



## **Strong policy through national consensus: Canada's forestry policy experiment**

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### **I Introduction**

Canada has one of the largest expanses of natural forest in the world. Recognising a need to preserve its natural resources, Canada, through the 1980's, became the first nation to form a national forest strategy, by establishing a clear and widely based commitment to the pursuit of the sustainable forest.

Several years before the UNCED "Earth Summit" tied forest use to sustainable national policies, Canada had begun setting its own course for sound forestry. In the 1980s, Canada developed two national strategies to help guide the forest community's actions. In 1990, largely in response to the call for sustainable development from the influential Brundtland Report of 1987, Canada embarked on a far more extensive and consultative process.

That year, the ministers responsible for forests at the federal, provincial and territorial level began to seek out a nation-wide consensus on how Canada's forests should be managed. The consultations engaged governments, wildlife groups, industry, First Nations, professional foresters, lobby groups, private woodlot owners, universities, and academics.

In March 1992, Canada unveiled its new policy document, entitled "National Forest Strategy, Sustainable Forests: A Canadian Commitment". At the same time, the first-ever Canada Forest Accord was signed by 29 government and non-government forest representatives. Five years later, the National Forest Strategy was updated (1998-2003), and the second Canada Forest Accord was endorsed by 52 stakeholders. Now, the

recent “2003-2008 National Forest Strategy” continues to provide a model for involving the public and gaining the co-operation of all interests groups in crafting sustainable forest policy.

Canada’s National Forest Strategy has served as the guiding policy document for the forest industry in the pursuit of sustainable forestry, and has led to new forest legislation and policies, renewed national programs, local and regional strategies, and tools and practices for sustainable forest management.

Canada’s National Forest Strategy attempts to reconcile diverse expectations for forests, their managers and users. These expectations are embodied in the document’s eight strategic directions:

1. Ecosystem-based Management
2. Sustainable Forest Communities
3. Rights and Participation of Aboriginal Peoples
4. Forest Products Benefits
5. Knowledge and Innovation for Competitiveness and Sustainability
6. The Urban Forest and Public Engagement in Sustainability
7. Private Woodlots’ Contribution to Sustainability
8. Reporting and Accountability

Creating the National Forest Strategy has been an exercise in consolidating expectations and building consensus. This is a particular challenge in a country such as Canada where the forest spans over many regions and forest policy is heavily decentralised from the federal government’s control, as 71 percent of all forest land falls under provincial jurisdiction. This has provided unique challenges, some of which are only now being addressed.

One particular challenge is that Canada’s National Forest Strategy is voluntary, not regulatory, and places the onus for sound forest management squarely on the forest community’s shoulders. The strategy outlines objectives set by the Canada Forest Accord signatories, but it is up to individual organisations and industry participants to decide how to meet them.

The National Forest Strategy has been influential internationally as a model for other countries to follow. With the 1992 strategy, Canada became the first country in the world to commit to sustainable forest management on a national level. The strategy has served as a template for other countries that are engaged in designing their own national forest policies.

The strategy has attempted to provide a model for how countries can balance the many different concerns, policies and practices in the industry, such as the conservation of biological diversity, Aboriginal Peoples’ rights, rural community well-being, employment, private land ownership, international trade and environmental protection. Most importantly, the model should promote sustainability.

While there are significant challenges still facing Canada’s National Forest Strategy, Canada’s experiment has shown that it is possible to develop a strong national policy on safeguarding forest biodiversity that brings together diverse values and that ensures environmental health, social and cultural well-being and economic growth.

## 2 History of Canada’s forest policy

For generations, the link between Canada’s well-being and its forest has generated much concern, which, in turn, provided the impetus for Canada’s national forest strategies, beginning in the 1980s. These forest strategies have evolved over time accompanied by new challenges and attitudes and increased knowledge, understanding and participation. Each forest strategy has led to a more concise definition of the sustainable forest, stimulated wider networking and attracted the participation of more members of the forest community. These strategies are:

- A Forest Sector Strategy for Canada: Discussion Paper, 1981–1987
- A National Forest Sector Strategy for Canada (1987–1992)
- National Forest Strategy (1992–1998) – Sustainable Forests: A Canadian Commitment
- National Forest Strategy (1998–2003) – Sustainable Forests: A Canadian Commitment
- National Forest Strategy (2003–2008) – Sustainable Forests: A Canadian Commitment

Over the years, forest-related interests, benefits and values have evolved and expanded. As a result, new knowledge and technologies, responsibilities and partnerships have emerged that constantly increase the understanding of Canada's forest and how its citizens relate to it.

