Policies for Sustainably Managing Canada's Forests

Tenure, Stumpage Fees, and Forest Practices

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Introduction

Public forest policies in Canada matter. Canada's forests cover over 41 percent of the country's land area (Canadian Forest Service 2007), account for about 8 percent of the world's forest area (FAO 2005), and are integral to the country's history, culture, economy, and environment. Forests are the traditional home to a majority of Canada's Aboriginal people, who, for thousands of years before the arrival of European settlers, relied on them for food, clothing, shelter, medicines, material for tools and crafts, and as a source of spiritual inspiration.

Since the earliest days of colonization, forest products have been the economic mainstay of local, regional, provincial, and national economies. Today, the forest sector remains an essential component of the country's economy. Forest products, although challenged by the increasing importance of energy in recent years, remain a critical component of Canada's international trade and a major source of foreign exchange. In 2006, forest products exports were valued at Cdn$38.2 billion and contributed Cdn$28.1 billion (i.e., 55 percent) to the nation's total trade balance (Canadian Forest Service 2007). Canada is the world's largest producer of newsprint and second largest producer of wood pulp and softwood lumber. It contributes more to international trade in these three commodities than any other country (Canadian Forest Service 2006).

Although, in 2006, the forest sector accounted for only 2 percent of total employment in Canada and contributed a modest 2.9 percent of the nation's gross domestic product (Canadian Forest Service 2007), every province in Canada, with the exception of Prince Edward Island, has a sizable forest products industry that makes a significant contribution to the provincial economy, and in several provinces, most notably British Columbia, Quebec, and New Brunswick, forest products dominate the manufacturing sector. The forest sector is particularly important to the economic and social well-being of rural Canada. A study based on 1996 data of 3,853 rural census sub-districts across the country showed that forest sector employment accounted for 10 percent or more of the total labour force in 24 percent of them and 20 percent or more in 10 percent (Stedman, Parkinson, and Beckley 2005). In 2006, the Canadian Forest Service reported that over three hundred rural communities across Canada depend on the forest industry for at least 50 percent of their income (Canadian Forest Service 2006).

In addition to their importance as a source of wood products, forests produce many other products and services that have a positive impact on the lives of millions of Canadians. But in most cases, these resources do not have a value assigned through conventional market mechanisms and are invisible in the national accounts. These include supplies of high-quality water, flood control, protection from landslides and avalanches, soil conservation, micro-climatic modification, biodiversity, outdoor recreation in its myriad forms, food from forest dwelling animals and plants, and an agreeable environment in which to live and work. Furthermore, Canada's forests play an important role in the global carbon cycle and, under the Kyoto Protocol, accounting for carbon sequestration may play an important role in Canadian forest management. It would not be an exaggeration to say that forests touch the lives of almost all Canadians in a significant and positive way.

Since 93 percent of Canada's 402 million hectares of forestland is publicly owned – 77 percent provincially and 16 percent federally (see Figure I.1) – public policies have a significant impact on our forests' health, conservation, management, and the mix of goods and services they provide. Public forest policies also shape the structure and performance of Canada's wood products manufacturing sector. Since

Figure I.1   Forest land ownership in Canada
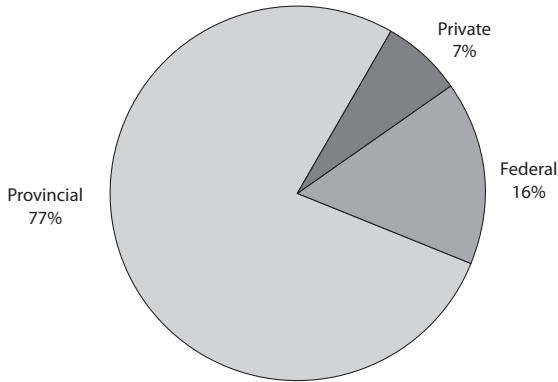
Source: Canadian Forest Service 2007

Confederation, Canadian governments have used forest policy as a means of pursuing social, economic, and environmental goals, including regional development, job creation, community stability, the conservation of forest resources, and ecosystem protection. Consequently, forest policies provide a vital direct link between federal and provincial governments and the welfare of all Canadians, particularly those living in rural areas.

Although forest policies differ substantially among the provinces, they have much in common. Forest policy makers across the country face similar challenges when formulating effective strategies to deal with evolving domestic and global economic environments, changing societal attitudes and expectations concerning forests, and the rapidly expanding knowledge base relating to the management of forest and associated ecosystems. In spite of these similarities, no contemporary nationwide descriptions and/or comparative analyses of Canadian forest policies are available, and within individual provinces, even among senior forest professionals and administrators, there is very little understanding of forest policies in other Canadian jurisdictions.[1] Consequently, the primary justification for this book is to fill an important void in the Canadian forestry and public policy literature by making available a

work that describes, in some detail, provincial forest policies, with particular emphasis on Crown forest tenure arrangements; compares them in a systematic manner; and analyzes their effectiveness in achieving the goals of sustainable forest management – the overarching objective of forest policy throughout the country.

Public Forest Policy in Canada and Abroad

Public forestland ownership has been firmly entrenched as a Canadian institution since the late nineteenth century. In keeping with contemporary colonial practice, when Great Britain assumed sovereignty over territories within what is now Canada, all land and resources became the property of the British Crown.[2] Private property was established by transferring rights from the Crown to groups and individuals. These lands became known as "Crown grants," a term that is still used today, although these holdings are now more frequently referred to as "private lands." Although considerable areas of forestland were Crown-granted in the Maritime colonies and in the settled, southerly regions of Upper and Lower Canada, vast areas of Crown forests remained.

Pre-Confederation governments, faced with small populations, meagre budgets, and valuable public timber resources begging development, devised forest licensing agreements that, by attracting the private sector capital necessary for the exploitation of timber resources, would increase public revenues and stimulate economic development. Under these arrangements, harvesting rights to public timber were transferred to the private sector in return for payments to the Crown, the land itself remaining in the public domain. The first arrangements of this type were initiated in New Brunswick in the 1830s (Wynn 1980) and were adopted by the United Provinces in 1846 (Gillis and Roach 1986). In 1865, a land ordinance in the Colony of Vancouver Island authorized the granting of timber leases, initially of unlimited size and duration – a model that was adopted by British Columbia following unification of the colonies in 1866 (Pearse 1976).

