



# Reporting on the Resilience of Forest Dependent Communities in Canada

Simon Bridge



Roundtable on Sustainable Forests

Madison, Wisconsin

7 September 2007

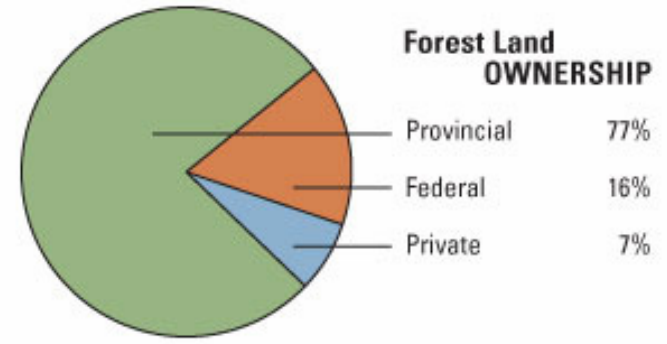
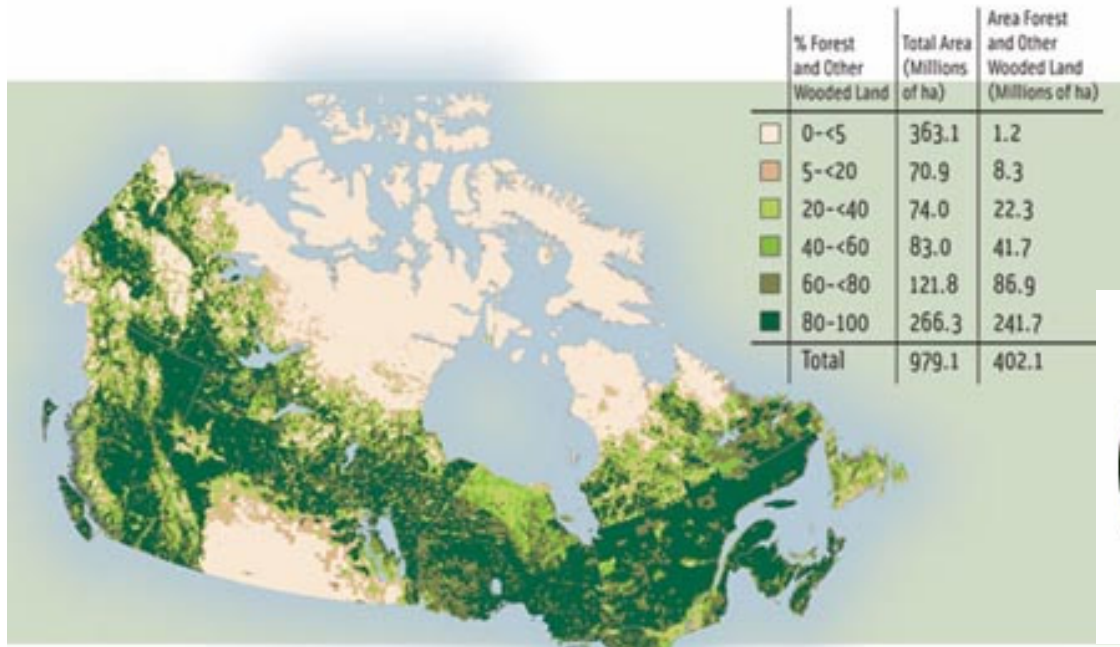


Natural Resources  
Canada

Ressources naturelles  
Canada

Canada 

# Background – SFM in Canada



- Provincial and territorial governments responsible for almost all forest management
- Federal government role – trade and international relations, national reporting, developing national consensus.

