

CCFM C&I INDICATOR REVIEW

A Process for Technical Working Groups

To

Review the Indicators in the

CCFM C&I Framework for Sustainable Forest Management

March 2002

Introduction

The Canadian Council of Forest Ministers' (CCFM) framework of Criteria and Indicators (C&I) is a science-based framework to define and measure Canada's progress in the sustainable management of forests. The criteria represent forest values that Canadians want to enhance or sustain, while the indicators identify scientific factors to assess the state of the forests and measure progress over time.

The CCFM C&I framework has been in place since 1995. Since then, the capacity of information systems has increased, approaches to forest inventories have changed, data availability has improved and advances in science have improved our understanding of ecosystems. Recognizing that sustainable forest management is an adaptive process and that assessing sustainability is a continuous activity, the CCFM approved a review of the 83 indicators in the framework in August 2000.

Goals of the CCFM C&I Framework Review

The overall goal of the C&I framework review is to improve the relevance and efficiency of the indicators for reporting on and assessing progress toward sustainable forest management at the national level. Public involvement will be an important part of evaluating and refining the current indicators in the C&I framework to develop the most suitable and functional indicators for assessing the state of Canada's forests while also contributing to a better understanding of the balance in social, environmental and economic objectives of sustainable forest management.

Overview of the Review Process

A Task Force composed of representatives from the federal, provincial and territorial governments guides the CCFM C&I process and is leading the framework review. Three experts on sustainable development indicators will advise the task force during this process and five Technical Working Groups (TWGs) will revise the indicators. The C&I Secretariat supports the Task Force and the TWGs. Indicators for Criterion 4: Forest Ecosystem Contributions to Global Ecological Cycles, will be reviewed by liaising with already existing committees and working groups working in this area.

The Technical Working Groups

Five Technical Working Groups will be established to review indicators in the CCFM C&I framework, one TWG for each Criterion, except criterion 4. The following outlines a process for the Technical Working Groups to follow to help them get through the substantial amount of work required to revise the indicators in the time allotted.

1. Develop initial list of potential indicators

Each TWG member drafts and submits to the C&I secretariat a list of potential indicators for their criteria along with any obvious reference conditions for each indicator considering the following:

- Analyze the values identified in the public consultation process
- Analyze the current CCFM indicators for potentially applicable indicators
- Look at indicators from other programs, e.g Montréal Process
- Consider whether there are additional long-term issues of critical concern to forest sustainability in Canada, for which indicators should be developed.
- Consider the list of indicator evaluation attributes provided by the C&I Task Force (Box 1)

The lists will be compiled by the C&I secretariat and redistributed back to the TWGs

2. Narrow the indicator list and adjust wording of potential indicators

- Sort and group similar indicators
- Agree on narrowed set of potential indicators (narrow to a set of no more than 20 indicators with reference conditions where appropriate)
- Refine wording of each indicator
- Identify any data/knowledge gaps to properly assess indicators
- Suggest how each indicator might be used in reporting by identifying each as a core, supporting, or potential indicator (See Box 3).

3. Evaluate indicators

- Rigorous review by TWGs using evaluation grid (Box 2, Table 1).
- Solicit comments from other experts.

4. Consider the results of the indicator evaluation:

- Narrow the list of indicators that will be recommended to the Task Force
- Refine the wording of indicators and reference conditions, where necessary.
- Identify barriers to reporting on indicators and costs to overcome barriers
- Identify how each indicator could be used in reporting by identifying each as a core, supporting or potential indicator.

After the March 15th meeting, each TWG member individually proposes a set of indicators (with obvious reference conditions where possible) for the criterion, considering current CCFM indicators, indicators from other processes, other long-term issues and the list of indicator attributes provided by the C&I Task Force (Box 1). These indicators will be compiled for each TWG by the secretariat to produce the first draft set of indicators for the Criterion

The TWG members will then meet on April 26th to reduce the list to no more than 20 potential indicators for the criterion. The TWGs will be asked to consider how each indicator could be used in reporting by identifying each as either a core, supporting or potential indicator (See box 3). The TWGs will also be asked to identify any data/knowledge gaps or other information required to properly assess potential indicators. Over May and June, the secretariat will attempt to research those data/knowledge gaps to help the TWGs refine their list of indicators.

