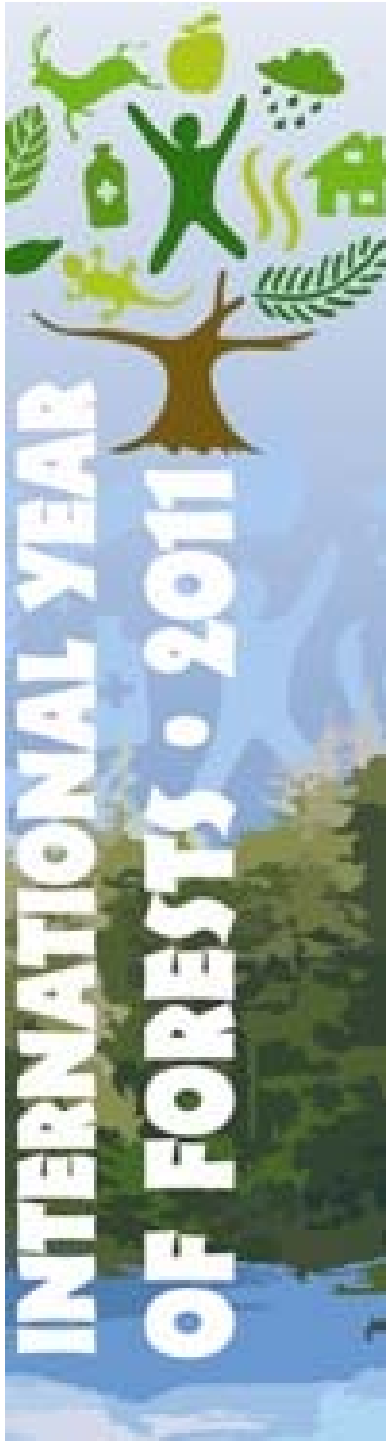

Regional Forest Information Week

State of forests and forest management in the UNECE region in the context of current needs and challenges

United Nations, Geneva – 21 March 2011

Advancing the Cause?

The Contribution of Criteria and Indicators to Sustainable Forest Management in Canada

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Overview

- C&I-SFM developments in Canada
- National-scale applications
- Local-level applications
  - Model forests
  - Forest certification
  - Industrial forest planning
- What do we do well with C&I-SFM?
- What DON'T we do well with C&I-SFM?
- Conclusions

C&I-SFM developments in Canada

- Montreal Process – October 1993
- CCFM C&I development process, leading to Canada's C&I-SFM in 1995
- Data reports 1997 and 2000
- C&I revisions process, leading to revised set in 2003
- Data report in 2007 (to 2005)
- New developments:
  - Review potential to link to Canada's forest vision (formerly national forest strategies)
  - Review revisions required to account for climate change

National-level applications of C&I-SFM

- National stock-takings of SFM progress
- Forest Futures Project, SFM Network
  - Capstone project of a 15-yr research network aimed at elevating the insight levels associated with policy discourses
  - Scenario-based analysis of alternative futures for Canadian forests and the forest sector
  - Scenarios defined by driver and response variables

Forest Futures Project, SFM Network
- 13 Drivers -

- global climate change
- global forest-prod markets & Cdn wood supply
- invasive species
- geopolitics
- global energy
- technology
- governance
- Aboriginal empowerment
- air pollution
- conflict over resources
- societal values
- demographics
- industry profitability

Forest Futures Project, SFM Network
- 11 Responses -

- **ecological sustainability**
  - biodiversity
  - ecosystem condition and productivity
  - water and soil
  - carbon
- **social and community sustainability**
  - amenity values
  - participatory processes
  - forest-related employment
  - markets for forest services
- **economic sustainability**
  - wood harvests
  - wood-processing industries
  - harvests of non-wood products