# Background – SFM in Canada



- Canadian Council of Forest Ministers (CCFM)
  - 14 federal, provincial and territorial ministers responsible for forests
  - Provides leadership on national and international issues and sets direction for SFM in Canada
  - Began developing a framework of C&I for national reporting on progress toward SFM in 1992
  - Cooperate closely to provide data and science support for reporting
  - Considerable overlap between CCFM C&I and MP C&I

# Reporting on Forest Community Resilience



- Indicator 6.5.c in original Montreal Process C&I
  - Viability and adaptability to changing economic conditions of forest dependent communities, including indigenous communities
- New MP indicator 6.3.c
  - Resilience of forest-dependent communities
- Four indicators in CCFM C&I
  - 6.3.1 – Economic diversity of forest-based communities
  - 6.3.2 – Education attainment levels in forest-based communities
  - 6.3.3 – Employment rate in forest-based communities
  - 6.3.4 – Incidence of low income in forest-based communities

# CCFM approach to reporting on Forest Community Resilience



- Based on assessment of community capacity
- Based on census data
  - Pro: can drill down to sub-national level with ease
  - Con: data collected once every 4 years
- Forest Dependent community
  - A census sub-division (CSD) that derives at least 50% of employment income from forest sector.
  - Metropolitan areas excluded
  - Compared with other single resource dependent communities and multi-resource dependent communities

# CCFM approach to reporting on Forest Community Resilience



- Aboriginal and non-aboriginal analyzed separately
- Aboriginal CSDs
  - Designated Aboriginal by Statistics Canada (e.g. reserve, Indian settlement), or
  - Reported an Aboriginal population of 50% or more
- Not possible to compare aboriginal CSDs with non-aboriginal

# CCFM approach to reporting on Forest Community Resilience

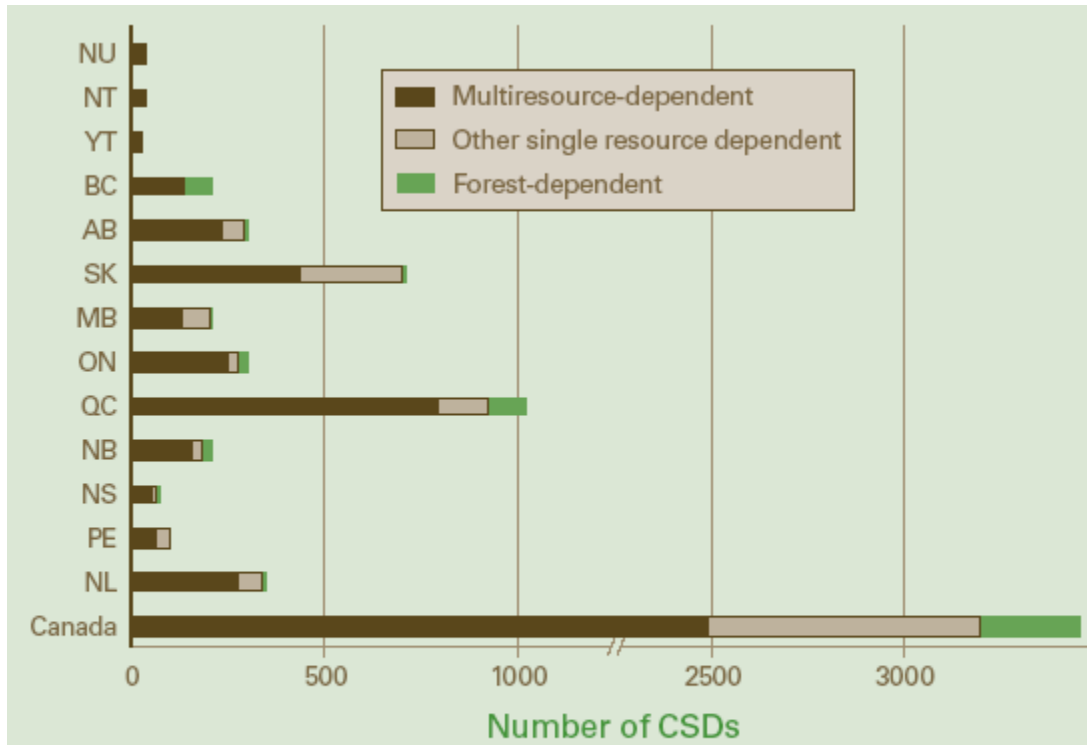


Figure 6.3a Distribution of non-Aboriginal census subdivisions.

