CANADIAN FOREST SERVICE SCIENCE-POLICY NOTES

Deforestation in Canada—What Are the Facts?

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The Canadian Forest Service of Natural Resources Canada monitors deforestation to meet international climate change reporting requirements.

Annual deforestation rates are estimated using a combination of satellite and aerial images, land-use records, and field inspections. The results show that although there is some deforestation in Canada, most is driven by sectors of the economy other than forestry, such as agriculture and urban development.

What Is Deforestation?

Deforestation is the permanent removal of forest cover from an area, and the conversion of this previously forested land to other uses. In Canada, clearcutting or other harvesting practices are used as part of sustainable forest management to provide timber for producing paper or wood products. This is not considered deforestation because the area is replanted or allowed to regenerate naturally, renewing the forest cover.

Deforestation in Canada—A Snapshot

- Deforestation is not logging—it is the result of clearing trees for a change to a non-forest land use, such as agriculture.
- Deforestation affected less than 0.02% of Canada's forests in 2005.
- Canada's deforestation rate accounts for only 0.4% of global deforestation.
- Solutions are complex, requiring the involvement of many players. Integrated landscape management and other best practices are part of the answer, as is raising public awareness about the issue.

How Much Deforestation Occurs in Canada?

Canada's 402 million ha of forest and other wooded land account for about 10% of the world's forest cover. In 2005, an estimated 56 000 ha were deforested in Canada. Over the past 30 years, except for large hydroelectric projects in the late 1970s and early 1980s, annual deforestation rates have been decreasing. Overall, deforestation affected less than 0.02% of Canada's forests in 2005. A portion of this deforestation is offset by increases



Area deforested for recreational usage (golf course) in Southern Ontario. (Don Leckie, Natural Resources Canada)

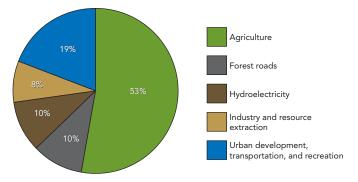
in forest area due to afforestation (planting of new areas of forest), estimated at 9400 ha in 2005.

Globally, about 13 million ha of forest are deforested each year—the area of Nova Scotia and New Brunswick combined. Therefore deforestation in Canada represents only approximately 0.4% of global deforestation, far less than Canada's 10% share of the world's forests. Around the world, deforestation is a major issue because it reduces biodiversity, affects water and soil quality, and is an important contributor to climate change. Although the rate of deforestation in Canada is quite low, it still makes sense to try and reduce it where possible.

What Activities Cause Deforestation?

The agriculture sector accounted for just over half of the deforestation in 2005 (see chart), the result of forests having been cleared for pasture or crops. The remainder was caused by urban development, transportation corridors, and recreation (19%); hydroelectric development (10%); the forest sector (10%); and other natural resource extraction industries (8%). About two-thirds of this deforestation occurred in Canada's boreal forest,





Causes of deforestation in Canada for 2005.

mainly in areas in Alberta, Saskatchewan, and Manitoba where the forest borders the Prairies.

How Can We Reduce Deforestation in Canada?

Deforestation in Canada is driven by demand for resource development, economic growth, and the need to build infrastructure. Efforts to reduce deforestation must therefore be balanced against other goals, such as expanding the economy, diversifying economic activities, and supporting community employment.

As a result, finding solutions to reduce deforestation is challenging. There is a range of government policies and regulations that affect development, and these vary by sector and jurisdiction. Policies and regulations generally deal with other environmental, safety, or economic issues—not deforestation. A further challenge is the lack of public awareness about deforestation. Governments and the public have only recently begun to focus on this issue.

Because of increasing awareness, governments and industry are trying to better understand and reduce deforestation in Canada. Recognizing that we need a more comprehensive approach, provincial governments are increasingly using innovative practices such as integrated landscape management (ILM). Integrated landscape management means planning land uses over an entire landscape and encouraging different land users to work together. For instance, ILM has been used in Alberta

Deforestation and Greenhouse Gas Emissions

The Canadian Forest Service estimates greenhouse gas emissions from deforestation for inclusion in Environment Canada's greenhouse gas National Inventory Report. Those estimates show that, in 2005, deforestation caused less than 3% of the total greenhouse gas emissions in Canada. In comparison, deforestation worldwide results in up to 20% of global human-caused emissions according to the Intergovernmental Panel on Climate Change—most of this is in developing countries. Since Canada's total greenhouse gas emissions are about 2% of global emissions, deforestation in Canada represents a very small proportion of global greenhouse gas emissions.



Area deforested for agricultural purposes near Quyon, Quebec. (Roberta Gal, Natural Resources Canada)

to coordinate forest clearing with oil sands development, to ensure forest companies harvest timber from sites to be cleared for oil and gas, and to prevent forest clearing for oil and gas development in newly replanted areas. British Columbia has also used ILM to encourage the various industries operating in forests to share roads rather than each building its own.

References

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