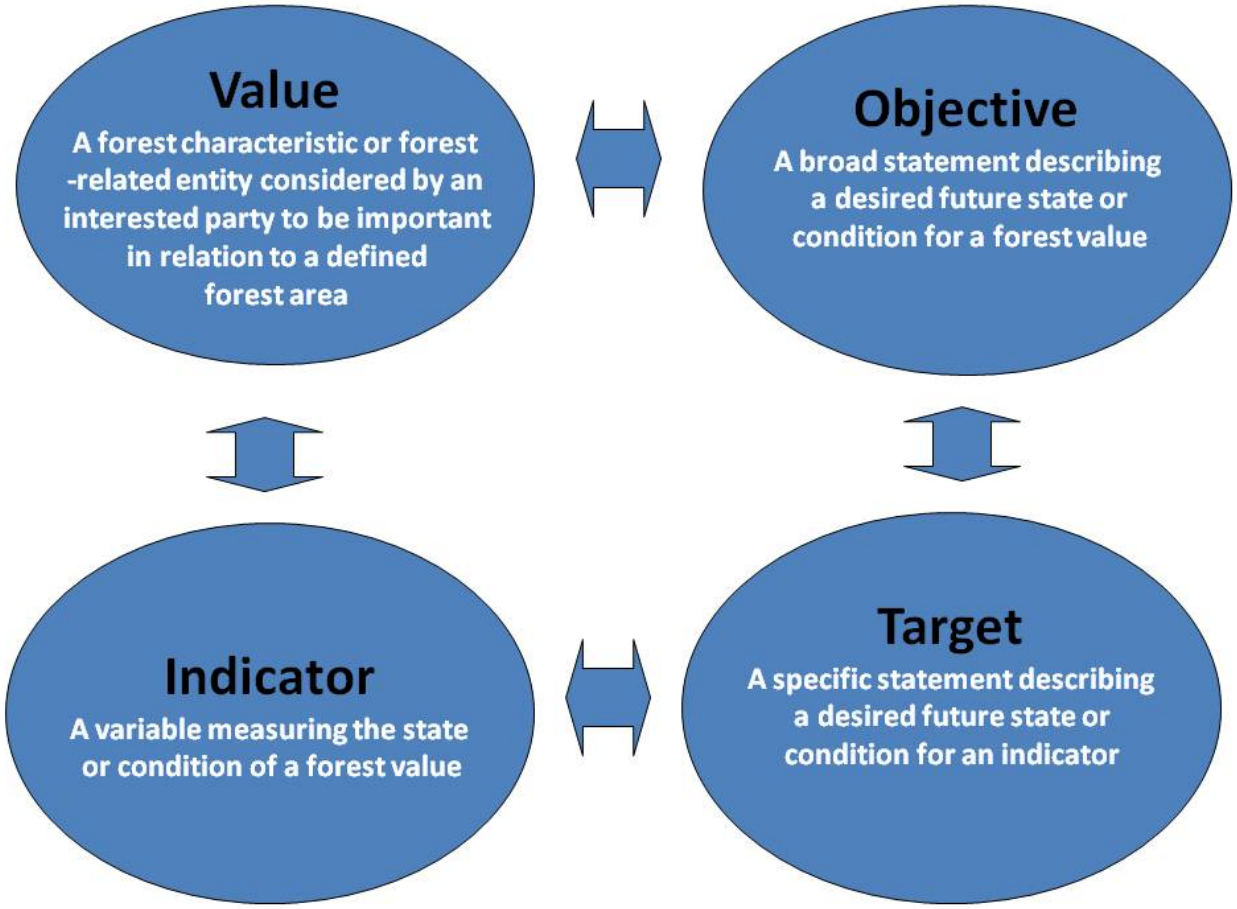
Local-level applications of C&I-SFM
Model forests

- Model forests established in Canada 1992
- Phase II of the program (1997-2002) required each to experiment with C&I-SFM
- Interesting work, but of unknown legacy value – probably high value in:
  - Sensitizing sector people to range of forest values held dear by Canadians
  - Educating sector people about the need, opportunities and difficulties of keeping track

Local-level applications of C&I-SFM
Forest certification

- **CSA Z809 SFM Standard**
  - **1996 – link to CCFM C&I established**
  - **2002 – order brought to indicator use - VOITs**
  - **2008 – mandatory core indicators identified**

