

Indicators of sustainable forest management: Review of potential indicators

Criterion 1: Biological diversity

Alyson McHugh, Angeline Gough, and John Innes

Sustainable Forest Management Laboratory
Faculty of Forestry
University of British Columbia

**DRAFT For Review
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Executive Summary

This document is intended to serve as a reference document for use in the choice of indicators of sustainable forest management. It provides details, where available, of approximately 200 indicators that have been selected from a broader range of over 3000 indicators that have been proposed or put into practice.

The relationship of each indicator to the criteria and indicators scheme used by the Canadian Council of Forest Ministers (CCFM) is given, and this scheme is used as the framework for the current document. Not all CCFM indicators have been used, and a number of supplementary indicators, more appropriate to the questions being asked about the nature and extent of sustainable forest management in British Columbia are given.

Under each indicator, the rationale and a brief description of the indicator (where available) is given. Much of this material has been taken directly from the source material to avoid the risk of interpretative bias in this reference document. Examples are provided of the use of indicators, and also of where they have been actually reported. Any outstanding research questions or uncertainties related to the indicators are provided, as well examples of the scientific literature related to each indicator (this last section is still incomplete).

Following recommendations at a (non-representative) stakeholder workshop in February 2005, particular emphasis in this document has been placed on social and economic indicators. This is because in work on criteria and indicators to date, it is the social and economic indicators that have caused the greatest difficulty.

This working draft will be supplemented with comments received during a broader stakeholder review. Identified gaps will be filled through further research and through interviews with a number of forest managers with experience of the use of indicators of sustainable forest management.

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¹ Each report contains introductory material for context, plus a single chapter for review.

² References are also available as a separate file for information and review.

Introduction

Since the 1992 United Nations Conference on Environment and Development, there has been increasing interest in the practice of sustainable forest management. Although by 1992 the International Tropical Timber Organization had already begun to develop criteria and indicators (ITTO 1992, 1993) and have subsequently done extensive work in this area (ITTO, 1998, 2003, 2005), it was the Forest Principles document³ that set the scene for the development of a number of different international and national sets of criteria and indicators of sustainable forest management. While many continue to argue that the definition of sustainable forest management is elusive, it is the generally agreed criteria that define sustainable forest management. Canada is a member of the Montreal Process, and in the Santiago Declaration of 1995, agreed to a set of seven criteria that would define the environmental, economic and social values that in turn define sustainable forest management. Each criterion was accompanied by a suite of indicators that would enable reporting of progress towards sustainable forest management at an international level (Montreal Process, 1999).

While most signatory states of the Montreal Process follow and use the criteria and indicators as the basis for national reporting, Canada has adopted a slightly different approach. Through the Canadian Council of Forest Ministers, the provinces have developed a revised set of criteria and indicators, loosely based upon, but subtly different from, the Montreal Process criteria and indicators (Canadian Council of Forest Ministers 2003). Following direction from the steering group of the Common Ground project, this report is structured around the Canadian Council of Forest Ministers revised suite of criteria and indicators.

The international level (Montreal Process) and national level (Canadian Council of Forest Ministers) criteria and indicators provide a basis for reporting at the international and national scales. Reports to date have encountered considerable difficulties due to lack or unavailability of the necessary data, throwing into question the practical value of some of the indicators. In addition, reports at these scales cannot report on whether or not management of individual forestry operations is sustainable (Canadian Council of Forest Ministers, 2003). However, it is at the scale of the management unit that forest managers are facing increasing pressure from major customers, and this pressure is making forest managers re-evaluate their information collection and reporting processes. In addition, it is becoming increasingly recognized that for forest managers to continue to practice forestry, a 'social license' is required, whereby there is broad acceptance of forest practices by forest stakeholders. These stakeholders are asking for evidence that good (sustainable) forest management practices are being adopted.

When faced with the challenge to demonstrate that their forest management practices are sustainable, managers are faced with a number of options. They can seek third-party certification through one or more of the systems currently in use (the main ones in

³ Non-legally binding authoritative statement of principles for a global consensus on the management, conservation and sustainable development of all types of forests. The full document can be accessed at: <http://www.un.org/documents/ga/conf151/aconf15126-3annex3.htm> .

