



**A SOCIO-ECONOMIC FEASIBILITY STUDY
OF THE FOREST TENANT MODEL IN THE
ALGOMA DISTRICT OF ONTARIO**



WILDLANDS LEAGUE

A chapter of the Canadian Parks and Wilderness Society

www.wildlandsleague.org

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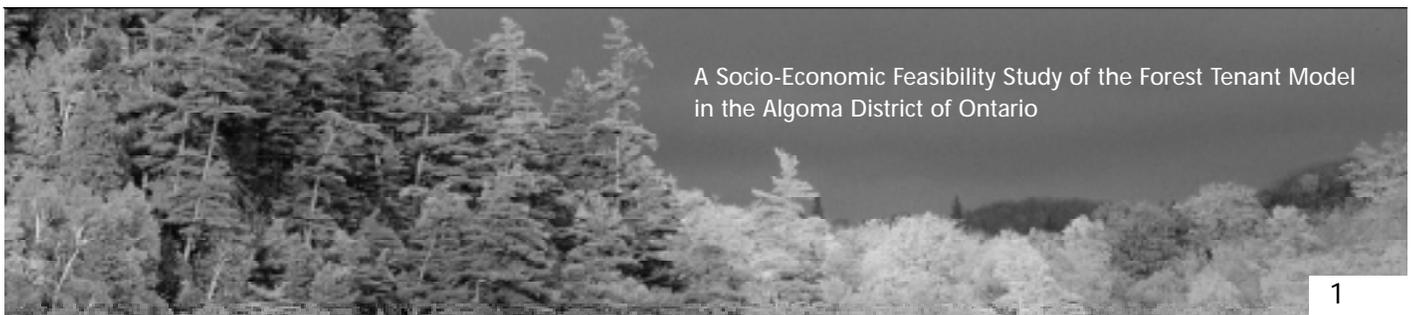


The Wildlands League was founded in 1968 to protect wilderness in Ontario. We joined the Canadian Parks and Wilderness Society (CPAWS) as a chapter in 1980. We are solutions oriented and we get results. We are respected for our science-based campaigns to establish new protected areas, our efforts to ensure that nature comes first in the management of protected areas, and success at addressing issues of resource management and community development. Our mission is to protect wilderness through the establishment of protected areas and the promotion of natural resource use that is sustainable for nature and communities.

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INTRODUCTION

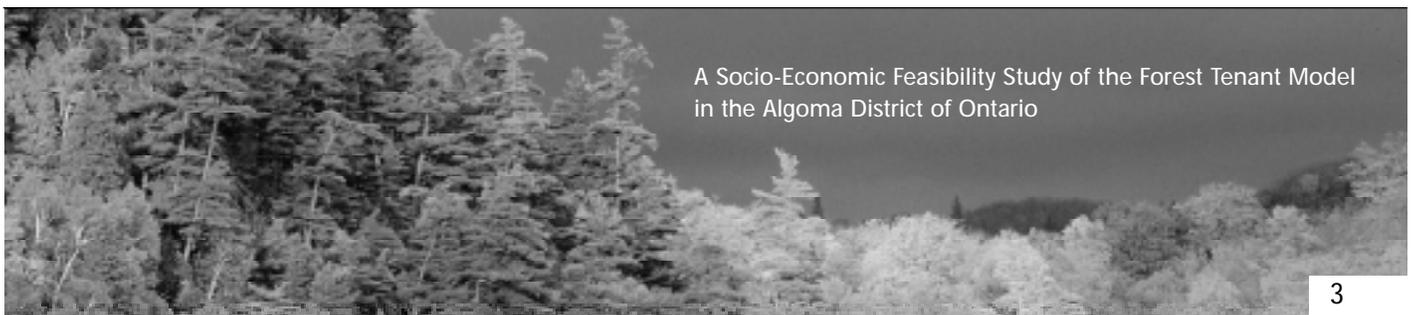
This study assesses the socio-economic feasibility of applying the Forest Tenant community forestry model in the Algoma district of Ontario (Map 1).

Community forestry is based in local control over local resources that provide local benefits and enjoyment.¹ In Ontario today, 63 percent of the total annual allowable harvest is allocated to the seven largest forest companies in the province through Sustainable Forest Licences (SFLs).² Although the Crown Forest Sustainability Act (CFSA) governing forestry on Crown lands in Ontario places constraints on forest harvesting to protect other values, the current industrial model has timber harvest as its driving objective. The investigation and encouragement of community forestry models is aimed at increasing societal benefits from forestry relative to the mainstream industrial model by ensuring that forests are managed for a diversity of values, and that forestry optimizes local benefits like employment and the generation of wealth.