VOIT Framework



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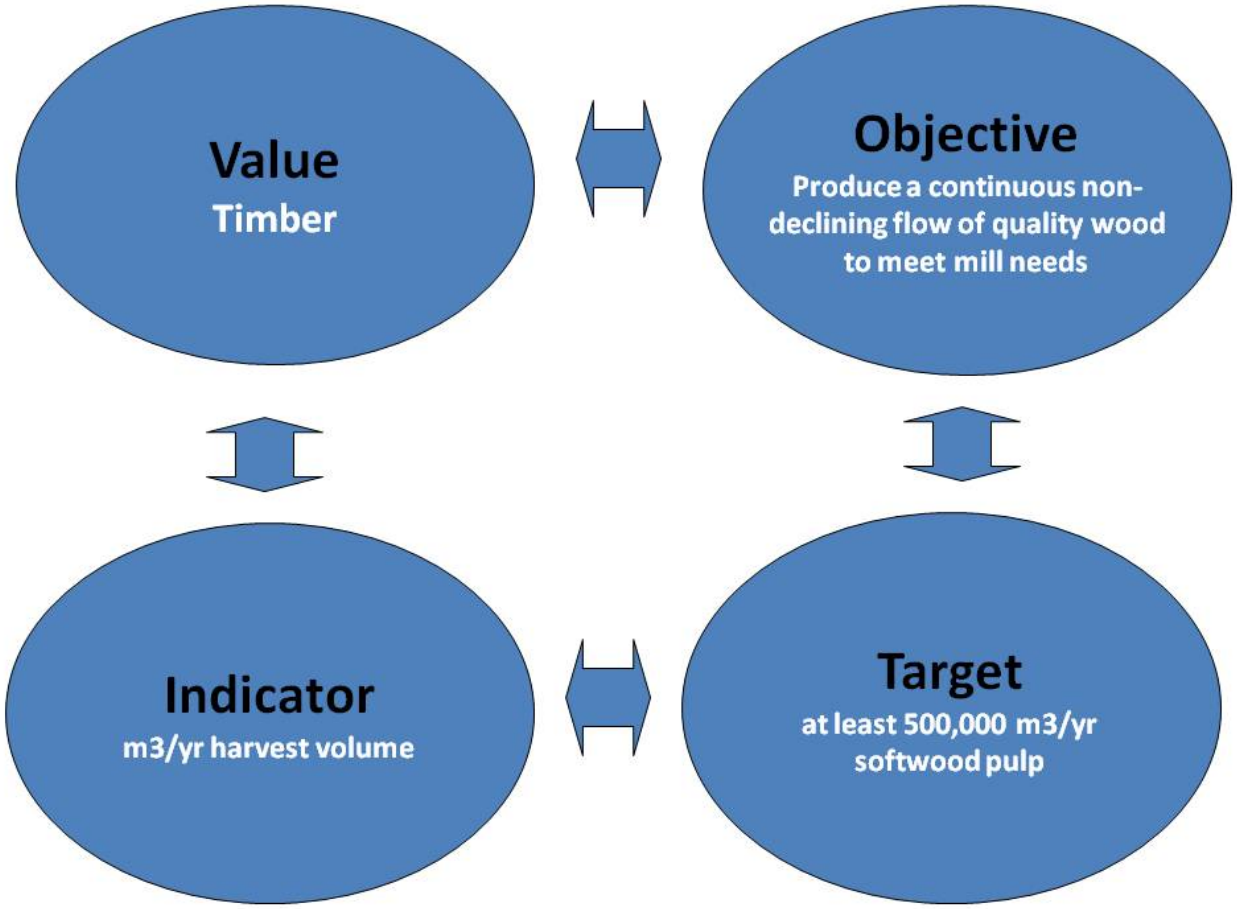
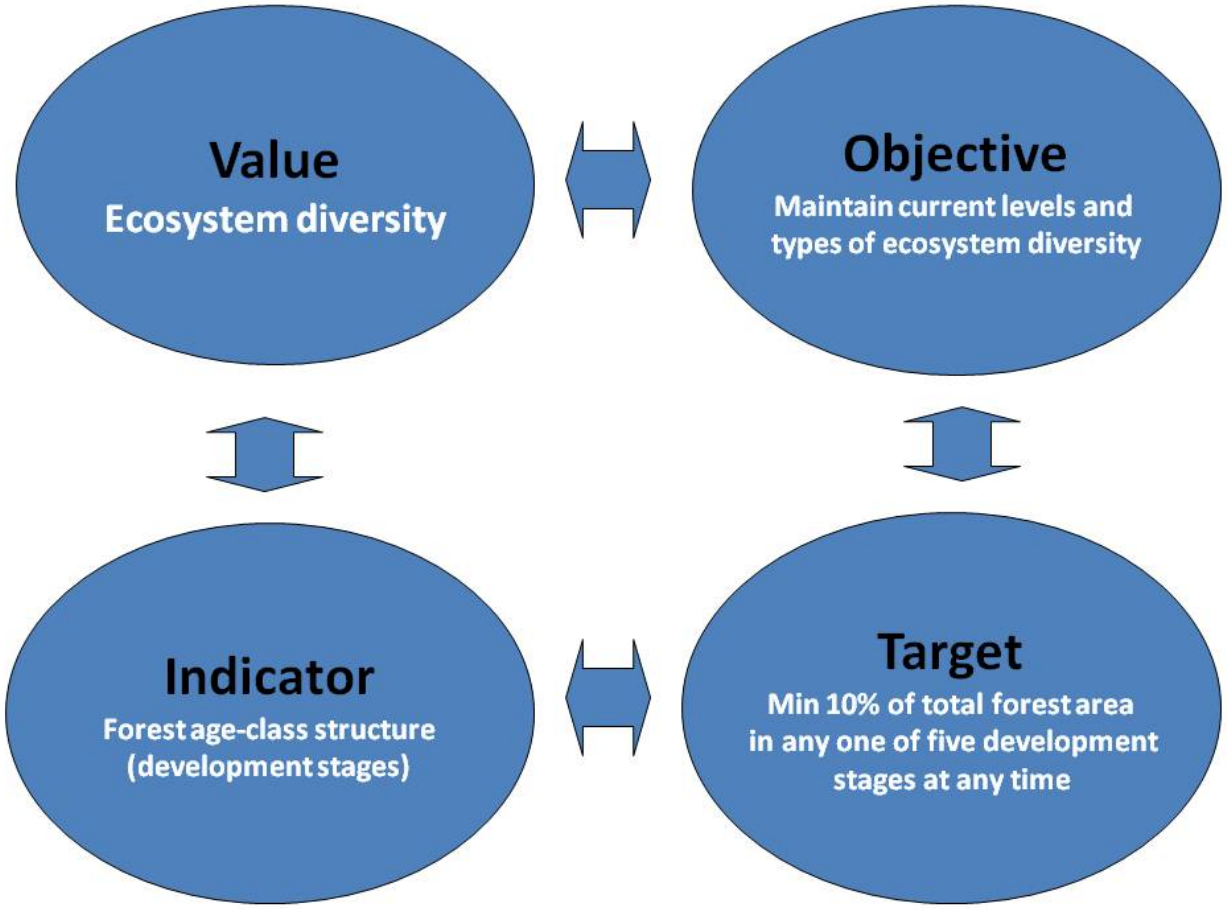
VOIT Example - Timber



