Comparing the criteria and indicators of sustainability used by the FSC, ISO, CSA, and SFI Forest Certification Schemes

Gypsy Wilson
Clayoquot Alliance for Research,
Education and Training
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Disclaimer for Matrix

The comparative matrix of the criteria and indicators of the forest certification schemes listed below is a technical comparison comprised of the criteria and indicators of each standard, and is NOT to be confused with each of the standards in their entirety.

- The FSC Regional Certification Standards for BC – Draft 3[1];
- The Interim SmartWood Guidelines for British Columbia for the Assessment of Natural Forest Management[2];
- The National Standard of Canada CAN/CSA – ISO 14001-96, *Environmental management systems – specification with guidance for use*[3];
- Canada's National Standard on Sustainable Forest Management – CAN/CSA Z809-02[4]; and,
- The 2002-2004 Edition Sustainable Forestry Initiative (SFI) Program[5].

Although there has been great effort to include the details contained within each of the standards, certain indicators deemed redundant have been excluded and the numbering system has been changed. This matrix is comprised of criteria and indicators specific to each and common to all of the standards of interest and is, therefore, a combination of the five forest certification standards.

Sincerely,

Gypsy Wilson.

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[1] FSC Canada Working Group – BC regional Initiative. *Forest Stewardship Council (FSC) Regional Certification Standards for British Columbia - Draft 3*. FSC-BC Regional Initiative Steering Committee. April 22, 2002.

[2] SmartWood. *Interim SmartWood Guidelines for British Columbia for the Assessment of Natural Forest Management*. http://www.smartwood.org. April, 2000.

[3] International Organization for Standardization. National Standard of Canada CAN/CSA 14001-96 (ISO 14001:1996): *Environmental management systems - Specification with guidance for use*. First edition 1996-09-01. Canadian Standards Association. 1996.

[4] Altoft, Katie. CSA Standard Z809-02 *Sustainable Forest Management: Requirements and Guidance*; Annex B - Summary of Requirements of Z809. Canadian Standards Association. Dec, 2002. Updated May, 2003.

[5] The Sustainable Forestry Initiative Program. *2002-2004 Edition Sustainable Forestry Initiative (SFI) Program*: 2002-2004 SFI Standard and Verification Procedures as adopted by the Sustainable Forestry Board December 2001 and amended June, 2002. American Forest and Paper Association, Inc. 2002.

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Scope of Project

This comparative analysis focuses primarily on the most current editions of the Forest Stewardship Council (FSC), the International Organization for Standardization (ISO), the Canadian Standards Association (CSA), and the Sustainable Forestry Initiative (SFI) forest certification standards, which are listed below. While the attached matrix is intended to be a detailed technical comparison of the criteria and indicators used in the specific standards of interest, please refer to the attached disclaimer for details, the report is a general overall comparison of the certification schemes. Aspects of sustainable forestry that may be addressed in separate but complementary documents produced by the forest certification schemes are not included in the matrix analysis; only what is addressed in each standard is the focus of this study. Previous comparative studies, however, have been incorporated into the summary report in order to give an overall analysis of each forest certification scheme.

The level of consumer confusion that is apparent regarding the concept and implementation of forest certification is of great concern. It is hoped that this study may help alleviate some of this confusion.

Forest certification standards of interest:

- The FSC Regional Certification Standards for BC – Draft 3;
- The Interim SmartWood Guidelines for British Columbia for the Assessment of Natural Forest Management;
- The National Standard of Canada CAN/CSA – ISO 14001-96, *Environmental management systems – specification with guidance for use*;
- Canada's National Standard on Sustainable Forest Management – CAN/CSA Z809-02; and,
- The 2002-2004 Edition Sustainable Forestry Initiative (SFI) Program.

Executive Summary

This comparative study was requested by Iisaak Forest Resources Ltd. for the Iisaak Sustainable Forestry Project, a cooperative project with the Clayoquot Biosphere Trust. Due to recent developments in British Columbia's forest practices code, and continued improvements in various forest certification schemes, Iisaak, who is currently certified against the SmartWood FSC guidelines, requested further information regarding their forest certification options.

