Incentives to Encourage Afforestation / Reforestation

Canadian Forest Service

Victoria, BC
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Background

• The Government of Canada (GoC) is examining afforestation to derive environmental and economic benefits

• Interested in encouraging A/ R through market mechanisms to help achieve its GHG emission reduction targets

• To help support this policy objective, two GoC A/ R related initiatives are underway:
  - Feasibility Assessment of Afforestation for Carbon Sequestration (FAACS) initiative
  - Forest 2020 Plantation Demonstration and Assessment (PDA) initiative
Incentives Research Overview

Purpose: To provide a review of the various types afforestation incentive mechanisms that have been used domestically and internationally

Brief background on the research: In total, 27 countries over six continents were examined, with an emphasis put on cases involving developed countries

Grouped incentives into five classes:
1. Direct Government Assistance /Programs
2. Preferential Tax Treatment
3. Industry Partnerships and Third-Party Leasing Arrangements
4. Market-based Trading
5. Non-Traditional Incentive Mechanisms
Direct Government Assistance / Programs

**Description:** A range of government funded incentive mechanisms that include: direct financial support for growers, providing the transfer of knowledge, and setting government policy to support forestry & forestry related industries. Comprise the majority of "traditional" afforestation incentive mechanisms employed by governments.

**Pros**
- Helps landowners to get beyond hurdle of initial high capital costs (fences, seedlings, etc.)
- Allows for targeted funding by the government
- Knowledge transfer

**Cons**
- Plantings on unsuitable land (e.g. Ireland)
- Involvement in program for “wrong” reasons
- May result in an excess supply of timber
- Approach may not overcome “cultural biases”
- May jeopardize trade agreements (subsidization)
- Can be difficult to manage on a large scale
- Can create a “dependency cycle”

- Loans, Grants or Subsidies
- Technical Assistance and Extension Services
- Direct Government Plantings or Provision of Seedlings
Preferential Tax Treatment

Description: includes the application of lower marginal rates of taxation, favourable capital gains treatments, property tax exemptions, tax holidays and income tax deductibility of costs to encourage afforestation.

Pros
- helps landowners to get beyond hurdle of initial high capital costs (fences, seedlings, etc.)
- allows for targeted funding by the government (e.g. certain income groups or certain equipment)
- can be easier to administer than many payment schemes

Cons
- plantings on unsuitable land (e.g. Ireland)
- involvement in program for “wrong” reasons (tax shelter)
- may result in an excess supply of timber
- may not overcome “cultural biases”
- may jeopardize trade agreements (subsidization)
- may create a dependency cycle
- may decrease tax receipts that could have been reinvested in supporting the industry

Examples
Norway Forest Trust Fund
Costa Rica
Industry Partnerships and Third-Party Leasing

Description: under these agreements, smallholders produce wood and fibre for private enterprises on a systematic basis

Pros
- little or no government involvement, therefore low financial cost
- ensures a market exists (as opposed to non-market schemes that may ignore market conditions)
- usually includes extension services provided by company or conservation agency
- low initial investment by landowner
- helps companies to increase wood supply

Cons
- landowner effectively relinquishes control of land, thereby forgoing alternative land uses
- dependent on continued existence of an individual company or organization

Outgrower Schemes
Biomass Power
Conservation Easements
Market-based Carbon Trading

**Description:** A CO2 emitting company (or country) unable to meet anti-pollution targets can buy carbon credits from an under-polluting company or operation. The CO2 emitting company effectively pays forest owners to set aside forest for the purpose of atmospheric carbon mitigation.

<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
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<td>• opportunity to generate income while the trees were growing</td>
<td>• unresolved issues regarding rules that govern them</td>
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<tr>
<td>• low initial investment by landowner</td>
<td>• depending on location, marketing of timber products from the planted forest may prove difficult</td>
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<td>• permits adjust automatically for inflation and external price shocks</td>
<td>• have to either re-purchase carbon credits at the time of harvest, or replant the planted forest</td>
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<td>• cost-effective way for companies to reduce emissions</td>
<td>• decision on whether or not to harvest will depend on the relative value of timber and carbon at the time</td>
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<td>• opportunity to pool land</td>
<td>• no guarantee of a market for trees harvested</td>
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Conclusions

- Past Programs: Government Program / Direct Assistance seems to be the most popular mechanism used in the past

- Direction: incentive mechanisms seem to be going toward market-based mechanisms (e.g. carbon trading & 3rd party leasing)

- Next Steps: evaluate past and present programs in terms of effectiveness and applicability to Canada
  - Taxation Incentives
  - Incentives for Investment
  - Conservation Easements
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