Canada attempts to ensure that everyone in the Canadian forest community has a role to play in ensuring their forest heritage. This community has grown to include governments, Aboriginal Peoples (Indian, Inuit, and Métis), the timber-based industry, non-timber forest product organizations, academia, research institutes, the recreation and tourism industry, forest practitioners, private woodlot owners, environmentalists and an increasing number of women and youth in these groups. With increasing knowledge, even more organizations and individuals are participating in forest-related decisions.

Forest management has become more challenging as forest managers attempt to balance many different concerns, policies and practices. For example, forest-related objectives and commitments now encompass matters such as the conservation of biological diversity, Aboriginal Peoples' rights, rural community well-being, employment, private land ownership, international trade and environmental protection. As well, newly discovered uses for non-timber products, such as medicinal plants and bio-plastics from forest products, have been added to the traditional, industrial uses of the forest.

Sustainability, widely seen today as the foremost goal of forest management, is at the centre of this continually changing arena of forest policies, practices, and interests. The National Forest Strategy, a broadly based public initiative, identifies and charts the direction that Canadians, as stewards of the forest, need to move toward in order to deal with evolving social, cultural, institutional, environmental and economic factors in their journey toward sustainable forest management.

### **3 Canada's forest framework**

Nearly 94 percent of Canada's forest is public land. Only six percent is under private ownership. In some parts of Canada, particularly British Columbia, an increasing amount of land is coming under Aboriginal jurisdiction as land issues are settled.

The forest is not confined to rural or wilderness areas, but is also found within municipal boundaries. Eighty percent of Canadians live in or near the urban forest. This forest is the major connection between them and the forest's environmental benefits and services, such as wind screens, energy reduction in the heating and air conditioning of buildings, air purification, wildlife habitat, carbon sequestering and oxygen production and protection against erosion. As well, this forest connects urban Canadians to other benefits such as recreation, aesthetic enjoyment, increased property values and physical and mental well-being.

Canada's forest figures significantly in the Earth's forest. It represents over 10 percent of the world's forest cover, 25 percent of the world's natural forest, 30 percent of the world's boreal forest and 20 percent of the world's temperate rainforest. Canada's forests include some of the world's largest intact forest ecosystems.

Under Canada's Constitution of 1867, the provinces own and regulate the natural resources within their boundaries, with exclusive powers to legislate for the enhancement, conservation and management of forest resources. The federal role in forestry is grounded in its responsibilities for the national economy, trade and international relations, science and technology, the environment, federal lands and parks and Aboriginal matters. The territories now have responsibility for their own resource management.

Aboriginal and treaty rights are primarily exercised in the forest and are constitutionally protected by the Constitution Act of 1982. Over the last 25 years, Canadian courts have affirmed Aboriginal and treaty rights. Thus, forest policy and forest management practices have to reflect the constitutional protection afforded Aboriginal and treaty rights. The federal government also has a lead responsibility towards Aboriginal Peoples, including for Indians and lands reserved for Indians under section 91(24) of the Constitution Act of 1867.

Forest resource users are meeting the increasing obligation for sustainable forest management in the managed areas of the publicly owned forest. In addition to the legal framework underlying sustainable forest management practices, markets are having a growing impact on these practices through their demands for forest certification.

Forest issues also remain high on the international agenda. Their resolution is a major challenge because of the magnitude of the land area and the multiplicity of the jurisdictions and interests that are involved. Canada is signatory to international agreements that have a direct bearing on how Canadians manage the forest, such as the Convention on Biological Diversity, Framework Convention on Climate Change, Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the Kyoto Protocol. As well, Canada has signed other agreements that have some effect on forest management. These include trade agreements, the United Nations Conference on Environment and Development (UNCED) – Forest Principles, and the Montreal Process – Criteria and Indicators of Sustainable Management of Temperate and Boreal Forests.