When the Canadian Confederation was founded, the Constitution Act (1867) granted jurisdiction over most lands and resources, including forests, to provincial governments.[3] These arrangements were confirmed

in the Constitution Act (1982).[4] Today, federal jurisdiction over forest-lands and forest sector activities in the provinces is limited to reserved federal lands, including national parks, Indian reserves, and national defence establishments; external and interprovincial trade and commerce; matters involving migratory aquatic and terrestrial species that cross provincial boundaries; the authority to make and enforce international treaties; and general powers to make laws for peace, order, and good government of Canada (Howlett 2001b).

Following Confederation, legislative initiatives toward forests were taken by the Canadian provinces, and by the federal government in the territories still under its jurisdiction. Through the creation of forest reserves, the principle of public forestland ownership was affirmed and Crown forestland was protected from non-forest uses. Subsequently, all provinces followed the pattern established prior to Confederation and put in place licensing arrangements that delegated responsibility for managing public forestland to the private sector. In return for exclusive timber harvesting rights, licence holders contributed to Crown revenues through the payment of royalties, stumpages, land rents, and other levies, and assumed varying degrees of responsibility for forest management. These arrangements became known as "Crown forest tenures."

Today, with the exception of New Brunswick, Nova Scotia, and Prince Edward Island, the majority of Canada's forestland is in public ownership (Table I.1), and most of the timber cut on these lands is harvested by private sector companies holding Crown forest tenures.

The proportion of publicly owned forestland in Canada far exceeds that of any other developed nation with a substantial forest estate (Table I.2). Furthermore, unlike Canada, where under most tenure arrangements forest management is delegated to the private sector, the majority of countries have a public agency or public corporation whose responsibility is to manage publicly owned forests. This may take the form of a government department – for example, the United States Forest Service (USFS) or the French National Forest Office (ONF), a quasi-autonomous commission such as the British Forestry Commission, or a public corporation such as the Government Trading Enterprises (GTEs) in Australia or the Landesbetriebe in certain German States (Haley and Nelson 2006). Such

Table I.1   Ownership of forestland in Canada by province and territory, 2004

Province	Provincial %	Federal %	Private %
British Columbia	95	1	4
Alberta	89	8	3
Saskatchewan	90	4	6
Manitoba	95	2	3
Ontario	91	1	8
Quebec	89	0	11
New Brunswick	48	2	50
Nova Scotia	29	3	68
Prince Edward Island	8	1	91
Newfoundland and Labrador	99	0	1
Yukon	0	100	0
Northwest Territories	0	100	0
Canada	**77**	**16**	**7**

Source: Canadian Forest Service 2005

organizations are responsible for most aspects of public forestland management, including the production of timber. This timber is normally sold in the form of logs, either at the mill or at the roadside – a common practice in European countries – or as standing trees. However, in some countries, for example Chile and New Zealand, commercial timber production is largely confined to privately owned lands, the public lands for the most part being managed for environmental protection and the provision of recreational services and other non-timber forest products.

The Evolution of Canadian Forest Tenure Systems as Instruments of Forest Policy

Although a majority of forestland in Canada is publicly owned, the capital necessary to harvest and process timber resources is almost

Table I.2 Forestland ownership in selected developed countries

Country	Forestland as proportion of total land area (%)	Publicly owned forestland %
Australia	24.2	72.0
Brazil	57.2	77.0
Canada	**43.6**	**93.4**
Chile	20.6	24.2
Finland	73.9	32.1
France	28.3	26.0
Germany	31.7	52.8
Japan	68.2	41.8
New Zealand	31.0	63.4
Portugal	41.3	7.3
Sweden	66.9	19.7
United Kingdom	11.8	34.2
United States	33.1	37.8

Source: Haley and Nelson 2006

entirely in private hands. Given this dichotomy, some of the most important questions facing public forest policy makers are how to transfer rights to utilize forest resources from the public to the private sector; how to capture for the public owners of the forests an equitable financial return for the use of public resources; and how to ensure that when private firms use public forest resources, broad public interests are protected and public goals are achieved.

Canadian governments, both federal and provincial, have addressed these questions through the Crown forest tenure system, which, since the earliest days of forest management, has been the principal instrument of forest policy in all jurisdictions and, consequently, is the major focus of this investigation. As described above, the tenure system is used to transfer rights to use public forests, principally the right to harvest timber, to the private sector. Financial returns to governments for the use of public resources are collected in various ways and are a component of

the contractual agreements under which timber harvesting rights are transferred. The principal payments are "stumpage fees," the term used to describe the direct cost to licensees for the Crown timber they harvest (see Chapter 5). In addition to fiscal measures, governments protect the public interest in Crown forests by means of regulations that set conditions – for example, reforestation or harvesting practices – that tenure holders must fulfill in order to exercise their rights.

The history of public forest policy in the Canadian provinces has largely been a story of Crown forest tenure arrangements evolving to accommodate changing public attitudes toward forests and meet new demands on forest resources. Thus, with the passage of time, Crown forest tenures have become increasingly complex.

The early tenure arrangements simply required licensees to pay levies such as timber royalties, land rents, and renewal fees. Although some conservationists in Canada raised alarms about the future of commercial timber supplies in the late nineteenth century, there was little concern for the rate of timber harvesting, the restocking of harvested stands, or the environmental consequences of harvesting activities. Populations were small, forests seemed to be endless, and the goal of forest policy was to convert standing timber into other forms of capital, such as infrastructure for transportation and communication, as efficiently as possible to fuel developing economies that were almost entirely dependent on natural resources. There was one environmental "problem," however, that demanded the attention of forest administrators: fire. Although wildfire is a natural component of many of Canada's forest ecosystems, it was regarded by early public policy makers, as it is to a large extent today, as a destructive agent that destroys valuable timber and threatens forest-based communities. Fire prevention and suppression, therefore, became the key to early expressions of forest management in Canada and the first management responsibilities imposed on tenure holders. This was followed by a more general concern for forest protection that included insect and disease control.