The scope of this analysis is the most current editions of the Forest Stewardship Council (FSC), the International Organization for Standardization (ISO), the Canadian Standards Association (CSA), and the Sustainable Forestry Initiative (SFI) forest certification standards, maintaining a geographic focus on British Columbia where feasible.

The intent of the study was not to draw any conclusions, but rather provide insight into the issues and complexity of forest certification in British Columbia. As is illustrated in the attached matrix, each standard has unique strengths and weaknesses. If one is forced to choose one, this report would advise that the Forest Stewardship Council's forest certification scheme is the most robust regarding economic, social, and environmental interests. The recommendations of this study would be, however, a combination of multiple schemes, again with FSC as the foundation, in order to complement each standard's strengths while balancing their weaknesses.

Introduction

History of forestry in BC

The development of industrial forestry has been described by a series of predictive stages, most recently in Chris Tollefson's opening account in *The Wealth of Forests*. In the first stage, Tollefson describes how forests are initially exploited with few regulations, so as to rapidly develop the resource. Through recognizing the need to manage the first to second growth transition, the second stage is characterized by a sustained yield paradigm. At this time, an annual allowable cut is identified that is theoretically sustainable. As the dominance of economic and timber values is increasingly questioned and pressure builds to take non-timber values into consideration, the paradigm is adapted to reflect a "multiple-use sustained yield" (Tollefson, 1998, p.5). The history of industrial forestry in British Columbia over the last century has illustrated the first two stages of this evolutionary analysis, and certainly the second stage has dominated for the majority of that time. A new paradigm is increasingly being called for, one which "proceeds from an explicit recognition of the forest as a complex and interdependent ecosystem, and which sets, as its overriding priority, the goal of maintaining that system" (Tollefson, 1998, p.6).

Why has the sustained yield approach not worked?

The sustained yield approach was based upon the assumption that by regulating the annual rate of harvest, by way of the annual allowable cut (AAC), a continuous supply of mature timber was ensured. "Scientifically based harvest regulation was implemented to protect against the short-term political influence of single interests and the short-term exploitative forces of economic development" (Dellert, 1998, p.256). Regulation, however, has not been able to achieve sustainability in the forestry industry of British

Columbia. Critics have noted that overly optimistic limits placed on the AAC, and its underlying scientific data, as well as on the rotation age, have contributed to the failure of the sustained yield paradigm (Dellert, 1998). Historical events have shown that both the forestry industry and the provincial government, through the Royal Commission of Inquiry into Forest Resources, have strongly influenced the Chief Forester's decision in keeping the AAC levels high. "[The Commission] felt that penalties – a reduction in the AAC – should not be imposed in the short-term because of uncertain future outcomes…. [It is] evident that economic values embedded in sustained yield mandated taking an optimistic approach to uncertainty" (Dellert, 1998, p.257).

The economics of scarcity guided the sustained yield paradigm, following the causal assumptions that as timber supply became scarce, prices would increase, and new technology would be developed so that presently uneconomical wood would become harvestable. As a result, a practice known as "all sites, all types, and all access" was developed which incorporated into the determination of the AAC wood that was presently not economically harvestable, but which was thought to become operable within the length of one rotation (Dellert, 1998). "Inclusion of areas that were unlikely to ever be harvested had had the effect of concentrating an inflated rate of harvest in the most accessible areas, usually the valley bottoms" (Dellert, 1998, p.259).

Due to the timber volume differences between the first rotation, original forest, and subsequent rotations thereafter, a mechanism was needed to thwart the falldown effects and thus maintain the same AAC as set for the first rotation. Reliance on intensive

silviculture and enhanced stewardship was established to manage the transition to second-growth yield (Dellert, 1998). This effort, however, has not been able to stabilize the rate of harvest and sustain the forestry industry. "By the 1990's…. the forest structure had not been normalized, the rate of harvest was declining in some regions as much as 25 percent, employment rates had declined, rural communities were at risk with the threat of mill closures, and much of the old-growth forest planned for harvest later in the rotation was protected from logging or was subject to strict environmental regulation" (Dellert, 1998, p.265).