In 1985, Canada's federal, provincial and territorial ministers responsible for forests formed the Canadian Council of Forest Ministers (CCFM). Through addressing national and international issues and stimulating joint initiatives, this voluntary organization coordinates and facilitates cooperative measures that have gradually shaped the overall direction for the sustainable management of Canada's forest. In doing so, the CCFM has built a legacy of consulting Canadians on the state of the forest and its future. For example, through public consultations, it led the development of three National Forest Strategies, including the creation of the National Forest Strategy Coalition – a collection of governmental and nongovernmental bodies – to oversee the implementation of the 1992 and 1998 Strategies.

The leadership for developing the fifth National Forest Strategy (2003-2008), however, came from within the National Forest Strategy Coalition. The broad forest community was once again engaged in dialogue – this time led by the Coalition. The 2003-2008 Strategy confirms Canada's collective commitment to continue to be a global leader in sustainable forest management. This Strategy proposes a vision and challenges all Canadians to implement the actions identified in it.

## 4 Canada's forest benefits

The forest plays a number of vital ecological roles. It is a biodiversity storehouse, reservoir of carbon, producer of oxygen, filter for clean air and water, moderator of climate and protector against soil erosion. The forest also provides recreational, aesthetic and environmental benefits for rural and urban Canadians. Canada's forest is home to a diversity of plants, animals and micro-organisms. About two-thirds of all species found in Canada live in the forest or depend on forest habitat.

As well, the forest provides socio-economic benefits to all Canadians. The forest is the economic backbone of many rural, remote and forest-based communities across the country. For Aboriginal Peoples across Canada, the forest is fundamental to their traditional cultural, spiritual and material well-being and future self-sufficiency. The wood and paper products industries are major contributors to Canada's standard of living. These industries employ over 350 000 Canadians directly and over 770 000 indirectly. They generate over \$58 billion in total sales annually, making a net contribution of \$34 billion – more than half of the country's annual trade surplus. Even though forest exports from other nations are rising, Canada continues to be the world's largest exporter of forest products.

Canada's forest also provides the required environment for sustainable resource use, such as timber production, as well as a wide range of internationally important non-timber products and activities such as recreation, tourism, hunting, fishing, trapping, Christmas trees, mushrooms, medicinal plants and maple products.

## 5 Themes of the national forest strategy

The National Forest Strategy (2003-2008) focuses on the following eight strategic directions:

1. Ecosystem-based Management
2. Sustainable Forest Communities
3. Rights and Participation of Aboriginal Peoples
4. Forest Products Benefits
5. Knowledge and Innovation for Competitiveness and Sustainability
6. The Urban Forest and Public Engagement in Sustainability
7. Private Woodlots' Contribution to Sustainability
8. Reporting and Accountability

### 5.1 Ecosystem-based management

The goal of this specific strategy is to manage Canada's natural forest using an ecosystem-based approach that maintains forest health, structure, functions, composition and biodiversity, and includes using integrated land-use planning, especially before tenure allocation, maintaining natural forested ecosystems, completing a system of representative protected areas. In addition, this strategy attempts to maintain carbon reservoirs and manage the forest to be a net carbon sink, on a national basis over the long term; and to conserve old-growth forests and threatened forest ecosystems.

The ecosystem-based approach to managing natural resources recognizes that the social and economic benefits the forest provides over the long term rests on the ecological integrity of the forest. Forest management policies in Canada are based on this philosophy, as are many forest-related international commitments. The United Nations Forum on Forests has identified the ecosystem-based approach to sustainable forest management as a priority.

Essential to an ecosystem-based approach is the establishment and management of protected areas. These contribute to the conservation of biological diversity. However, protected areas must be complemented by sound stewardship across the entire country, accompanied by particular attention to lands around protected areas.