By the mid-twentieth century, provincial governments faced three principal concerns. A large and increasingly capital-intensive forest industry sought more secure supplies of timber for further expansion and

consolidation, foresters feared the consequences for future timber sup-plies of an unbalanced pattern of harvesting and inadequate reforesta-tion, and rural populations sought greater security than was provided by an industry that advanced across the landscape leaving moribund communities in its wake.[5] To address these problems, new tenure ar-rangements were developed in many Canadian provinces that provided their holders with relatively long-term secure timber supplies at admin-istratively determined stumpage prices. In return, tenure holders under-took to manage their licences for a sustained yield of timber. To a large extent, contemporary Canadian forest tenures have their roots in these mid-twentieth-century Crown forest policy reforms.

During the post-Second World War years through to the early 1970s, the major priorities of forest policy in most Canadian provinces was sustained economic growth and development, the creation of regional employment, and the mitigation of instability in forest-dependent rural communities. Tenure arrangements were designed to attract capital investment to efficiently harvest and process public timber resources in an orderly and sustainable manner. These policies, by and large, were successful in meeting their objectives. Vast areas of primary forest were opened up, new and established communities flourished, real wages in the forest industry rose as labour productivity increased, and government revenues burgeoned. By the late 1970s, however, the global and domestic environments in which the Canadian forest sector functions began to enter a period of profound change. The pace of change accelerated throughout the 1980s and 1990s and continued during the first decade of the new millennium.

During the late 1970s, the global environmental movement gathered momentum and in many countries began to attract more interest from mainstream citizens. In Canada, forests, as one might expect, became a major focus of environmentalists' concerns. Initially, provincial govern-ments responded by introducing policies that placed more emphasis on the management of forests to produce a broad spectrum of non-timber products while continuing to emphasize the sustained production of commercial timber. However, by the early 1980s, there were increasing pressures from environmental NGOs for a new approach to forestry

that would place more emphasis on integrated management designed to produce an optimum mix of timber and non-timber forest products while maintaining the health and integrity of forest ecosystems. A major turning point for the global environmental movement was the publication, in 1987, of the report of the World Commission on Environment and Development (Brundtland 1987). The report introduced the term "sustainable development," a concept that captured the public's imagination, stirred governments to action, and galvanized the efforts of the environmental movement worldwide.

By the mid-1990s, Canada's forests, as a result of high-profile campaigns such as the one in 1994 to protect the forests of Clayoquot Sound on Vancouver Island, had become a magnet for international environmental activism (J. Wilson 2001). Civil disobedience in the woods and international campaigns promoting consumer boycotts forced provincial governments to act and redirect forest policies toward more environmentally sensitive and socially conscious forest management.

In 1990, a House of Commons subcommittee advised Parliament that if Canada were ever to practise sustainable development successfully, it must begin in the forests (Standing Committee on Forestry and Fisheries 1990). Later that year, the Canadian Council of Forest Ministers (CCFM) sponsored the National Forestry Forum on Sustainable Development and Forest Management. The meeting was followed by a series of public forums on the management of Canada's forests, culminating in 1992 with the production of the document *Sustainable Forests: A Canadian Commitment* (CCFM 1992). Throughout the balance of the 1990s and into the new millennium, sustainable forest management became the major focus of the environmental policy agendas of both federal and provincial governments.

Although sustainable forest management has been defined in many ways (e.g., National Forest Strategy Coalition 1992; Helsinki Process 1993; International Tropical Timber Organization 1998), central to all definitions is the maintenance of the health and integrity of forest ecosystems in a condition that will allow them to flourish and produce multiple economic, social, and cultural benefits for present and future generations. Sustainable forest management, therefore, is generally regarded as having three dimensions: economic sustainability, social

sustainability, and environmental sustainability. In pursuit of sustainable forest management, governments must endeavour to achieve a balance among economic goals; social goals, such as equity, job creation, and community stability; and the protection of healthy, intact forest ecosystems capable of providing consumptive and non-consumptive goods and environmental services in perpetuity.[6]

Individual provinces responded to the challenges of sustainable forest management in various ways. However, on the whole, provincial Crown tenure systems have remained essentially intact and continue to place emphasis on sustained timber harvests and the notion that regional economic prosperity and sustained regional development can be achieved by regulating the structural development, timber utilization, and marketing strategies of the forest industry. Changing social demands on forests and the ecological goals of sustainable forest management have not been accommodated by modifying forest tenures in ways that provide incentives for private sector licensees to voluntarily work toward emerging public goals. Rather, tenure holders are required by increasingly complex and pervasive regulations to provide for non-timber forest products, environmental services, and ecosystem protection (see Chapter 4). Such measures often result in considerable compliance and enforcement costs and may significantly attenuate licensees' timber harvesting rights (G.C. van Kooten 1994; Haley 1996).

Since the mid-1990s, the ability of Canada's pulp and paper and lumber manufacturing sectors to compete in global markets has been severely eroded, resulting in declining market shares; falling rates of return to capital; declining capital investment that, in some parts of the country, is insufficient to even replace depreciated capital stocks; and an increasing number of mill closures, accompanied by falling employment and declining local economies.[7] In conjunction with increasing costs from environmental requirements of tenure policies, a number of other factors, both domestic and global, are responsible for this situation that threatens to undermine the important historic role the forest sector has played in the Canadian economy. Among the domestic factors are declining supplies of economically accessible timber, deteriorating timber quality, an aging and difficult-to-replace labour force, and rising energy costs. Global factors include a realignment of global currency

exchange rates, resulting in a rising Canadian dollar relative to most other currencies; increased capital mobility; the ongoing and protracted softwood lumber trade dispute with Canada's largest customer, the United States; a realignment of global supply/consumption relationships as new, low-cost suppliers emerge and consumers switch to more readily available and less costly lower-grade wood products and non-wood substitutes; the emergence of China as both a major market for, and competitive global supplier of, wood products; and a continuing secular downward trend in real prices for both pulp and lumber for the foreseeable future (Forest Economics and Policy Forum 2005). These trends were exacerbated in the late summer of 2008 by the onset of a major worldwide recession precipitated by the near collapse of the global financial sector.