Potential instruments for the implementation of forestry reform

To date this situation has seen little improvement. Environmental economists, however, have examined the potential for influencing social behaviour through various instruments including tax policy, cost-benefit analysis, market creation, green accounting, and eco-certification (Gale and Burda, 1998). Marketing mechanisms such as eco-certification and eco-labeling are based on the underlying notion that corporations respond largely to changes in consumer choices. "Consumer awareness of, and demand for, less environmentally damaging products, if translated into actual consumer behaviour, creates an economic incentive for companies to produce and sell these products" (Gale and Burda, 1998, p.279). However, the present plethora of company- and country- specific green labels could lead to consumer confusion and potentially undermine the entire approach.

What is forest certification?

Definition of forest certification

Forest certification in its simplest form is a "tool to help consumers choose ethical and environmental products from well-managed forests…. At the point of sale, the label tells the consumer that the product is sourced from a forest that meets certain environmental and social standards" (Ozinga, 2001, p.11). The details of those standards are not on the label, and so it takes the dedicated consumer to do the homework. A technical comparative matrix of the standards of interest is included as Appendix I.

Reasons for forest certification

As there are numerous stakeholders in the forest resource industry, there are differing and often conflicting reasons for forest certification. In her report for the UK based NGO Fern, Saskia Ozinga eloquently sums up the significant variation in motivations for certification:

> For environmental and social NGOs (speaking for concerned consumers), the original hope was that the certification process could improve forest management and conditions for forest peoples. For forest owners and the forestry industry, certification provides an opportunity to maintain or obtain market access, promote wood as a renewable resource, or obtain a price premium for certified products, although many also sincerely want to improve forest management.
>
> (Ozinga, 2001, p.17)

At the foundation of every resultant certification standard is the motivation and intention of the individual forest certification scheme. It is, therefore, imperative to understand not only the bias of the developing organizations, but also the social and political climate at the time of development.

History of forest certification

As a response to global public concern over tropical deforestation in the mid 1980s, environmental civil society organizations (ESCOs) initiated the movement towards forest certification. By the 1990s, the growing realization that the forestry practices in the world's temperate and boreal forests were no better than in the tropics prompted ESCOs to expand the focus of their forest certification campaign. Failure by the international community to establish a meaningful forest certification and labeling scheme impelled ESCOs to discuss a process of their own. The outcome of this effort was the development of a new international forest organization, the Forest Stewardship Council.

In response to the development of the Forest Stewardship Council (FSC), and in order to protect the access of domestic forestry industries to international markets, government- and industry- sponsored certification schemes are being established. Gathering increasing momentum and significance in the global forestry market, the forest certification initiative of ESCOs is now of great importance to industry, governments and NGOs alike. "Competing efforts to participate in or control the direction of forest certification has resulted in the emergence of a variety of certification schemes representing opposing interests, different standards, and a range of objectives" (Gale and Burda, 1998, p.282).

Kinds of forest certification:

- 1st, 2nd, 3rd party

Due to the wide range of certification schemes presently offered to the confusion of market consumers and forest resource companies alike, it is important to be aware of the general differences in the types of forest certification.

First-party forest certification schemes "are initiated by the timber companies themselves and involve an internal assessment of the company's systems and practices in regard to internally established guidelines or environmental objectives" (Gale and Burda, 1998, p.282). Although there are no eco-labels promoting this type of certification, advertising information suggests to consumers that forest management, planning and practices under these schemes are "sustainable". The credibility of such certification scheme can easily come under question when the same interest group for whom it is intended develops the standard.

Second-party forest certification schemes "are promoted by governments, industry associations, and/or government-funded certified bodies" (Gale and Burda, 1998, p.282). In various countries governments are establishing new forest certification schemes and certifying associations. Such organizations include the Lembaga Ekolabel Indonesia and the Canadian Standards Association.