Ecological functions and processes must be understood, maintained and restored where necessary. Maintaining productive capacity, resilience and biological diversity are key factors in ensuring a healthy forest ecosystem. In turn, a healthy ecosystem is essential for a healthy society and economy. Thus, an ecosystem-based approach needs to reflect the fundamental connection of people to the ecosystem.

Forest management considers all the benefits the forest can provide, whether these are direct benefits, such as wood, water, carbon sequestration, wildlife habitat, recreation, hunting, trapping, fish habitat, fishing or wildfoods, or indirect benefits, such as the beauty of the forest landscape or the satisfaction that society derives from its forest. Management also considers human and natural disturbances such as fire, insects and disease when making choices to optimize forest use over time. Managing the forest to encompass this wide spectrum of benefits is complex because they often conflict.

Ecosystem-based management, therefore, considers non-timber and timber benefits along with other social and economic benefits, while also incorporating the best available scientific and traditional knowledge.

In order to fully adopt this strategy, however, Canada needs to take specific steps. First, it ought to develop

guidelines for integrating watershed-based management and wildlife habitat conservation into forest management practices across Canada and measures for evaluating implementation. In addition, it must establish a process involving forest-based communities leading to the implementation of land-use management plans, which include all forest benefits. It should also implement systems and decision making that sets resource-use levels (for example, the Allowable Annual Cut – AAC) as an output of a planning process.

Despite better forestry practice in the industry, Canada needs to place an emphasis on reforesting areas that are cut for temporary uses and use afforestation, where feasible, to mitigate the permanent loss of forest, as well as learning from afforestation techniques that have proved effective elsewhere (i.e. Finland: Tahvanainen, et al. 1996)

Where pests are concerned, Canada needs to manage to avoid or mitigate the adverse impact of invasive species on its forest ecosystems, increase the use of pest management approaches to gradually reduce the use of synthetic, chemical pesticides in forest management, and redirect, where appropriate, harvesting into forest areas affected by forest fire, pests and disease damage to mitigate loss.

## 5.2 Sustainable forest communities

The goal of this strategy is to develop legislation and policies to improve the sustainability (social, environmental and economic) of forest-based communities by fostering participation and involvement in forest management decision making improving access to resources, sharing benefits, enhancing multiple benefits, and supporting community resilience and adaptive capacity.

In 2000, nearly 300 communities, described as being “heavily forest-dependent”, had at least 50 percent of their employment base in the industrial forest sector. As well, more than 800 Aboriginal communities are located within Canada’s productive forest. Many of these communities continue to depend on the forest for traditional, non-economic uses. All forest-dependent communities, however, rely on the forest not only for their economic well-being, but also for their environmental and social well-being – in some cases, even for their survival.

Traditionally, the forest industry’s processing facilities have been built in rural or remote areas close to the fibre source. This, however, is changing. Communities have been affected by a shift in the way forest resources are used. For example, expanded access to remote forest areas, efficient mechanized harvesting and transport and large tenure allocations have reduced the number of jobs per unit of wood harvested and concentrated forestry support services in larger and fewer regional centres.

The heavy dependency of forest-based communities on the forest as a source of employment and revenue has created economic challenges in many areas of Canada. Simple proximity to the forest and forest industry jobs does not necessarily lead to community sustainability and meaningful participation in the forest economy. The ability of forest-based communities to participate in resource and land management decision-making processes and in the development of new economic opportunities that will improve their future, is essential to ensure community sustainability.

Despite increasing community involvement in forest management planning in recent years, further community involvement in decision-making and implementation needs to be improved. This is especially important because the future of rural regions and Aboriginal Peoples is linked not only to a timber-based forest economy, but also to the use of non-timber forest products and other forest uses such as trapping, traditional uses, tourism and recreation.

To meet this need, Canada needs to develop and adapt forest legislation and policies to provide involvement of forest-based communities in sustainable forest management decision making and implementation. In addition, Canada ought to expand the area and use of community-based tenure systems and resource allocation models in remote, rural regions of Canada to increase benefits to Aboriginal Peoples and forest-based communities.