Although all provincial governments recognize the need for forest policies that encourage global competitiveness and create a favourable environment for capital investment, in most provinces, for the past decade or more, these goals have frequently been overshadowed by policy initiatives designed to achieve environmental and other social objectives at the expense of industrial competitiveness.[8] However, recently several provinces have embarked on analyses of their forest industries and are exploring policy reforms that might be introduced in order to reverse the sector's downward economic spiral. In November 2004, the Ontario minister of natural resources established the Minister's Council on Forest Sector Competitiveness, which brought down its final report in June 2005 (Minister's Council on Forest Sector Competitiveness 2005). On 30 March 2005, British Columbia's premier announced the formation of the BC Competition Council to review the province's competitive position and to recommend workable private sector and public sector actions to improve British Columbia's competitiveness (BC Office of the Premier 2005). Important components of the council were the Pulp and Paper Industry Advisory Committee and Wood Products Industry Advisory Committee. The former brought down its Final Report on 25 January 2006 (BC Competition Council 2006a), and the latter did so on 31 March 2006 (BC Competition Council 2006b). In 2008, the BC minister of forests and range appointed a multi-stakeholder working round table on forestry (BC Ministry of Forests

and Range 2008) "to develop recommendations and ideas that government, the forestry industry and others can act on to strengthen British Columbia's forest sector over the next five to 10 years." In Alberta, the provincial government in cooperation with the Alberta Forest Products Association prepared a report on the economic health of the Alberta forest industry and its ability to compete in the global marketplace. This report was followed by the establishment of the ongoing Forest Industry Sustainability Committee, with representation from industry and government ministers.[9] It is likely that these and similar initiatives that are being contemplated in other provinces will result in reforms to existing forest tenure arrangements that place more emphasis than in recent years on economic sustainability.

Objectives and Organization of This Book

As is evident from the preceding discussion, Crown forest tenures are, and have been historically, a major instrument used for the implementation of public forest policies in Canada. In fact, if a comprehensive approach is taken to the investigation of tenure arrangements that includes the rights they grant and the broad spectrum of constraints they place on their holders' behaviour, then many significant aspects of forest policy are embraced. Thus, the principle objective of this book is to describe Canada's provincial Crown forest tenure systems within analytical frameworks that allow us to compare alternative policy approaches and analyze their suitability for pursuing sustainable forest management. Each of the chapters in this book is targeted toward making a contribution to this overarching objective.

In Chapter 1, we describe how the emergence of sustainable forest management is occurring in concert with a number of key changes in the role of the state in governance. Forest tenure arrangements determine how the responsibility for delivering the many products and environmental services provided by public forests is allocated between provincial governments and other agents – private firms and individuals, First Nations, local authorities, communities, NGOs, and other stakeholders. Forest tenures, therefore, play a central role in forest sector governance. But forest governance and sustainable forest management transcend considerations of forest tenures and include such approaches as forest

certification and criteria and indicators. Chapter 1 provides this broader context for the discussions that follow by examining the changing roles of the state in relation to private markets and civil society, both generally and in relation to the rise of sustainable forest management within the Canadian forest sector. The emergence of new governance models in the forest sector are examined, including the evolving roles of First Nations, environmental NGOs, communities, stakeholder organizations, and private certification bodies.

To describe and analyze Canada's complex Crown forest tenure systems in a way that allows interprovincial comparisons to be made and their outcomes to be critically examined requires an appropriate analytical framework. The purpose of Chapter 2 is to develop such a framework. Following a discussion of the importance of property rights as instruments of public policy, particularly their roles in market economies, Chapter 2 goes on to explain the analytical approach adopted in this study. This methodology, which is sometimes referred to as the "property rights approach" to public policy analysis (Alchian and Demetz 1973; Bromley 1991), is predicated on the notion that property rights can be disaggregated into a number of attributes or characteristics. Any property right can be perceived as a combination of "rights" that authorize its holder to extract a stream of benefits, or utility, from the property concerned and concomitant obligations that "attenuate" the value of this benefit stream. Property rights characteristics describe both rights and obligations. Thus, each forest tenure can be described in terms of its characteristics that identify its unique features, facilitate comparisons with other tenure types, and, taken together, provide a powerful tool that can assist policy analysts in understanding the relationships between different tenure arrangements and their possible outcomes as reflected in the behaviour of their holders. The system of property rights characteristics adopted for this study is described, and the possible impact of individual characteristics on the behaviour of forest tenure holders is discussed.

The property rights embodied in forest tenures in Canada are sufficiently complex to justify the use of multiple analytical frameworks. Two characteristics of Crown forest tenures – regulations designed to

control forest practices and Crown stumpage fees – are so complex and such important components of contemporary forest policies throughout Canada that they receive special attention in this study. Each is the subject of a separate chapter (Chapters 4 and 5 respectively), where special analytical frameworks are developed and applied to describe and classify these important sources of attenuations in ways that allow useful interprovincial comparisons to be made.

In Chapters 3 through 5, we populate our analytical frameworks with information about, respectively, forest tenures, regulations, and stumpage fee systems across Canada. Chapter 3 uses the methodology developed in Chapter 2 to describe and compare forest tenures in nine of Canada's ten provinces. Prince Edward Island is excluded, since more than 90 percent of that province's forestland is privately owned and the forest sector is not a very important component of the provincial economy. In Chapter 4, an analytical framework is developed that recognizes four approaches to regulating forest practices within four general areas: strategic planning, operational planning, requirements for specific practices, and compliance and enforcement regimes. Unlike the more general analysis of Crown forest tenures presented in Chapter 3, comparisons of forest practices regulations are confined to five provinces where the forest sector plays a fairly prominent role in the provincial economy: British Columbia, Alberta, Ontario, Quebec, and New Brunswick. In Chapter 5, following a theoretical discussion of economic rent, stumpage, and the desirable characteristics of a public stumpage system, a framework for comparing stumpage fee systems is developed based on seven distinct characteristics. This scheme is then used to describe methods of determining, collecting, and dispersing stumpage fees in the Canadian provinces, again excluding Prince Edward Island.

One of the key purposes of Chapters 3 through 5 is to provide the empirical basis for making comparisons between forest tenures across Canada. Moreover, this overview of existing tenure policies provides insights regarding how current policies may facilitate, or stand in the way of, sustainable forest management objectives. Along these lines, at the end of each of these three chapters, we identify features of current tenures, forest practices, and stumpage fee systems that may impede or

facilitate the pursuit of sustainable forest management objectives. These sections provide information that foreshadows some of the conclusions reached in Chapter 6.