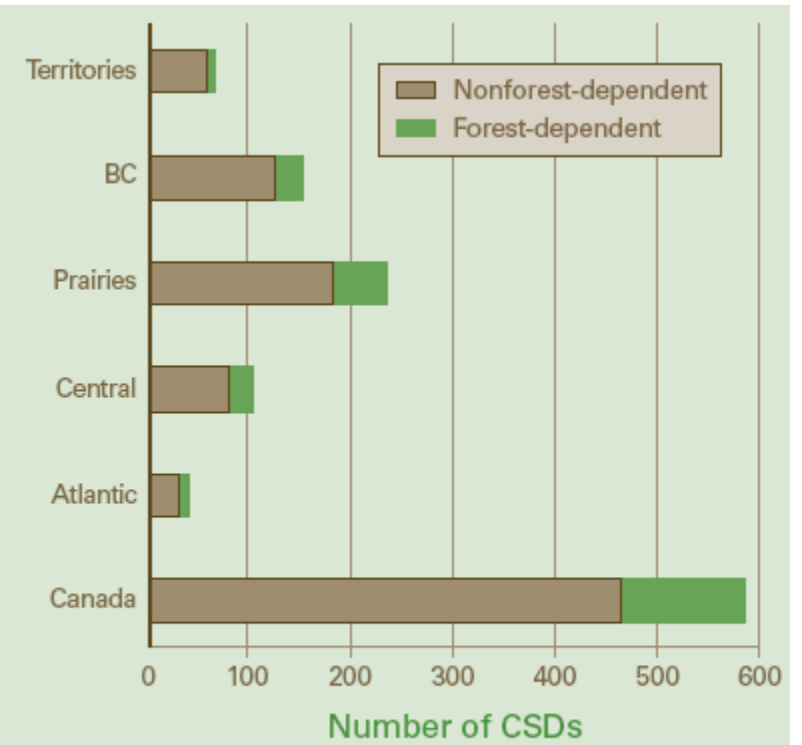


Figure 6.3b Distribution of Aboriginal census subdivisions.

## 6.3.1 – Economic diversity



- A measure of the uniformity of employment across all sectors of the economy
- Portion of total personal income derived from one sector divided by the total income from all sectors
- Provides insight into the range of employment opportunities in CSDs
  - More economically diverse CSDs are better positioned to absorb and respond positively to various shocks in the economy.
- Caution – larger CSDs tend to be naturally more economically diverse

## 6.3.2 – Education attainment



- Measure of human capital in the community
  - Capacity of individuals in the form of skills and capabilities that can be used in the production of goods and services
- Communities with high human capital are likely better equipped to adapt to changing social and economic conditions
- Reported as proportion of residents in a CSD with at least a Bachelor's degree.
- Caution – Human capital involves other skills and abilities such as entrepreneurship and health, but education attainment is a useful proxy at the community level

## 6.3.3 – Employment rate



- Directly related to economic, human and social wellbeing
- Generally, high employment rates indicate thriving communities
- Low rates of employment can lead to underemployment where workers are forced to work in conditions that underutilize their skills and abilities.
- Low employment or underemployment can result in social and health problems at community or individual level
- Reported as percent of total population 15 years of age and over that are employed during the week before census day
- Caution: requires careful interpretation – variation due to several factors. Other measures may be more suitable.

## 6.3.4 – Incidence of low income



- Proxy measure for poverty in Canada
- Reported as proportion of families or individuals below the low income cut-off (>70% of income spent on basic necessities)
- Cut-off varies depending on family size and rural vs. urban
- Provides a strong signal about the ability of residents to secure a living wage
- Close relationship between low income and other social and health issues that draw down capacity of forest communities to respond positively to challenges
- Caution – reasons behind high rates or poverty is subject to intense academic debate

# Summary

---



- An assessment of community capacity
- CCFM uses four indicators to help assess human, economic and social assets in forest-dependent communities
- Compare forest-dependent (>50% employment income from forest sector) with other communities
- Analyze aboriginal communities (designated by StatsCan or >50% Aboriginal population) separately from non-aboriginal