Third-party forest certification schemes "are developed by parties that are knowledgeable about the environment, life-cycles analysis, and the ecosystem-based approach to

resource stewardship" (Gale and Burda, 1998, p.282). Developed by ESCOs, the FSC scheme is an example of third-party certification. Under this type of certification scheme, an independent, i.e. *third-party*, accredited organization certifies forestry operations against the pre-developed certification standards. This practice minimizes the influence of internal bias and thus ensures the credibility of the certification scheme.

- Performance-based and Systems-based schemes

Performance-based forest certification standards "are used to evaluate whether the managed forests meet specified ecological and social performance measures" (Ozinga, 2001, p.11). Verified by field monitoring assessments, the focus is on outcomes and allows forest managers flexibility in the process by which they achieve these outcomes.

System-based forest certification standards "are used to evaluate whether systems are in place that allow forest owners/managers to achieve and review targets they have set" (Ozinga, 2001, p.12). Through these standards, the focus is on process rather than on outcome, and the management system is evaluated rather than the forest. Under systems-based standards, two forestry operations conducting similar activities, yet having different environmental performances, may be certified under the same standard. With this in mind, however, systems-based standards are very useful for large organizations managing a range of different operations (Ozinga, 2001).

The Players: FSC, ISO, CSA, and SFI

The Forest Stewardship Council (FSC)

- General Background

"The Forest Stewardship Council is an international non-profit organization founded in 1993 to support environmentally appropriate, socially beneficial, and economically viable management of the world's forests" (FSC[a], 2002). Membership to FSC is open to all involved in the forest resource industry, which is evident in the variety of representatives from environmental and social groups, the timber trade and forestry profession, indigenous people's organizations, community forest groups and forest product certification organizations across the globe. As of 2001, forty countries contained FSC certified forests (Ozinga, 2001).

"All forest products carrying [the FSC] logo have been independently certified as coming from forests that meet the internationally recognized FSC Principles and Criteria of Forest Stewardship" (FSC[a], 2002). Through national and regional working groups, FSC supports the development of national and regional standards that implement the international Principles and Criteria at the local level. This initiative recognizes the diversity in natural bioregional ecosystems, as well as the equally varied social and economic atmospheres at the micro scale. The third draft of the *Forest Stewardship Council (FSC) Regional Certification Standards for British Columbia* is the latest effort by the FSC-BC Regional Initiative Steering Committee in developing regional FSC certification in British Columbia (FSC[b], 2002). Until this time however, FSC accredited certifying bodies in BC must each develop an interim standard that they use to certify

new forestry organizations. One such document presently in use is the *Interim SmartWood Guidelines for British Columbia for the Assessment of Natural Forest Management* (SmartWood, 2000).

- Summary of strengths and weaknesses

Since its inception in 1993, the FSC has focused on the accreditation of certification bodies and the development of global, national and regional standards based upon the FSC's international principles and criteria. One of the major strengths of FSC is that at all three levels of certification, the FSC standards are binding to at least that of the international principles and criteria. "The FSC's performance-based certification scheme requires certifiers to assess the degree to which a forest operation is managed in accordance with FSC's principles and the set of detailed pre-determined social, environmental, and economic standards" (Gale and Burda, 1998, p.282). The relevance of having *binding* principles and criteria, as opposed to those that need only to be *supported*, is that for the former in instances of non-compliance the certification may be retracted. The significant commitment by the organizations participating under the binding standards of FSC is further revealed in the clause mandating that within two years after achieving certification, the organization must have in place a timetable for its entire operation to become FSC certified. The FSC-BC regional certification standard, once approved, will therefore certify forestry operations, including product chain-of-custody, against the predetermined set of principles and criteria specific to British Columbia in compliance with the international FSC standard.

There is significant emphasis on the standard being previously set prior to individual certification applications, another considerable strength of this certification scheme, as it establishes the social and environmental credibility of the FSC standard. At the pinnacle of the FSC organizational structure is the General Assembly comprised of three chambers representing economic, environmental, and social interests. To further ensure the FSC's credibility, social and environmental interests are always weighted heavier in the organization's decision structure than are economic interests (Gale and Burda, 1998).