Chapter 6 synthesizes the information and concepts presented in previous chapters. After reviewing some of the challenges facing the forest products industry in Canada, the chapter links a number of these problems to current tenure configurations. Most of these observations are drawn from Chapters 3 through 5, where potential problems with current policies are identified. However, taken together, these problems suggest broader directions for potential change. From these potential future directions, several essential attributes are identified that may be used to guide tenure reform. The chapter then considers numerous barriers that could prevent change in Canadian forest tenure systems. We conclude by discussing potential means of overcoming these barriers.

The empirical work in this volume is based on a province-by-province survey of forest legislation, regulations, licensing contracts, and other policy documents. In the Appendix we provide province-by-province sources that were used to collect this information. In many cases, changes in forest policies were underway as the data were being collected. Thus, the empirical information presented here represents policies as they existed at a snapshot in time. Although forest tenures are in constant flux, the general structures of forest tenures provide a basis to assess general policy approaches that have been adopted, and to assess potential future directions for forest tenures.

The Rise of Sustainable Forest Management and Trends in Forest Sector Governance

1

This book is concerned with institutions and institutional change in the Canadian forest sector, specifically provincial Crown forest tenure systems. As we suggest in the Introduction, Crown forest tenures are the principal instruments used by governments in Canada to implement public forest policy. A salient function of forest tenure systems is that they serve to allocate responsibilities for the management of public forestland between governments and other agents such as private firms, First Nations, and communities. Crown forest tenures, therefore, play a central role in forest sector governance – who owns forests, who has the authority to determine how they are managed, and who is actually responsible for their management.

The forest sector has experienced dramatic changes in governance structures over the past decade. Some of these changes are sector specific, but some of them reflect broader societal trends. Broadly speaking, as the sector has grappled with implementing the concept of sustainable forest management, the magnitude and complexity of what society is demanding of its forests have increased exponentially and the traditional hierarchical systems of governance are being challenged from a variety of sources. In this chapter, trends in the role of the state in relation to markets and civil society are examined, both in general and with respect to the rise of sustainable forest management within the forest sector,

including expanding participation in decisions concerning the stewardship of forest resources for a broader range of interest groups, the challenges of developing new relationships with First Nations, the consideration of innovative policy instruments, the emergence of corporate social responsibility, the rise of forest certification, and increasing pressures to offload management responsibilities from the government to Crown forest tenure holders.

General Trends in the Roles of Government: From Government to Governance

The relationship between the state and the market in developed economies has changed significantly over time, in measurable and ideological terms. After the steady trend of growth in government as a component of the economy in the period after the Second World War, pressures for the downsizing of government emerged in the 1980s, as witnessed by the governments of Thatcher in Britain, Reagan in the United States, and Mulroney in Canada. Even Bill Clinton, in 1992, the only Democratic president to be elected in the United States between 1980 and 2008, famously acknowledged in his 1996 State of the Union address that "the era of big government is over." Throughout the Western industrialized world, government programs have experienced budget cutbacks, and attention has shifted from relying on governments to fix "market failures" to diagnosing and addressing "government failures" (Wolf 1979; Weimer and Vining 2005). Governments and policy analysts have begun to consider a broader, more market-oriented range of policy instruments for the delivery of services traditionally performed by government.

When the "great recession" struck in the fall of 2008, governments around the world responded with a massive increase in the role of the government, including the outright purchase of major financial and industrial corporations. Although it is premature to speculate on the practical and ideological consequences of this extraordinary turn of events, it is striking that, thus far, these massive changes have generally been rationalized as a response to an emergency rather than as the basis for a new public philosophy on the role of the state. Perhaps the most profound indication of how our conceptualization of the appropriate role of government has changed is the shift in discourse from a focus

on *government* to one on *governance*. In what Salamon (2002) referred to as "the revolution that no one noticed," two fundamental changes have occurred. First, there has been a marked shift toward less hierarchical, more collaborative relationships between government and society as governments have increasingly recognized how much they rely on non-governmental actors for the effectiveness and legitimacy of policy development and implementation. Salamon calls this a shift from hierarchy to network. Second, there is an increasing reliance on third parties and public-private partnerships in service delivery. As a result, much of modern governance involves the management of effective relationships among governments, non-governmental organizations, and markets (Salamon 2002; Pierre and Peters 2000).

Components of this new governance have been evident in the Canadian forest sector for some time now. Much of the current emphasis is on contracting out the delivery of services, but Canadian forest tenures have been a form of alternative service delivery since governments first required licensees to take on management responsibilities in return for exclusive rights to harvest public timber. In fact, close "bipartite" relationships have existed between governments and the forest industry for decades (Howlett and Rayner 2001).

However, much of what is involved in the "new governance" is also new to the forest sector. Over the past two decades, a wide range of new or newly strengthened interests have come to challenge the legitimacy of government-forest industry relationships (Pearse 1998; Stanbury and Vertinsky 1998).[1] Environmental groups have used both grassroots activism and international market campaigns to force private firms and governments to pay greater attention to environmental concerns. First Nations have challenged the very basis of government ownership of "Crown" land. Community groups have demanded decentralization of control, and a broad range of individuals and groups, both commercial and non-commercial, affected by forest management decisions have insisted on a larger role in the formulation and implementation of managerial strategies. The Canadian forest sector has witnessed a shift from a closed, government-industry partnership to a more open network best characterized as "multipartite bargaining." From national round tables to regional land use planning in the provinces, multi-stakeholder

negotiations have become a central component of policy development (Lindquist and Wellstead 2001). The forest sector has also witnessed the emergence of non-governmental, private certification organizations that have come to share in the governance of forest management. Many of these changes are associated with the rise of sustainable forest management as a policy paradigm.

The Emergence of Sustainable Forest Management as a Policy Paradigm

Sustainable forest management emerged as the dominant paradigm for the management of forest resources in Canada in the 1990s. The concept has its roots in earlier efforts to expand the objectives of forest management beyond the focus on sustained yield that dominated the development of industrial forestry in Canada (Luckert and Williamson 2005). The concept emerged in the early 1990s as Canada prepared for the 1992 UN Conference on Environment and Development and sought to articulate a model that could provide a foundation for a legally binding international forest convention but also provide some defence against growing international environmental criticisms of Canada's forest practices (Bernstein and Cashore 2000). When the Canadian Council of Forest Ministers (CCFM) issued the report *Sustainable Forests: A Canadian Commitment* in 1992, the concept of sustainable forest management was granted official status in the discourse of Canadian forest management and policy (Rayner and Howlett 2007).

