The Economics of Community Forestry

Prepared for

Building Resilient Communities through Community-Based Forest Management

at Algoma's Water Tower Inn Sault Ste. Marie, Ontario
January 16-18, 2013

Dr David Robinson

Institute for Northern Ontario
Research and Development

inord

Institut nord-ontarien de
recherche et de développement

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16 January 2013

Outline

Goal : increase intolerance

- Tenure reform lacked economic analysis of alternatives
- Policy makers didn't know they didn't know
- Let's not let them get away with nonsense, prejudice or lies
- Any economist could write the textbook from "first principles"
- Let's create the Economics of Community forestry

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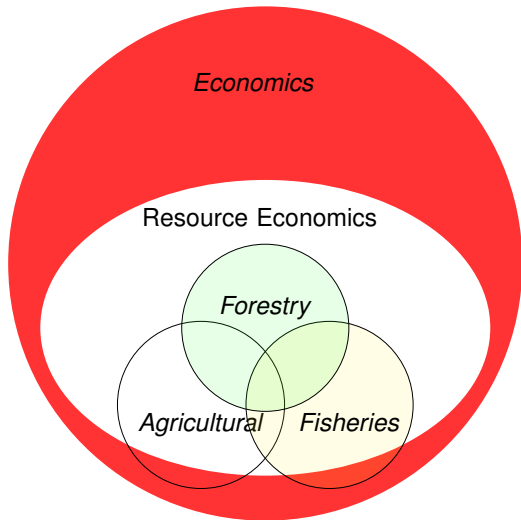- Let's create the Economics of Community forestry

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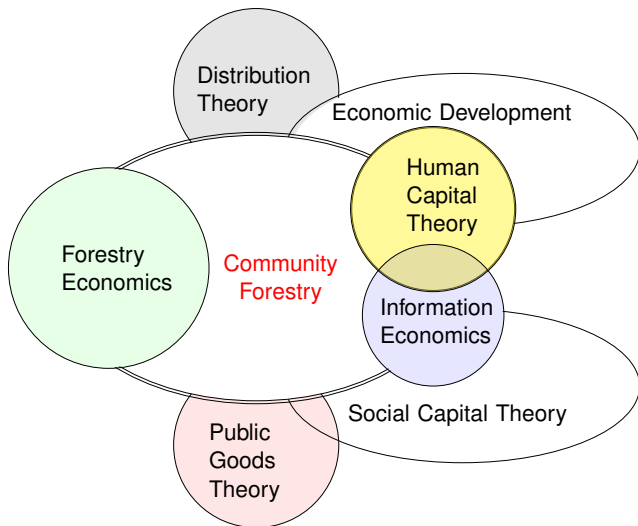- Let's create the Economics of Community forestry

Inventing the economics of community forestry

Related fields

Two observations

- The economics of community forestry is much wider than the economics of forestry.
- In community forestry you take many more issues into account.

A basic economic principle

The effect of having more choice:

- relaxing a constraint can't hurt
- you can't do worse if you have more tools
- Therefore

$$\max_{x,y} W \geq \max_{x} W,$$

Fundamental Principle #1

The community can control more variables than a forestry company, company.

Some reasons

- The community is a legitimate representative of the public, the company is only an agent.

- the company interests are not the same as the interests of the community.

- the company must be regulated more closely than the community

- the company can be allowed to control fewer variables than the community.

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Potential community controlled variables

- water quality
- public access
- education of children
- schedules of public works
- labour supply

- household energy choice
- animal habitats
- municipal heat systems
- rules

The Company's problem

Maximize profits by choosing x given the features of the forest, the

labour market, the technology available and any enforceable rules.

$$\max_{x} \Pi = p \cdot x$$

subject to

$$T(x, y, z) = 0,$$
$$R(x, y, z) = 0$$

The Community's problem under Principle #1

Maximize profits by choosing x and y subject to technology and rules

$$\max_{x,y} \Pi = p \cdot x$$

subject to

$$T(x, y, z) = 0,$$
$$R(x, y, z) = 0$$

Theorem 1

Theorem:

$$\max_{x,y} \Pi \geq \max_{x} \Pi$$

Community forests will in general be more profitable than forests under conventional tenure

Evidence: CF's on unprofitable land in BC

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Counter arguments

Do companies have powers that the community forest does not have?