The FSC standard, although primarily performance-based, also incorporates management-system elements. As part of the certification process, stakeholders such as employees, neighbours, government authorities and environmental groups are consulted regarding the operation applying for certification. This is also an important aspect of the FSC forest certification scheme as it provides non-timber interest groups with opportunities to affect the decision as to whether or not to certify, as opposed to commenting once the operation has already been certified.

Some studies have critiqued FSC for being involved with the accreditation of the certifying bodies as well as the actual certification of the operation itself. FSC is addressing this issue while recognizing the need to ensure the competency and credibility of the certifiers of FSC forests. There has also been concern raised regarding the risk that the desire to appeal to and include a larger portion of the forestry industry could lead to compromises that undermine its credibility (Gale and Burda, 1998).

The International Organization for Standardization (ISO)

- General Background

The International Organization for Standardization (ISO) is a network of the national standards institutes of 147 countries (ISO, 2003). Member institutes include governmental organizations, private sector, and industry associations. "The ISO's mission is 'to promote the development of standardization to improve the international exchange of goods and services, and to develop intellectual, scientific, technological and economic activity'" (Gale and Burda, 1998, p.282).

Developed in 1996, the ISO 14001 standard *Environmental management systems – Specification with guidance for use* is intended to provide organizations with environmental management systems that can be integrated within overarching management structures in order to aid the organizations in achieving their environmental and economic goals (ISO, 1996). "This International Standard… has been written to be applicable to all types and sizes of organizations and to accommodate diverse geographical, cultural and social conditions" (ISO, 1996, p.v).

- Summary of strengths and weaknesses

Being the primary international standard for environmental management systems, most prominent certification schemes – including FSC, CSA, and SFI – are consistent with the ISO 14001 standard. Although compliance with this International Standard ensures that an appropriate environmental management system is in place, it is entirely a systems-based standard: The ISO 14001 standard "does not establish absolute requirements for environmental performance beyond commitment, in the policy, to compliance with

applicable legislation and regulations and to continual improvement" (ISO, 1996, p.vi). Therefore, two organizations conducting similar activities, while having different environmental impacts, may both be consistent with this standard. This standard is also not intended to adequately address aspects of occupational health and safety management.

The Canadian Standards Association (CSA)

- General Background

Chartered in 1919, the Canadian Standards Association (CSA) was accredited by the Standards Council of Canada to the National Standards system in 1973. The corporate mission of CSA is to "provide an open and effective forum for activities facilitating the exchange of goods and services through the use of standards, certification and related services to meet national and international needs" (Altoft, 2003). Through funding by the Canadian Sustainable Forestry Certification Coalition, a cooperative of forest industry associations headed by the Canadian Pulp and Paper Association (CPPA), the CSA has developed guidelines for a Sustainable Management Standard using a management-systems based approach with a framework for performance requirements built into it (Gale and Burda, 1998; Ozinga, 2001). The CSA's second-party forest certification scheme, however, has been unsuccessful in securing the support and participation of First Nations, environmental and social organizations (Gale and Burda, 1998; Ozinga, 2001). The CSA Standard Z809-02 *Sustainable Forest Management: Requirements and Guidance* has been accepted as Canada's national standard on forest practices as of May 2003.

- Summary of strengths and weaknesses

The CAN/CSA Z809-02 standard outlines the requirements for the implementation of the public participation, system, and performance requirements for a defined forest area (Altoft, 2003). There are no predetermined performance criteria and indicators used by the CSA; however, "a system of management and planning is established, through which a company sets its own standards in compliance with, but not necessarily beyond, government regulations and legislation" (Gale and Burda, 1998, p.284). Much heralded as the primary strength of the CSA forest certification scheme, a Public Advisory Committee is created to advise on the development of the performance requirements; however, the final decision rests with the organization seeking CSA certification (Ozinga, 2001). As the forest stewardship performance requirements are set by the organization that applies for certification, the standards and indicators used may consequently vary case-by-case (Gale and Burda, 1998; Ozinga, 2001). Therefore, although the CSA evaluation regarding the management system in place in two independent operations may comply with the standard, the environmental and social conditions of each operation may vary widely. Due to the inevitable differences in the operational outcomes in the forest, the credibility of CSA certification is greatly undermined.