How sustainable forest management came to be defined in operational terms, and whether it has produced significant changes in forest policy and management, are challenging questions. Although definitions have varied over time and source, one broad definition that reflects the core spirit of sustainable forest management is the vision statement of the 1992 Canada Forest Accord: "Our goal is to maintain the long-term health of Canada's forest ecosystems, for the benefit of all living things, and for the social, cultural, environmental and economic well-being of all Canadians now and in the future" (as cited in Burton et al. 2003, 49). Arguably, the most fundamental departure from the prior sustained yield paradigm is the elevation of the importance of environmental and social values.

Operationally, sustainable forest management was given meaning through the articulation of *criteria* that reflect core forest values and through *indictors* that measure progress toward desired objectives (Luckert and Boxall 2009). Although the concept has been enthusiastically developed and promoted through national, interjurisdictional process through the CCFM, provincial governments still dominate jurisdiction over forest management across the country. The remainder of this chapter draws those links between new governance trends and sustainable forest management.

The Rise of the Organized Environmental Movement

The environmental component of the sustainable forest management paradigm was initially forced on the forest sector by external mobilization. One of the most important trends over the past several decades is the development and institutionalization of environmental groups active on forestry issues throughout Canada. These groups have provided a persistent challenge to the sustained yield, industrial model of forest management. Much of the initial focus was on setting aside more wilderness as protected areas, but they have become increasingly active in pressuring governments on a broader range of policies, especially forest practices. Unfortunately, there is not much literature on the Canadian environmental movement relevant to the forest sector.[2]

J. Wilson (2002) stressed three important facts about the Canadian environmental movement. First, it is extremely diverse in its organization and strategies, which we will discuss in more detail below. Second, it draws great strength from the personal commitment of the activists who staff the organizations. Third, the movement is still relatively resource-poor in terms of finances and professional staff, limiting its ability to compete successfully with government and industry organizations.

A wide variety of environmental groups address forestry issues across the country. Table 1.1 provides a sample of some of the most prominent groups nationally and in selected jurisdictions. Groups operate at various scales. Some are very large international organizations, such as Greenpeace, that have Canadian chapters. Others, such as the Sierra Club of Canada and the Canadian Parks and Wilderness Society (CPAWS), are national groups that work at the federal and national levels

Table 1.1   Prominent environmental groups focusing on forest-related issues in selected Canadian jurisdictions

Jurisdiction	Environmental group	Date founded
International (strong Canadian presence)	• ForestEthics • Greenpeace • Rainforest Action Network	1994 1971 1985
National/ federal	• Sierra Club Canada*	1963 – started activities in Canada 1989 – established office in Ottawa
	• Canadian Parks and Wilderness Society (CPAWS)*	1963
	• Canadian Boreal Initiative	2003
	• Sierra Legal Defence Fund	1990
	• World Wildlife Fund Canada	1967
	• Nature Canada (formally Canadian Nature Federation, which was formally the Audubon Society of Canada)	1939 – magazine begins 1948 – Audubon Society established
	• Canadian Wildlife Federation	1962
British Columbia	• Sierra Club of BC Foundation	1969 – started activities
	• Western Canada Wilderness Committee	1980
	• West Coast Environmental Law	1974
	• David Suzuki Foundation	1990
Alberta	• Alberta Centre for Boreal Studies (started by CPAWS Edmonton chapter)	2000
	• Alberta Wilderness Association	1965
	• Forest Watch Alberta (part of Global Forest Watch)	1999
Ontario	• Wildlands League (Ontario CPAWS chapter)	1968

◄   Table 1.1

Jurisdiction	Environmental group	Date founded
	• Ontario Nature (Federation of Ontario Naturalists)	1931
	• Earthroots	1986
	• Canadian Environmental Law Association (land use issues, among others)	1970
Quebec	• Union québécoise pour la conservation de la nature (UQCN)	1981
	• Société pour la nature et les parcs du Canada – Montreal section, Quebec chapter (SNAP = CPAWS)	2001
	• Réseau québécois des groupes écologistes (RQGE)	1982
	• Aux arbres citoyens! (Combination of four groups: WWF, SNAP, UQCN, RQGE. Deals specifically with boreal forest and protected areas issues.)	2001
	• L'action boréale de l'Abitibi-Témiscamingue (vice-president is singer/songwriter Richard Desjardins, who made the documentary *l'Erreur Boréale,* which shocked Quebec and started a big forest movement)	2000
New Brunswick	• Conservation Council of New Brunswick	1969
	• Crown Lands Network (A loosely knit assemblage of New Brunswick environmental groups, such as the Conservation Council of New Brunswick, the Sierra Club Canada Atlantic chapter, and the New Brunswick Protected Natural Areas Coalition. The network is a "caucus" of the New Brunswick Environmental Network.)	2001-02

*   All of the provinces listed above have a Sierra chapter (New Brunswick's is the Atlantic Sierra chapter) and a CPAWS chapter.

but also have strong provincially focused chapters. Others focus explicitly on provincial issues, and some are organized around a particular area of concern (such as Friends of Clayoquot Sound on the west coast of Vancouver Island in British Columbia). The most prominent of these groups have been active for at least ten years; some, such as Nature Canada and Greenpeace, have existed for many decades.

Environmental groups rely on a wide range of strategies to influence public policy and industrial management practices.[3] They utilize traditional group strategies, such as lobbying public officials and, more so than most groups, combine insider lobbying with efforts to mobilize public opinion. Although it has become far less common over the past five years, environmental organizations in Canadian forestry are well known for their reliance on protest and direct action to draw attention to specific causes – the protests in Clayoquot Sound in British Columbia and Temagami in Ontario being the most prominent examples (J. Wilson 1998; Cartwright 2003).

However, more frequently, media events are built around the release of reports, either focused on advocacy research reports or "report cards" evaluating government or corporate performance according to the environmental group's criteria.[4] Some examples of recent report cards are described on the following page.

Environmental groups also use litigation as a strategy. However, because of the discretionary nature of Canadian environmental law, they have not been nearly as effective as their counterparts in the United States, or First Nations in Canada, at using courts to force change. Nevertheless, environmentalists still find the occasional lawsuit effective in focusing pressure on high-priority concerns (Hoberg 2000).