Up to this point, TWG members will only have been asked to consider the indicator attributes given to them by the C&I Task Force (Box 1) when deciding upon indicators. Each TWG member will now be asked to consistently and rigorously evaluate each of the remaining indicators using the evaluation questions (Box 2) and the worksheet provided (Table 1). The indicator evaluations will be compiled by the secretariat. Comments on the proposed indicators can also be solicited from other experts in the field.

The TWG members will then meet for a final time in August to discuss the evaluations and agree on the revisions to the indicators. The final set of indicators and reference conditions produced from this meeting will be recommended to the C&I Task Force for that criterion. Recommended indicators should also be identified as being either core, supporting or potential. The TWGs will also be asked to identify any barriers to reporting and costs to overcoming those barriers.

Box 1: Attributes that revised indicators in the CCFM C&I framework should possess.

Relevant – each indicator must relate clearly to a particular criterion, and should represent significant information about the values embodied by the criterion. An indicator must be sensitive and responsive to change in the sense that management actions and other forces can readily influence its behaviour

Measurable - an indicator should be based on available or easily obtainable, scientifically valid, empirical measurements that can be consistently repeated over time to observe trends. Obtaining indicator data must be practical and fiscally feasible. The data may be already collected for other purposes, or may need to be collected specifically for the purposes of gauging progress towards SFM.

Understandable - indicators must be understandable not only to forest managers but also to the informed public, especially if public interests are to be incorporated into forest planning exercises. Simplicity and clarity are also characteristics that make indicators more understandable.

Can be Forecast - Future indicator behaviour should also be predictable with reasonable accuracy, if they are to guide management or policy decisions. It must be possible to make an assessment of future indicator behaviour, given certain management actions, policies or other factors.

Have Reference Values - indicators often have their strongest meaning when forest managers or policy makers are able to compare their performance against reference values, and subsequently to design actions to induce indicator performance in some desired future direction. Where feasible, indicators in the CCFM framework should include reference values/conditions, and the TWGs should make recommendations on how reference values may be used with the indicators they recommend.

Box 2: Indicator Evaluation Questions.

Indicator Wording Checklist

- The indicator is precisely defined
- The indicator is a specific and measurable parameter (not too vague)
- The indicator is written non-directionally (not suggesting a response in either direction)
- The indicator wording does not include or imply the methods or reference values (targets/thresholds), although the description of the indicator may include reference values.

C&I Framework Questions

1. Is the indicator closely and unambiguously related to CCFM Criterion this TWG is focusing on?
2. Does the indicator link or feed into any of the Montreal Process indicators (contribution to international reporting)? Which ones?
3. Does the indicator assess sustainable forest management at the national level?
4. Does the indicator overlap with other indicators in the set

Indicator Data/M Measurement Questions

5. Is the indicator appropriate for data collected at the national level
6. Is the indicator reliable (Can you trust the information the indicator is providing)?
7. Is the indicator sensitive and responsive to change (can management actions or other forces readily influence its behaviour)?
8. Can data for the indicator feasibly be collected?
 - a) Is it costly or difficult? Does it require a special arrangement between agencies?
 - b) Can it be measured over time or measured repeatedly?
 - c) Can it be comparably measured across all provinces and territories?

Indicator Use Questions

9. Is the indicator useful to the intended audience (Conveys information that is meaningful to decision makers and /or public, suitable for use across provinces and territories and/or across Canada as a whole?)
10. Is the indicator relatively easy to analyze/interpret?
11. Is the indicator relatively easy to present and understand (for reporting to general public)?