The Sustainable Forestry Project (SFI)

- General Background

In 1994 the American Forest & Paper Association (AF&PA) established the Sustainable Forestry Initiative Principles and Implementation Guidelines, which has since evolved through an external review panel of government agencies, conservation groups and academic institutions. By 1998, the Sustainable Forestry Initiative Standard was

developed, allowing the organization to choose from first- , second- , and third-party approaches to the SFI forest certification scheme. A multi-stakeholder Sustainable Forestry Board (SFB) was established in 2000 to manage the SFI Standard, SFI Verification Procedures and SFI program compliance.

A three-year review cycle of the SFI program and standard has been developed, including a web-based review and commentary process open to all interested parties. The last of these reviews occurred in 2001, creating the 2002-2004 Edition of the SFI Standard that is currently in place.

- Summary of strengths and weaknesses

For SFI forest certification, a subset of core indicators must be met; however, these indicators focus primarily on system-based measures that are evaluated in the office rather than through a field inspection. With the exception of these core indicators, the use of any other SFI indicators is at the discretion of the organization. (Ozinga, 2001) The bottom line regarding the SFI forest certification scheme is that "the SFI's standards and procedures have been developed and approved by industry for industry, rather than by a balance of environmental, social and economic interests" (Ozinga, 2001, p.26).

SFI's mandatory membership for all AF&PA member companies has weakened its approach by requiring the SFI standard to be more flexible (NRDC, 2002; Ozinga, 2001). As a result, the SFI "has 'certified' 50 million acres of near *status quo* industrial practices – i.e., almost the entire US industrial timber base, plus millions of acres of old growth logging in Canada" (SFI, 2002, p.1). Due to this increased inclusivity, or lowering of the

bar of standardization, in its first two years SFI certified acreage in the US and Canada was approximately equal to nine years of FSC certification in 54 countries (NRDC, 2002).

Market-based approach

Certification as a marketing tool

- Market-based vs. Regulatory approach

The latest in the evolution of consumer boycotts, forest certification provides the consumer with the opportunity to support sustainable forestry by consciously purchasing wood products that are known to originate from well-managed forests. Studies have shown that consumer-purchasing decisions are being based increasingly on environmental conditions, and that consumers are willing to pay a higher price for wood products originating from sustainably managed forests (Gale and Burda, 1998). Although the end product retailers are noticing this growing niche market, it has yet to be adequately translated back down the chain-of-custody to the operational forest management. Without this, there is a lack of incentive "for retailers to stock certified timber products, for the secondary and remanufacturing sector to buy eco-certified logs and lumber, and for the logging companies and forest managers to switch from industrial to ecoforestry stewardship practices" (Gale and Burda, 1998, p.287).

Aspects such as maintaining healthy functioning ecosystems, nutrient recycling processes and the underlying support systems for the overall biodiversity of forests cannot be priced, or if they are, are considerably under priced by the market (Tollefson, 1998).

Furthermore, interests of future human and non-human species cannot be adequately voiced in today's markets.

Therefore, although forest certification has proven to be an effective marketing tool, it is clear that the market-based approach cannot alone create the type of forestry reform that is presently needed. Similarly, the past century of forest practices in British Columbia guided by the regulatory approach was just as, if not more, unsuccessful in providing truly sustainable forestry practices. After all, "everything cannot be regulated. But neither can everything be regulated" (Tolleson, 1998, p.374). It is therefore proposed that a combination of market-based and regulatory approaches to sustainable forestry practices may have the desirable outcome: Prescriptive regulations to ensure the safeguard of vulnerable forest ecosystem features, and appropriate market pricing for other forest resources and non-timber interests (Tollefson, 1998).

Buyer beware: all labels look alike

If sustainable forestry is to be led by eco-certification purchasing choices, then it is imperative to educate the consumer regarding exactly what each label represents. With a growing array of different eco-labels to choose from, they may become tools for misleading the public rather than informing them.