The current arrangement closest to community forestry on Crown land in Ontario is the management of the French Severn Forest (855,446 hectares) by the not-for-profit Westwind Forest Stewardship Inc., a company that is governed by a board of directors including large company representatives, small forest contractors and local citizens. The major shortcoming of the Westwind model is that the board is dominated by timber interests.

The Forest Tenant model was developed and implemented by the Bas St. Laurent Model Forest in Quebec. It is a system that aims to increase public control over forestry and the flow of benefits to the public by making land available to local people to carry out forest management activities. The Forest Tenant project was established as an attempt to combat some of the social and economic difficulties facing the Bas Saint Laurent region. The objectives of the Forest Tenant project include:

1. *Providing employment opportunities in forestry:*
By providing job opportunities in forestry, the program aims to increase the level of employment in the communities and decrease the reliance on social insurance.
2. *Placing greater value on forestry work:*
To utilize the skills of under-employed forest workers and encourage young people to remain in the region to pursue a career in forestry.
3. *Creating wealth in rural communities:*
The individuals who gain employment through the Forest Tenant project have increased



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income to spend within the community. The local purchase of supplies, food and services by the forest tenants contributes to the overall wealth of the community by keeping money in the area.

4. *Ensuring a more equitable sharing of income from forest management:*

By increasing the number of people employed in the forest, the program aims to distribute income from forestry among a greater number of individuals within the community than industrial forest management.

5. *Fostering entrepreneurship:*

By providing individuals with a land base to manage, a sense of entrepreneurship could be developed as tenants explore various opportunities to generate revenue.

In addition, the program was developed to address concerns about the sustainability of forest resources by providing a framework for integrated forest management and to improve the quality of the timber resources through more intensive silviculture.

Determining the feasibility of this study focused on answering four questions:

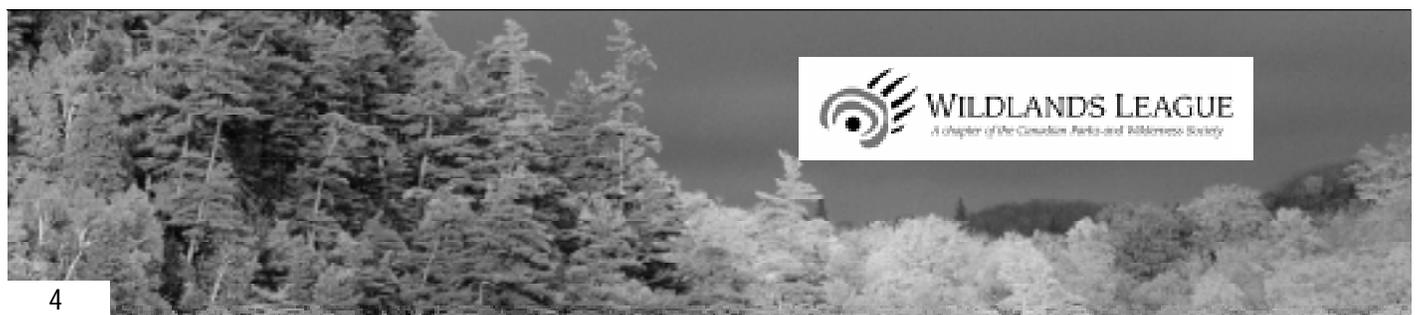
1. Is there a social and economic need for community based forestry in the Algoma district?
2. Is there interest in the Algoma district for the Forest Tenant model?
3. Is the Forest Tenant model economically viable in the forests of the Algoma district?
4. Is the Forest Tenant model feasible within the institutional framework in Ontario on Crown land, private land, and/or First Nation reserve?³

With the exception of specific findings of socio-economic need and interest in the Algoma district, the results of this investigation can be applied to areas of similar forest cover in Ontario.

2. FOREST TENANT MODEL

Description of the Bas Saint Laurent region

The Forest Tenant model is a unique model for forest management. It was first implemented in 1994 by the Foret modele du Bas-Saint-Laurent in western Quebec. The Foret modele du Bas-Saint-Laurent lies within the Great Lakes – St. Lawrence forest region. The forests of the area are productive and have the capacity to produce high value timber, but have been severely high-graded over the past 200 years. This has resulted in the loss of high-value timber species and the degradation of other forest resources. The Forest Tenant Model is being applied on two parcels of forest covering 47,600 hectares: the *Seigneurie du Lac-Metis* and *Seigneurie Nicolas-Riou*, which have been owned by Abitibi-Consolidated Inc. since 1876 and 1911



respectively. These pieces of land are relatively remote from the company's other forest operations in the region and from the company's mills.