On the community level, the government ought to support capacity building in local communities so that they can effectively participate in processes that lead to community sustainability. Finally, Canada needs to develop assessment and decision-support systems to enhance the socio-economic health of forest-based communities.

### 5.3 Rights and participation of aboriginal peoples

This strategy attempts to accommodate Aboriginal and treaty rights in the sustainable use of the forest recognizing the historical and legal position of Aboriginal Peoples and their fundamental connection to ecosystems.

Aboriginal Peoples' involvement in sustainable forest management continues to increase, shaped by several concurrent factors, including various international commitments, court rulings on accommodating such rights, as well as policies and practices ensuring benefits to Aboriginal communities. These recognize the historical and fundamental connection of many Aboriginal Peoples to forest ecosystems. Land claims, treaty-making and treaty land entitlement are three ongoing processes through which Aboriginal interest in the land is acknowledged formally, resulting in an Aboriginal-controlled land base. Meaningful Aboriginal participation in forest management necessitates goodwill and foresight on the part of the entire forest community.

Although courts have provided direction on certain issues, Aboriginal Peoples and governments in Canada have different views on the scope and nature of Aboriginal and treaty rights and how they should be applied generally to forest management policies and practices. This difference in perspectives creates a sense of economic and legal uncertainty in the forest sector. A shared understanding of Aboriginal and treaty rights, how they can be accommodated in forest management and how this affects roles and responsibilities, is essential in order to achieve the clarity and relative stability sought by all parties in the forest sector.

In addition to the direction provided by Canadian courts, several international conventions, declarations and ongoing policy fora are directly relevant to the involvement of Aboriginal Peoples in sustainable forest management. These include, for example, the Convention on Biological Diversity, the United Nations Conference on Environment and Development (UNCED) – Forest Principles and the Draft United Nations Declaration on the Rights of Indigenous Peoples. Their spirit and intent will influence sustainable forest management policies and initiatives in Canada.

Aboriginal participation in the forest sector has generally increased in recent years. Opportunities for employment, contracting and business development are more abundant, with the forest industry willing to enter into various forms of partnership. However, the lack of technical, human and financial resources and the lack of appropriate policy frameworks make it difficult for Aboriginal Peoples to participate in forest management and forest-based economic activities. Effective participation also calls for innovative and bold institutional arrangements between governments and Aboriginal communities relating to forest management. To support more effective participation, forest management planning and decision-making processes need to include women and youth as well as Aboriginal cultural and traditional approaches to land use.

To effect this, Canada needs to initiate processes with Aboriginal Peoples and appropriate levels of government for establishing a shared and grounded understanding of Aboriginal rights, Aboriginal title and treaty rights, the roles and responsibilities of Aboriginal Peoples, governments and forest stakeholders; and, measures to fulfill governmental fiduciary responsibilities and the legal duty to consult. In addition, Canada should implement institutional arrangements between Aboriginal Peoples and governments that reflect a spirit of sharing responsibilities and benefits for the management, conservation and sustainable use of forest lands and resources, and give effect to land claim settlements, treaties and formal agreements on forest resource use and management.

Aboriginal Peoples play an important role. Canada should do its best to incorporate traditional knowledge in managing forest lands and resources in accordance with the Convention on Biological Diversity, as well

as direct federal and other available funding to support Aboriginal capacity building and participation in implementing the National Forest Strategy, through measures such as a renewed and expanded First Nation Forestry Program and the development of a parallel Métis forestry program, and in supporting Aboriginal participation in related local, regional and international meetings. Finally, Canada should provide for access to a fair share of benefits from the use of forest lands and resources, as well as provide for Aboriginal interests in the development of international trade agreements.

## 5.4 Forest products benefits

This strategy attempts to stimulate the diversification of markets, forest products and services and benefits (both timber and non-timber) by understanding current and emerging markets and developing new domestic and international markets, promoting value-added and best end-use through expanded research and design, and attracting manufacturers of finished products and promoting markets for forest environmental services.