For the use of the international FSC label, the requirements include FSC certification for the forestry operation as well as the entire chain-of-custody process. The labels wrapping the timber products also stipulate that for pulp and paper products a minimum of 17.5% of the total fibre and 30% of virgin fibre be FSC certified, leaving the remaining 82.5%

being of neutral materials such as pre or post recycled fibre. For solid wood the label also states that at least 70% of the total virgin fibre is FSC certified. (Abusow, 2003)

Certification or qualification to the CSA chain of custody, CSA Plus 1163, is required for any use of the CSA product label. The CSA label also informs the consumer that the minimum thresholds include 70% of certified content for pulp, paper and composite products, and 100% – with an option of 70% – certified content for solid wood (Abusow, 2003).

Use of the SFI label requires adherence to the "SFI Office of Label Use requirements which include the need for 100% of the procured wood to be sourced from known sources that meet specific SFI procurement criteria" (Abusow, 2003, p.6).

Unfortunately, the consumer need not only read the fine print, but must also recognize that wording such as "wood sourced from known sources" does not necessarily mean, "wood originating from certified forests". Furthermore, "certified content" does not differentiate between virgin or second growth forest products.

Comparison benefits and difficulties

Regional vs. International standards

The comparison of forest certification standards across multiple spatial scales is inherently difficult. Biogeographic ecosystems differ dramatically across smaller regions let alone entire countries. To adequately test the impacts of eco-certification on forest management practices, studies have shown that certification needs to take place at the

forest management unit level, i.e. the individual forest operation (Ozinga, 2001). At this spatial scale it is argued that the certifier can adequately assess what is happening on the ground in the forests.

In order to accommodate the flexibility necessary to certify different operations at the management unit level, forest certification standards cannot remain appropriately, and comparatively, rigorous at larger scales. The smaller the spatial scale, the more particular and isolated the conditions are that concern the development of a forest certification standard, and thus increasingly difficult to establish meaningful comparisons between standards. To address this issue, forest certification standards are developed for larger spatial scales with the intent on further adaptation depending on local conditions. Although this is defended by the increased ease of comparison across the global community, too much room for adaptation may weaken and undermine the credibility of not merely the individual standard, but the entire forest certification scheme. Illustrating this concern, the matrix attached as Appendix I compares the current standards of the four forest certification schemes of interest, covering international, national and regional spatial scales.

Thus, there is again a fine balance between the need to compare forest certification schemes internationally as well as considering the spatial limitations necessary for appropriate scientific assessments of each unique forest.

Voluntary compliance and binding standards

It is a significant feat when an organization voluntarily limits its production capabilities. Other than the market incentive and the general desire to practice sustainable forestry, there are few other enticements. As is reflected by the individual standards developed, there is tremendous temptation to influence these commitments towards economic and industry interests. It is, therefore, important for the consumer to differentiate between a standard that requires the *support* for a certain concept, and a standard that includes *binding* criteria and indicators for which non-compliance may lead to the retraction of certification. All of the forest certification schemes of interest are fully voluntary, yet it is the responsibility of each consumer to ask: *to what are the participating organizations truly volunteering for?*

Directions for the future

- Need for forestry reform in BC

It is generally agreed that there is a need for forestry reform in British Columbia, which has begun and must continue to evolve the forestry practices in this province. The complexity of this task is emphasized, however, in that "'promoting sustainable forestry' is a qualitatively different policy problem than 'reducing pollutant X below level Y'" (Tollefson, 1998, p.377). This is compounded by the very political nature of any decision regarding the future of forest resources, and thus in order to ensure a forestry reform that reflects social preferences, these preferences must also be reflected in overarching political processes.