VOIT Example - Biodiversity



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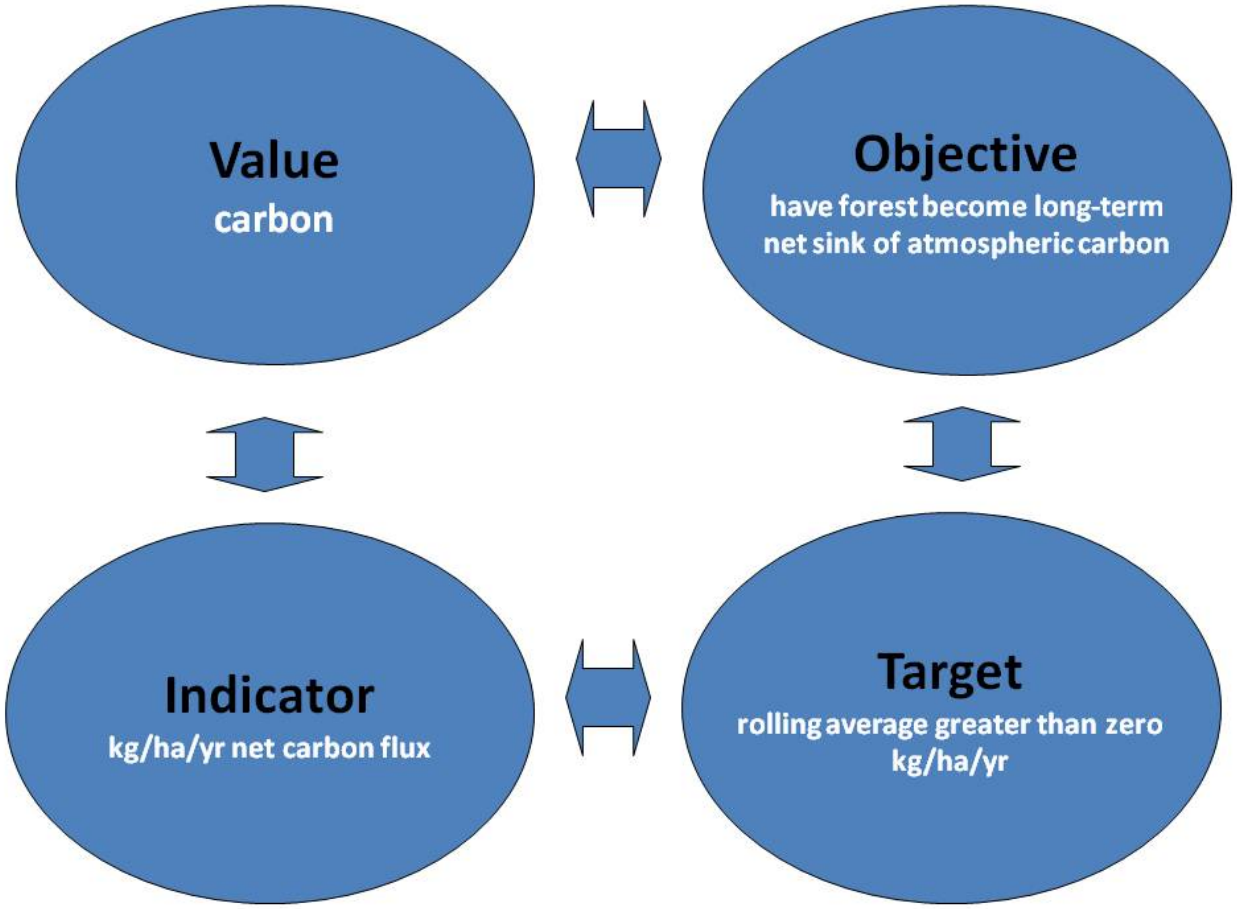
VOIT Example - Carbon