In addition to ecological services, Canada's forest supports a wide range of benefits such as timber, recreation, numerous non-timber products and service-based industries that are important both nationally and internationally. Over the last decade, exports of non-timber products and value-added products (for example, engineered wood products or wood veneer panels) have increased more than have exports of traditional wood and paper products.

Canada is the world's largest forest products exporter, accounting for over 20 percent of the global market in 2001. Canada's future share of the international forest products market and the competitiveness of its forest industry will depend on its ability to adapt to changes in domestic and international markets at a time when the forest is increasingly expected to be managed for uses other than timber production.

Canada's success in producing and marketing forest products and its closeness to the U.S. market have provided excellent economic opportunities. However, regulatory barriers and new global competition from lower-cost fibre sources present new challenges for the forest industry. Addressing these challenges requires continuous improvements in new product development, market diversification, cost competitiveness, quality enhancement, worker retraining and public reporting. Opportunities, nevertheless, exist to increase products and services while using less wood and less land.

Changing values have underlined the need to collaborate in communicating information about Canadian forest practices. The industry's commitment to sustainable forest management must be demonstrated to both Canadian and international communities.

Accordingly, Canada ought to create and maintain policies and programs that encourage human capacity, investment, productivity, innovation and competitiveness in existing and potential primary and value-added timber industries, non-timber and service-based industries, such as tourism and recreation, hunting and fishing, trapping and wildfoods, and specialty forest products and services such as medicinal plants, ethnobotanicals, carbon sinks, water regeneration, and bioplastics.

In addition, Canada must create and maintain policies and programs that encourage, develop and maintain access to markets for primary and value-added timber and non-timber based industries. As an example, Canada should promote its forest products and practices at home and abroad through public events, market initiatives, world-class environmental programs and community activities.

In terms of development, Canada needs to develop value-added industries and programs to support innovation, such as financial investment in intermediate and final product manufacturing, and collect statistics to monitor their development, as well as providing for the removal of policy barriers, thereby encouraging the greater use of renewable forest products to improve resource and energy efficiency.

## 5.5 Knowledge and innovation for competitiveness and sustainability

This strategy seeks as its goal to maintain and enhance the skills and knowledge of forest practitioners and mobilize the broader Canadian knowledge community to establish a new forest innovation agenda for Canada by developing “clusters” of forest sector cooperation, both nationally and regionally, to use available science and technology resources more efficiently and effectively. In addition, it seeks to support innovative post-secondary education institutions, continuing education and technology transfer to ensure that the principles of adaptive management improve the management of resources, and improve the processes for bringing new and traditional knowledge and ideas to policy evolution, decision making and field practices.

The Canadian forest sector has an impressive history of using innovative practices and new technologies that have advanced many aspects of forest management and captured a significant share of the global forest product market. Future success lies in embracing a more knowledge-centred, innovation-based approach that encompasses forest tree genetics to forest products markets. Research is increasingly structured so that experts from diverse disciplines can work together. There is also a growing appreciation for the importance and value of traditional scientific knowledge found in Aboriginal and local communities, and for the need to integrate this with current scientific knowledge. Canada’s progress in sustainable forest management requires integrated approaches and multidisciplinary research partnerships and networks that incorporate the natural and social sciences and traditional knowledge.

Achieving the National Forest Strategy’s objectives requires understanding how knowledge, from tree seed to markets, is generated and translated into new products, processes and services. Technology, public awareness, social responsibility and environmental standards have changed considerably in the last ten years. Canada’s workforce (from field personnel to policy makers) is responsible for Canada’s leading presence in global markets. The workforce must be equipped with the knowledge and the ability to adapt to change by fostering a culture of innovation, learning and knowledge management. This requires a continuing commitment and stable funding for research and development by all partners and to applying the best available knowledge to decision making. To remain competitive and to meet the evolving expectations of forest stewardship, the forest community needs to quicken the pace of innovation.

To meet this objective, Canada must develop a framework to use traditional knowledge along with current scientific knowledge and to protect the intellectual property rights of Aboriginal Peoples, and develop strategies for improving the forest sector’s success in competing for funding to support leading-edge science and technology programs, using research and development, tax credits, research extension and education.