1. access to capital. probably fallacious

2. management capacity not scarce

3. command and control social media?

4. access to knowledge the web?

5. accountability not better

6. competitive pressure wrong goals

7. cost containment lots of counter examples

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Fundamental Principle #2

Accountants can't see values that don't appear on the balance sheets.

Assume the community values z as well as $p \cdot x$:

$$\max_{x,y} W = p \cdot x + v \cdot z$$

subject to

$$T(x, y, z) = 0,$$
$$R(x, y, z) = 0$$

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Theorem 2

Theorem:

$$
\begin{aligned}
W = & \ p \cdot x(argmax_{x,y}(W)) + v \cdot z(argmax_{x,y}(W)) \\
\geq & \ \ p \cdot x(argmax_x(\Pi)) + v \cdot z(argmax_x(\Pi))
\end{aligned}
$$

"If he's not maximizing what you care about he won't do as good a job as you would."

Theorem 2

Theorem:

$$W = p \cdot x(argmax_{x,y}(W)) + v \cdot z(argmax_{x,y}(W))$$
$$\geq p \cdot x(argmax_x(\Pi)) + v \cdot z(argmax_x(\Pi))$$

"If he's not maximizing what you care about he won't do as good a job as you would."

Company's problem

If a forestry company values only profit ($p \cdot x$) it will not take care of the environment.

Community forestry is the general case

1. Conventional tenure is a restricted version of community forestry
   Community forestry is the general case

2. legislators should formulate rules for the more general case

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Be intolerant

1. Do not accept arguments that community forestry is less efficient - they are based on ignorance.

2. Anything conventional forestry tenure can do, community forestry can do better.

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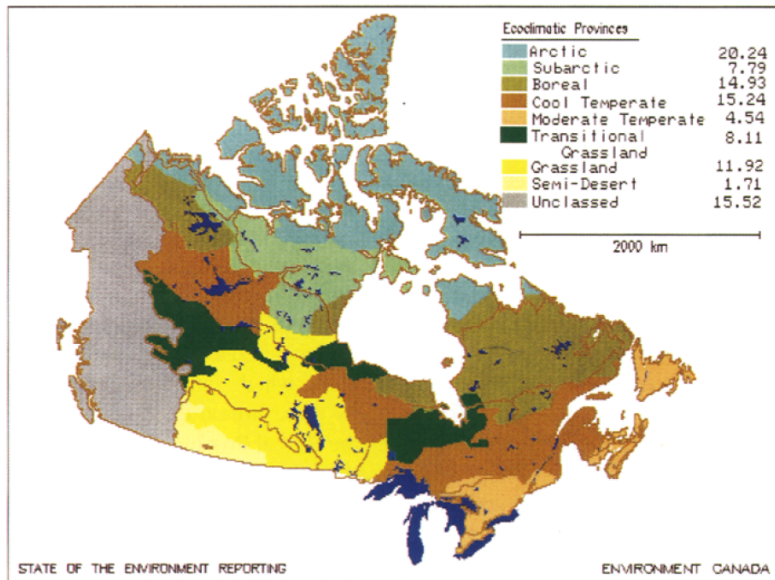2. Anything conventional forestry tenure can do, community forestry can do better.

Is CF the way to deal with Climate Change?

Ecoclimatic Provinces

Arctic		20.24
Subarctic		7.79
Boreal		14.93
Cool Temperate		15.24
Moderate Temperate		4.54
Transitional Grassland		8.11
Grassland		11.92
Semi-Desert		1.71
Unclassed		15.52

2000 km

STATE OF THE ENVIRONMENT REPORTING

ENVIRONMENT CANADA

Thanks!!

Send money or suggestions!

Slides for this talk will be available at:

`http://inord.laurentian.ca`

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