The most important change in environmental group strategies has been an increasing reliance on international markets to pressure the industry and government to adopt stronger environmental policies (Bernstein and Cashore 2000; Stanbury 2000). Leading environmental groups such as Greenpeace and ForestEthics have turned their attention away from roadblocks to focus on the consumers of Canadian forest products, especially large wood products retailers like Home Depot in North America and Sainsbury's in Europe, or major publishers utilizing Canadian paper. Through persuasion backed by the threat of protests,

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Recent Examples of Environmental Group Report Cards

Great Bear Rainforest Report Card
A report written by four ENGOs (Greenpeace Canada; ForestEthics; Sierra Club Canada, BC Chapter; and the Rainforest Action Network) evaluating changes in forest practices in the Great Bear Rainforest in British Columbia since land-use agreements were signed in the early 2000s. Grades range from a high of C for "use of credible science" to a low of F for "ecological management and planning."
http://www.savethegreatbear.org/resources/Reports/2005 report card

Sierra Club Canada – National Forest Strategy Report Card Database
An analysis of the provinces' fulfillments of their commitments to the National Forest Strategy.
http://www.sierraclub.ca/national/programs/biodiversity/forests/nfs/index.shtml

Sierra Club Canada – Rio Report Cards
For thirteen years, Sierra Club Canada has published report cards that grade the federal and provincial governments on their commitments made in Rio de Janeiro in 1992. The 2005 report gives Canada a C for its implementation of the forest principles.
http://www.sierraclub.ca/national/rio/

Ontario Nature (Federation of Ontario Naturalists) – Ontario Living Legacy Report Card
An assessment of the progress made in establishing parks and protected areas under Ontario's Living Legacy plan.
http://www.ontarionature.org/discover/resources/PDFs/reports/report_crd.pdf

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environmental groups have persuaded a number of major companies to adopt purchasing policies that steer them away from forest products produced from companies or in areas that environmentalists have designated to be engaging in unsustainable practices. The most prominent market campaigns in Canada have been those focused on the Great Bear Rainforest, comprising the central coast region of British Columbia, and more recently the entire boreal forest region.[5]

This strategic innovation has been profound because it has created a direct corporate interest in addressing environmental issues to protect market shares. One consequence of the influence of these tactics is a dramatic increase in collaborative initiatives between leading environmental groups and the forest industry. For example, several major forest companies have signed onto the Boreal Forest Conservation Framework, which calls for protecting "at least 50% of the region in a network of large interconnected protected areas" (Canadian Boreal Initiative 2003).

Environmental interest groups have become influential players in the Canadian forest sector. They have relied on a combination of direct action, conventional interest group strategies, and innovative political strategies through the marketplace to force governments and industry to demonstrate greater protection of environmental values in the forest.

Challenges in Reconciliation with Aboriginal Peoples

Another major challenge confronting the forest sector is the increasing role of First Nations, both in the economic activities of the industry and governance of the resource. Despite the proximity of many First Nations communities to forest industry operations, First Nations have not benefited significantly from forestry in much of Canada (Wilson and Graham 2005). Over the past several decades, numerous conflicts have emerged between industrial forest development and First Nations communities seeking to protect their Aboriginal and treaty rights. Several of these cases have ended up in the courts, where the general trend has been the expansion of Aboriginal rights. A series of court decisions has forced governments and the forest industry to give greater consideration to the interests of First Nations. Although, historically, many governments and companies have been reluctant to acknowledge the need for change, there now seems to be an emerging consensus among government, industry, and First Nations on a strategy to increase First Nations' participation in the forest sector (e.g., Wilson and Graham 2005). And, although it seems somewhat slower in coming, there are increasing signs that governments have acknowledged the need to share authority with First Nations in some areas.

Several decisions by the Supreme Court of Canada have been instrumental in advancing Aboriginal rights and title. In the December 1997 *Delgamuukw* case involving the Gitksan and Wet'suwet'en people of northwestern British Columbia, the Supreme Court of Canada entrenched the principle that "there is always a duty of consultation."[6] In that case, the court elaborated on the meaning of Aboriginal title and under what circumstances it could be infringed. The court ruled that title could be infringed by the Crown for certain purposes involving the "furtherance of a legislative objective that is compelling and substantial," and explicitly included forestry operations as an example of that kind of government activity. But infringement could occur only with adequate consultation and compensation. The case had a significant impact not only on the Government of British Columbia but on the governments of other provinces as well, forcing them to adopt or revamp policies designed to improve procedures for consultations with First Nations (Ross and Smith 2002).

Despite adopting more elaborate consultation policies, the Government of British Columbia maintained in legal arguments that the duty to consult arises only once Aboriginal title has been proven, a situation that has not occurred throughout most of British Columbia. This legal position created significant tensions with First Nations groups, but the conflict was clearly resolved in the November 2004 decisions of the Supreme Court of Canada in the *Haida* and *Taku* cases. The *Haida* case involved the transfer of Tree Farm Licence 39 on the Queen Charlotte Islands/Haida Gwaii to the Weyerhaeuser Corporation when it purchased the MacMillan Bloedel Corporation in 1999; the *Taku* case involved the approval of a mining licence and associated road following a provincial environmental assessment.[7]

The *Haida* case was particularly important because lower court decisions had created a great deal of uncertainty as to how elaborate consultation needed to be, and who was responsible for consultation. In 2002, the BC Court of Appeal had extended the obligation beyond consultation to include *accommodation* of First Nations' interests. Moreover, the court expanded the legal duty of consultation and accommodation to include the licensee as well as the Crown. That decision led the

BC government to adopt new policies that included accommodation based on the development of forest and range agreements that incorporate revenue sharing with First Nations and access to volume-based timber harvesting licences in exchange for First Nations' acknowledgement that the government had satisfied the economic aspects of consultation and accommodation.