Box 3: Core, Supporting and Potential Indicators

The TWGs should try to identify their recommended indicators as either core, supporting or potential indicators. This classification will help the C&I Task Force identify how indicators may best be used in future reporting. There are several examples of indicator processes that use similar classification schemes to clarify reporting and provide broad overviews of sustainability to general audiences.

Core Indicators are intended to give a broad overview of whether we are progressing towards the sustainable management of Canada's forests. These indicators relate to values, issues or concerns that are clearly of great interest to Canadians and they raise public awareness and focus public attention on what sustainable forest management means. These indicators have all of the attributes identified for suitable indicators and are measurable in the short term. It is suggesting that the total number of core indicators be fairly limited, perhaps about two dozen.

Supporting Indicators complement the core indicators and give additional, more detailed information on the progress towards sustainable forest management in Canada. These indicators have all or most of the attributes identified for suitable indicators and are measurable in the short term.

Potential Indicators include future indicators that address important concepts but which cannot currently be measured or properly defined. In this case, the value, issue or concern is deemed important enough to warrant some form of indicator as a placeholder. These indicators may identify areas where further research is warranted.

Timeline

March 15, 2002	<p><i>First TWG meeting</i></p> <ul style="list-style-type: none"> • Individual members asked to propose a list of indicators for their criterion • Submitted to Secretariat by April 12th
April 12, 2002	<ul style="list-style-type: none"> • Indicator lists submitted by individuals to C&I secretariat
April 19, 2002	<ul style="list-style-type: none"> • Secretariat compiles and redistributes lists to TWGs • Individual members asked to select preferred indicators from compiled list
April 25 & 26, 2002	<p><i>2nd TWG meeting</i></p> <ul style="list-style-type: none"> • Discuss indicators and reduce list to < 20 indicators • Identify data/knowledge gaps • Provide direction to secretariat on where additional info is needed to assess indicators
May – June, 2002	<ul style="list-style-type: none"> • Secretariat researches info gaps for TWGs
July, 2002	<ul style="list-style-type: none"> • Individual TWG members critically evaluate indicators on short list using the worksheet provided
July, 2002	<ul style="list-style-type: none"> • Comments solicited from experts on potential indicators.
July – August, 2002	<ul style="list-style-type: none"> • Evaluations compiled by secretariat and results distributed to TWGs
August, 2002	<p><i>3rd TWG meeting</i></p> <ul style="list-style-type: none"> • TWGs meet to discuss the evaluations and agree on the revisions to the indicators and benchmarks • TWGs identify any barriers to reporting on indicators and costs to overcome barriers
August – September, 2002	<p>Write report on recommended indicators, benchmarks and barriers to reporting for submission to C&I Task Force</p>

Proposed TWG Meeting Objectives

March 15, 2002: First Meeting

- Intro to CCFM C&I framework
- Overview of review process
- Overview of background material
- Task TWGs with developing initial set of indicators before second meeting

April 26, 2002: Second meeting

- Narrow list of potential indicators with obvious reference conditions where appropriate
- Identify data/knowledge gaps
- Provide direction to secretariat on where more info is needed to assess indicators

August, 2002: Third meeting

- Discuss the evaluations and agree on the revisions to the indicators.
- Identify barriers to reporting on these indicators and costs of overcoming barriers.

Table 1: Portion of the proposed indicator evaluation matrix used by the Technical Working Group

	C&I Framework Questions				Indicator Data/Measurement Questions					Indicator Use Questions			
	Q. 1	Q. 2	Q. 3	Q. 4	Q. 5	Q. 6	Q. 7	Q. 8			Q. 9	Q. 10	Q. 11
Ind. #	Relates to CCFM Criterion	Links to MP	Assesses SFM at National Level	Overlaps w/ other ind's in the set.	Appropriate for data collection at national level	Is the indicator reliable	Is the indicator sensitive to change	Feasibly collected a. Costly or difficult b. Measurable over time c. Can be comparably collected across prov/terr			Useful to audience	Easy to analyze/interpret	Easy to present and understand
								a	b	c			
1													
Comments													
2													
Comments													
3													