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The CSA Z809-08 Elements (34 Indicators)

- 1.1 Ecosystem Diversity (4)
- 1.2 Species Diversity (3)
- 1.3 Genetic Diversity (0)
- 1.4 Protected areas and sites of special biological and cultural significance (2)

- 2.1 Forest ecosystem resilience (1)
- 2.2 Forest ecosystem productivity (2)

- 3.1 Soil quality and quantity (2)
- 3.2 Water quality and quantity (1)

- 4.1 Carbon uptake and storage (1)
- 4.2 Forest land conversion (1)

- 5.1 Timber and non-timber benefits (1)
- 5.2 Communities and sustainability (4)

- 6.1 Aboriginal and treaty rights (3)
- 6.2 Respect for Aboriginal forest values, knowledge, and uses (1)
- 6.3 Forest community well-being and resilience (3)
- 6.4 Fair and effective decision-making (3)
- 6.5 Information for decision-making (2)

Local-level applications of C&I-SFM
Industrial forest planning

- AB – has adopted the CSA Z809 framework
- ON – detailed requirements embedded into the Forest Management Planning Manual
  - Social and economic objectives
    - Long-term harvest levels
      - Long-term projected available harvest area
      - Long-term projected available harvest volume by species group
    - Involvement in forest management planning
      - Opportunities for involvement of Aboriginal communities in plan development
      - Local citizens committee's self-evaluation of its effectiveness in plan development
  - Forest diversity objectives
    - Natural landscape patterns, forest structure and composition
      - Area of forest unit and development stage
      - Amount and distribution of old-growth forest
    - Habitats
      - Habitat for forest-related species, particularly species at risk

What do we do well with C&I-SFM?

- **Organize our forest value sets**
- **Sensitive people to comprehensiveness and balance in forest values**
- **Track our past degrees of satisfying key forest values**

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What DON'T we do well with C&I-SFM?

- Use them to strengthen monitoring programs
- Use them to guide forest policy (by peering into future possibilities)
- Connect them in their systems contexts
- Apply them to forested protected areas and urban forests

Conclusions

- **C&I-SFM:**
  - **The basic concepts are sound**
  - **Tremendous insights gained about forest values**
  - **Most useful applications – local-level forest planning – forward-looking, systems-analytical**
  - **Least progressive applications – national-level reporting – backward-looking, unsystematic**

Conclusions

- **For strong progress in the next 5-10 yr, we need:**
  - **Ubiquitous uptake, all spatial levels (woodlots to continents)**
  - **Systems-analytical applications**
  - **Firm embedding in management and policy processes**
  - **Resource allocations commensurate to the tasks**
  - **Accounting for contextual change**

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