

Incentives to Encourage Afforestation / Reforestation

Canadian Forest Service

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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 targetted 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 targetted 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 (eg. 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

Pros

- opportunity to generate income while the trees were growing
- low initial investment by landowner
- permits adjust automatically for inflation and external price shocks
- cost-effective way for companies to reduce emissions
- opportunity to pool land

Cons

- unresolved issues regarding rules that govern them
- depending on location, marketing of timber products from the planted forest may prove difficult
- have to either re-purchase carbon credits at the time of harvest, or replant the planted forest
- decision on whether or not to harvest will depend on the relative value of timber and carbon at the time
- no guarantee of a market for trees harvested



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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