification, help to follow international discussion

Other sectors
   Linkages with other sector’s reports, often with reduced number of selected indicators

General public
   Informing on the status of forests, what is important in forests

Educational purposes
   Illustrating the various functions of forests, teachers toolbox

Research community
   Excellent tools for science/policy interface, framework for statistics
Use of C&I in assessing SFM in Finland

Experiences on use of C&I to assess SFM over 17 years

- Enable to distinguish trends, and comparisons on impact of forest policy on forest management

- Established instrument for assessing and monitoring

- Used in preparation and monitoring of forest policies and strategies such as National Forest Program and Regional Forest Programs

- Impact on the development of forest management guidelines, as well as on the forest certification standards by PEFC

- Key indicators such as 3.1 Balance between increment and fellings for planning processes and calculating cutting alternatives, 6.9 share of wood based energy and 4.9 Protected forest areas are practical tools for timely forest policy discussion and decisions
Providing information to other sectors

1. International activities
   - UN Millennium development goals: goal 7 ensure environmental sustainability > land area covered by forests
   - CBD, GHG, Land Use, Land-Use Change and Forestry (LULUCF)
   - SEBI (EU) Biodiversity indicators
   - Standards for sustainable biomass for energy purposes CEN/TC 383, ISO 13065

2. Indicator set for the new Nordic strategy for sustainable development (Nordic Council of Ministers):
   forest related indicators: *increment and fellings; renewable energy in total energy consumption; emissions from LULUCF*

3. Findicator (Prime Minister’s Office plus experts):
   key society indicators; forest related are: *increment and fellings, threatened species, renewable energy resources*
C&I set for dialogue and communication

State of Finland’s Forests 2011

Report

Broschure

Press release

Online presentation
Experiences on communication:

• Report as such not well suited for public information on forests, although it is the basic compilation of the information
• A brochure with reduced set of indicators positively received by policy makers, public audiences, and representative of other sectors
• Press release and articles are been succesful
• The comparision of Finnish situation to the European situation has raised much interest
• The internet based communication is the main tool to disseminate the information, findings, graphs and other material (descriptive indicators)
Conclusions

Criteria and indicators for SFM and reports based on these are considered as a very important because of following aspects:

1. C&I provide a balanced compendium of information on SFM
2. C&I provide broader view than the traditional statistics for informing on forests
3. Showing long-term trends and change in the forests
4. Integrating the forest policy goals and decisions with the measurable indicators
5. Making a continuous base for the international comparability
6. C&I sets are used in Finland for presentation of and reporting in forestry, monitoring progress of NFP, and other policy processes, steering forest management and forest certification and educational and communication purposes in Finland as well as internationally
Thank you

Reference

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