In the *Haida* decision, the Supreme Court established in no uncertain terms that the Crown has an obligation to consult *and* accommodate First Nations' interests, even if title has not been proven. The court based this ruling on the "honour of the Crown," originating from the Royal Proclamation of 1763. The court also clarified that third parties such as Weyerhaeuser do not share in that legal obligation, ruling that "the honour of the Crown cannot be delegated." At the same time, in the *Haida* and *Taku* cases, the court also clarified that the government's duty to consult and accommodate did not grant First Nations a veto over activities they oppose. In the *Taku* case, the court ruled that the elaborate process conducted by the BC government under its environmental assessment process was sufficient. These decisions do not resolve all the uncertainties about how far governments need to go to consult and accommodate First Nations, but they do clarify three important issues: existence of the duty to consult and accommodate even before title claims have been established; that this legal obligation rests with the Crown and not the licensee; and that First Nations do not hold a veto over development decisions.

Most of the focus of Aboriginal jurisprudence in Canada has been in British Columbia, where because of the absence of settled treaties there is greater uncertainty about Aboriginal rights and title. Nonetheless, First Nations issues have been increasingly prominent in the forest sector across the country. In many areas there are disputes over the meaning of existing treaties regarding the relationships between First Nations and the Crown for the control of forest resources. In New Brunswick, the Court of Appeal in 2003 set aside a conviction of a Mi'kmaq man, Joshua Bernard, for harvesting timber on Crown land, ruling that Bernard had an unextinguished treaty right to harvest and sell timber.[8] Some areas have witnessed agreements that provide for co-management of forest

resources, such as the agreement between Quebec and the James Bay Cree, and the agreement between the government of Newfoundland and Labrador and the Innu (Ross and Smith 2002; Wilson and Graham 2005).

Across Canada, First Nations have come to play an increasingly important role in the forest sector. Courts' decisions have forced governments to find ways to involve First Nations more directly in decision making, and to distribute more of the economic benefits of forestry to First Nations. Many forest companies have developed their own Aboriginal policies on consultation and accommodation and have experimented with joint ventures and other economic arrangements with Aboriginal groups.

The Rise of Multi-Stakeholderism

The increasing importance of actors beyond the traditional nexus of government and business is one of the hallmarks of the widespread trend toward new governance structures (Howlett and Rayner 2006a). As a result of the increased power and legitimacy of these players, governments have been forced to reconsider the process of policy development and implementation. One of the most prominent manifestations of this trend is multi-stakeholder consultations, where governments gather together relevant interest groups in a process designed to develop agreement on policy changes (Lindquist and Wellstead 2001). There are a number of examples of these new forums. One prominent early example is the round tables focused on integrated environment and economy in the late 1980s (Howlett 1990). Although many of these have been terminated, the National Round Table on the Environment and the Economy continues to play a prominent role and recently released a major study on the boreal forest. Multi-stakeholder processes were also used to develop the national forest strategies that first articulated the sustainable forest management paradigm in Canada (Rayner and Howlett 2007).

Multi-stakeholder consultations have been most influential in land use decision making. British Columbia has developed several comprehensive "land and resource management plans" through consensus-based exercises involving a wide range of resource-related interests

(J. Wilson 1998). Most of the planning tables were able to reach consensus, and even those that did not were quite influential on the ultimate decisions adopted by government (Thielmann and Tollefson 2009). Alberta and Ontario have also relied on multi-stakeholder consultations to develop comprehensive land use plans (Cartwright 2003). In areas such as land use planning, these consultations have become necessary in order for governments to garner legitimacy for their decisions. As a result, multi-stakeholder consultations have empowered a wide variety of policy actors beyond the traditional nexus of business and government to participate in policy decisions in a meaningful way, while at the same time greatly complicating the policy making process.

Addressing Sustainable Forest Values through Regulation and Increasing Attenuation of Tenure Property Rights

The environmental movement and assertion of a greater First Nations role in forest policy and management are the most prominent examples of a societal shift toward increased concern for the environmental and social aspects of the sustainable forestry management equation. At the provincial level, these new interests have been accommodated largely through a combination of changes in planning processes and new regulations on land use and forest practices. All provincial jurisdictions have some requirements for strategic and operational planning (as described for five provinces in Chapter 4). These have been modified to give the public and First Nations greater opportunity for participation. In addition, all the jurisdictions have substantially updated and formalized the manner in which environmental values are addressed in the forest.

Table 1.2 provides an overview of some major changes in statutes, regulations, and land use planning processes in British Columbia, Alberta, Ontario, Quebec, and New Brunswick. There was a major burst of new legislation in the early to mid-1990s, as typified by BC's Forest Practices Code, Ontario's Crown Forest Sustainability Act, and Alberta's Ground Rules.[9] More recently, there has been a new wave of reform to modify regulatory frameworks to incorporate new understanding of various aspects of sustainable forest management, especially the protection of biodiversity and the incorporation of frameworks for criteria

Table 1.2 Major forest sector planning and regulatory changes
in five provinces

Year	Province	Item
1982	New Brunswick	Crown Lands and Forest Act
1986	Quebec	Forest Act
1988	Ontario	*Timber Management Guidelines for Protection of Fish Habitat*
1988	Quebec	Regulation respecting standards of forest management for forests in the public domain (RSFM)
1989	New Brunswick	Clean Water Act
1991	Ontario	Code of Practice for Timber Management Operations in Riparian Areas
1991	Quebec	Draft strategy on forest protection, followed by public consultations on the strategy
1992	British Columbia	Protected Areas Strategy launches to double protected areas to 12 percent
1993	Alberta	Alberta Forest Conservation Strategy begins
1993	Ontario	Policy Framework for Sustainable Forests approved by cabinet
1993	Quebec	Forest Act updated
1993	Quebec	RSFM updated
1994	British Columbia	Forest Practices Code Act
1994	Alberta	Alberta Timber Harvest Planning and Operating Ground Rules
1994	Ontario	Crown Forest Sustainability Act
1994	Ontario	Class Environmental Assessment of Timber Management on Crown Lands in Ontario
1994	Quebec	Forest Protection Strategy
1994	New Brunswick	*Forest Management Manual for Crown Land*
1995	Alberta	Special Places program begins
1995	Ontario	*Forest Operations and Silviculture Manual*
1995	Ontario	*Scaling Manual*
1995	Ontario	Conservation Strategy for Old-Growth Red and White Pine Forest Ecosystems
1996	Alberta	Forests Act updated
1996	Ontario	*Forest Management Planning Manual*
1996	Quebec	Forest Act updated
1996	Quebec	RSFM updated
1996	Quebec	Biodiversity Strategy and Action Plan

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