In addition Canada ought to develop and implement more focussed education and training for practitioners involved in growing, harvesting and producing specialty wood products through enriched secondary and post-secondary education curricula, extension services, adaptive management, demonstration projects and outdoor classrooms, and continuing education.

## 5.6 The urban forest and public engagement in sustainability

The primary goal of this strategy is to actively engage Canadians in sustaining the diversity of benefits underlying the importance of Canada’s forest by establishing mechanisms to advance the planning, maintenance and management of urban forests based on an ecosystem-based approach and enhancing communication and outreach programs.

For the vast majority of Canadians living in large urban areas, the urban forest is their contact to the forest’s benefits and values. The urban forest provides many tangible and intangible social, spiritual, cultural, environmental and economic benefits. In many cases, it defines communities, neighbourhoods and cities. Trees can increase residential property values, can attract industry and tourists, provide wildlife habitat and provide jobs for city foresters, technicians, planners, arborists and others.

The forest in rural areas affects people living in towns and cities because of its contribution to the economy, its environmental functions (i.e. cleansing groundwater and regulating water flows) and its recreational opportunities. All the while, people living in urban areas are increasingly shaping forest policies by their participation in decision making at local, regional and national levels.

A key element in fostering educated debates and making sound decisions is credible information. Canadians need to be informed about the state of the forest and the social and spiritual well-being, environmental health and economic wealth that results from both forest use and conservation. Whether living in an urban centre or a rural forest-based community, Canadians benefit from greater access to, and availability of, accurate, timely information on the forest. Sharing information in an open and transparent manner is a critical part of generating trust and understanding between the public and the various interests that compose the forest community. Engaging young people, in particular, and encouraging the exchange of perspectives on the forest in various public meetings is important.

To effectively engage the public on these issues, Canada needs to develop and implement a national urban forestry strategy, as well as guidelines and support tools to help municipalities maintain and enhance their urban forest, to protect the surrounding forest and watersheds from urban pollution, to inform the public about how the forest contributes to their quality of life. To engage young people, Canada needs to develop educational initiatives and programs that will inform youth about forest stewardship and engage them in local forest stewardship programs.

## **5.7 Private woodlots' contribution to sustainability**

This objective seeks to increase the economic, social and environmental contribution by Canadian woodlot owners to Canadian society through a concerted effort by stakeholders to strengthen policies and services that encourage and support viable woodlot businesses.

Six percent of Canada's forest is owned by 425 000 woodlot-owning families. Woodlots are often the forest most Canadians see, because they are a common feature on the southern Canadian landscape. Woodlots are also an important source of raw material for the forest industry. The income generated from producing pulpwood, sawlogs and other forest products is an important source of economic stability for many rural communities. As well as economic benefits, woodlots provide recreational opportunities, wildlife habitat and biodiversity, clean water and pleasant roadside scenery across rural Canada. In some areas, woodlots may be all that is left of the original forested ecosystem.

The multi-faceted contribution of private woodlots to Canadian society is the result of good stewardship carried down through generations of many woodlot-owning families. These families have been guided by their own "land-ethic", by market opportunities and by supportive government policies and programs, including forest extension services. However, a delicate balance exists between sustainable management of woodlots and the short-term financial viability of woodlot-based family businesses. Financial pressures sometimes build to a point where poor forestry practices result, such as over harvesting and deforestation. These problems have been increasing in parts of Canada in recent years. At the same time, Canadians have rising expectations about acceptable management practices. Indeed, woodlot owners are subject to an accelerating pace of change in markets, production technology, management practices and obligations to society. There is a growing need for reliable information and educational services, both of which are vital tools for coping in an environment of constant change.

With appropriate incentives, these problems can be overcome. More owners will be encouraged to strengthen their commitment to good stewardship, which in turn will increase the flow of products and services from woodlots. The challenge for Canadian society is to ensure that a comprehensive framework of policies and services is in place and is available to all owners.