- Barriers to implementing sustainable forestry through eco-certification

There are three underlying barriers that threaten the success of sustainable forestry through forest certification schemes. The first of these is that all certification schemes reflect the interests of the parties involved in their initial development, and compromises are evident in the established processes, principles and standards (Gale and Burda, 1998). The second is the absorbent amount of eco-labels in the marketplace, overwhelming and confusing the consumer. "The proliferation of eco-certification schemes benefits the status quo forestry, because consumers may be so confused about certification labels and claims that they are unable to discriminate between bogus and genuine logos in the marketplace" (Gale and Burda, 1998, p.286). Compromises between the economic, social and environmental interests must necessarily be made; however, the third pitfall to eco-certification is the potential for these compromises to go too far and ultimately lose the support of the environmental organizations (Gale and Burda, 1998).

The importance of maintaining the fine balance that is required to reflect the complexity of the many conflicting and competing interests in the forest must not be underestimated. Many argue that forest certification is meant to be inclusive to all timber trade and forestry organizations, but lowering the standard to include the masses defeats the purpose and the role for which eco-certification was intended. Therefore, in order for forest certification schemes to continue to be an influential tool in the movement towards sustainable forestry, the original intent of providing assurance to consumers of a timber supply sourced from a sustainably managed forest must not be compromised.

Works Cited

1. Abusow, Kathy. *Focusing on Certification Similarities to Promote SFM.* Forest Products Association of Canada. 2003.

2. Altoft, Katie. CSA Standard Z809-02 *Sustainable Forest Management: Requirements and Guidance*; Annex B - Summary of Requirements of Z809. Canadian Standards Association. Dec, 2002. Updated May, 2003.

3. Dellert, Lois H.; Tollefson, Chris (Ed.). *The Wealth of Forests*. The UBC Press, Vancouver Canada. 1998.

4. Forest Stewardship Council (FSC[a]). *Forest Stewardship Council*. http://www.fscoax.org/principal.htm. 2002.

5. FSC Canada Working Group – BC regional Initiative (FSC[b]). *Forest Stewardship Council (FSC) Regional Certification Standards for British Columbia - Draft 3*. FSC-BC Regional Initiative Steering Committee. April 22, 2002.

6. Gale, Fred and Burda, Cheri; Tollefson, Chris (Ed.). *The Wealth of Forests*. The UBC Press, Vancouver Canada. 1998.

7. International Organization for Standardization (ISO). *About ISO – Introduction*. http://www.iso.ch/iso/en/aboutiso/introduction/index.html#two. 2003.

8. International Organization for Standardization (ISO). National Standard of Canada CAN/CSA 14001-96 (ISO 14001:1996): *Environmental management systems - Specification with guidance for use*. First edition 1996-09-01. Canadian Standards Association. 1996.

9. Ozinga, Saskia. *Behind the logo, and environmental and social assessment of forest certification schemes.* Fern. United Kingdom. May, 2001.

10. SmartWood. *Interim SmartWood Guidelines for British Columbia for the Assessment of Natural Forest Management*. http://www.smartwood.org. April, 2000.

11. The Sustainable Forestry Initiative Program (SFI). *2002-2004 Edition Sustainable Forestry Initiative (SFI) Program*: 2002-2004 SFI Standard and Verification Procedures as adopted by the Sustainable Forestry Board December 2001 and amended June, 2002. American Forest and Paper Association, Inc. 2002.

12. Tollefson, Chris. *The Wealth of Forests*. UBC Press, Vancouver Canada. 1998.

13. National Resources Defense Council (NRDC). *Forest Certification Programs: A Comparison of the Forest Stewardship Council (FSC) and the Sustainable Forestry Initiative (SFI) of the American Forest and Paper Association (AF&PA)*. Fern, UK. April, 2002. http://www.fern.org/

List of Appendices

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II. Statistical Tables of Hectares Certified

III. The FSC Regional Certification Standards for BC – Draft 3

IV. The Interim SmartWood Guidelines for British Columbia for the Assessment of Natural Forest Management

V. The National Standard of Canada CAN/CSA – ISO 14001-96, *Environmental management systems – specification with guidance for use*
   - This standard could not be included due to copyright infringement laws, but is available for sale from the Canadian Standards Association.

VI. The Canada's National Standard on Sustainable Forest Management – CAN/CSA Z809-02

VII. The 2002-2004 Edition Sustainable Forestry Initiative (SFI) Program