The framework would include conventional incentives through the marketplace, the tax system and silviculture assistance programs. Fair access to markets is needed as are government policies that could help offset

market pressures. Adequate funding is needed for silviculture programs. Positive incentives in the tax system need to replace disincentives to sustainable forest management. The framework would also include new forms of incentives to compensate for the cost of providing environmental services, such as maintaining watershed health and clean water, wildlife habitat and other services. Another component of the framework would include educational services. They are vitally important in ensuring that owners have access to the information, skills, technology and the assistance with planning needed to take full advantage of available financial incentives. As woodlot owners begin to respond to the challenge of forest certification, the importance of these services increases.

Stronger partnerships among woodlot owners, their associations, governments, industry and other agencies are instrumental in making progress toward these goals. To strengthen these partnerships, Canada must identify and remove obstacles hindering sustainable development with particular attention to market incentives, silvicultural programs and tax policies, increase the capacity of private woodlot owners by expanding extension programs, and develop and implement incentives for the provision of environmental services from private woodlots.

In addition, Canada should consider organizing a national forum for private woodlot owners to review progress across the country in the design and implementation of policies, incentives and programs to support private woodlot owners in areas such as extension, training and technology transfer, taxation (income and property), forest renewal, environmental services, natural disasters, certification, fairness in access to markets and stumpage policies, and carbon pooling.

## 5.8 Reporting and accountability

The main goal of this strategy is to create a comprehensive national forest reporting system that consolidates data, information and knowledge for all valued features of the forest, both urban and rural.

Sound, credible information is essential not only for knowledgeable decision making, but also for reporting at all levels. However, reporting and accountability are significantly challenged by the ability of any one organization to efficiently collect, compile, analyse, synthesize and publish information, and by the speed with which both forest-related information and public expectations have expanded. From an information perspective, tremendous changes in technology such as better remote sensing material and improved computerized tools have taken place in the last ten years. At the same time, the evolution of more powerful computers, farther-reaching information networks and the internationalization of the debate on the forest have rapidly increased the number and range of reporting requirements that Canada must comply with. Forest data and information are currently generated from a vast range of sources. The resulting information often varies in scope, nature, format and volume.

Canada needs a standardized national system that provides information on the current state of its forest and forest change over time. Improved databases and availability of information will help influence the quality of reporting, communicate the value of the forest and promote the accountability of all those involved in the forest sector.

To increase its accountability Canada must attempt to establish the capacity for credible and authoritative reporting to the public on important topics such as legal reporting requirements, how management practices incorporate multiple values, criteria and indicators of sustainable forest management, Aboriginal involvement in the forest sector, honouring international commitments such as those under the Convention on Biological Diversity, and actions pursuant to recommendations of the Intergovernmental Panel on Forests and the United Nations Forum on Forests and other forest-related international meetings.

In addition, Canada needs to assess socio-economic and environmental impact analysis of policy and management options, institute forest data standards for forest inventories, including monitoring protocols, to create a publicly accessible forest information system that provides high-quality information on the status of the forest, and enhance programs to monitor and inform the public about invasive species.

Finally, Canada must establish a consolidated reporting system that satisfies its objectives and obligations related to conventions and policy initiatives such as the Convention on Biological Diversity, the United Nations Forum on Forests and those related to the CCFM Criteria and Indicators Framework, as well as the National Forest Strategy.

## 6 Conclusion

This National Forest Strategy provides an overview of the vision and the goals that Canadians have for their forest over the next five years. While it confirms Canada's collective commitment to continue to be a global leader in sustainable forest management, it must also develop the appropriate frameworks to actually reach these goals. As the Strategy goals are voluntary, Canada must balance the realities of a strategy that is largely unenforceable, while still meeting obligations it has committed to nationally and internationally.

While there are significant challenges still facing Canada's forest policy, Canada's experiment has shown that it is possible to develop a strong national policy on safeguarding forest biodiversity that brings together diverse values and that ensures environmental health, social and cultural well-being and economic growth. By encouraging active national participation, the level of commitment to the strategy by each of those involved in the industry has shown that sustainability can be achieved through a voluntary system. While some problems still remain, the experiment has effectively been a successful one.