The Forest Tenant Model was developed to address a number of social and economic problems facing the area. The Bas-Saint Laurent region is heavily dependent upon natural resource extraction, with an emphasis on primary manufacturing over secondary value-added manufacturing. The forest industry makes a critical contribution to the region's economy. However, in recent years the number of jobs available in the forest industry has been declining as a result of changes in technology and slowing industrial activity. The low employment rate in the region has caused many residents to migrate from rural areas to urban centres. It is projected that the population in the region will decline by 14.4% by the year 2016, with an accelerated decrease in the number of young people.⁴ Often, employment in the forest industry or other resource industries is part time and workers must rely on employment insurance to supplement their income. Sixty-three percent of forest workers in Quebec rely on employment insurance.⁵

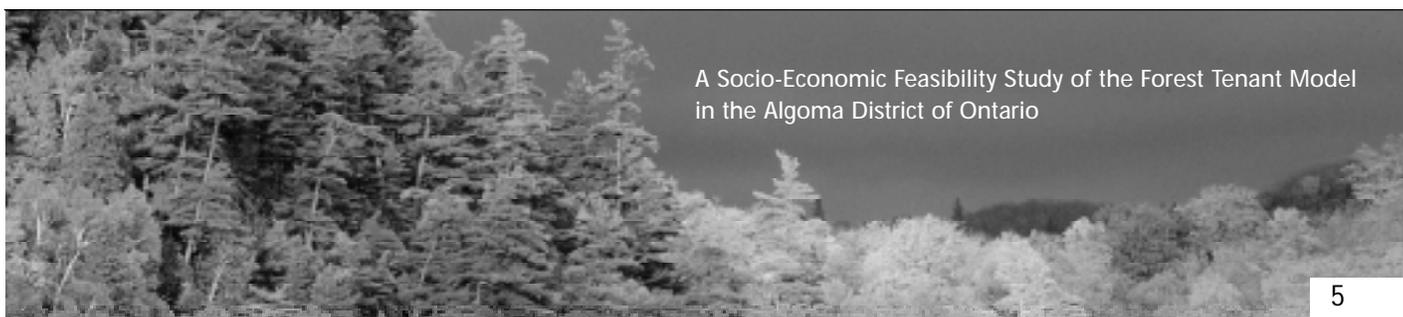
Explanation of the Forest Tenant model

The Forest Tenant concept can be defined as:

Allocation of a unit of forest land to an individual, called a forest tenant farmer, who agrees to manage it on a sustainable basis and to share its usufruct with the landowner⁶

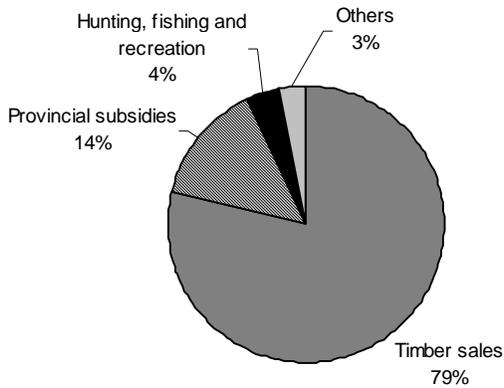
Abitibi-Consolidated owns the land that is used for the Forest Tenant project. The company has delegated the management of timber, wildlife and recreation on these lands to the Bas Saint Laurent Model Forest. The Model Forest has divided the two areas into 25 plots averaging 1000 hectares each and has developed contracts with tenant farmers for the management of each plot. The area of the forest managed by each tenant farmer was established to allow for a stable income to be derived through timber extraction. The tenant farmers are responsible for managing and operating their tenant farms in a sustainable manner. The tenants receive income from timber and non-timber resources and pay stumpage fees to the Model Forest for timber harvested.

The Model Forest prepares five-year multi-resource management plans for the area in cooperation with forest tenants and partners of the Model Forest. The multi-resource management plans include a calculation of the allowable harvest, silvicultural prescriptions, and measures to provide wildlife habitat. Each forest tenant is required to manage his/her forest according to the multi-resource management plan and to prepare an annual operating plan in cooperation with Model Forest support staff. The forest tenants of each seigneurie



have formed cooperatives to jointly manage fishing, hunting and recreational activities. The forest tenants also cooperatively set the price for their timber. In delegating management responsibility of the territories to the Model Forest, Abitibi-Consolidated retained the right to determine the destination of timber harvested from the land. Therefore, forest tenants negotiate the price of the timber with the mill specified by the company.

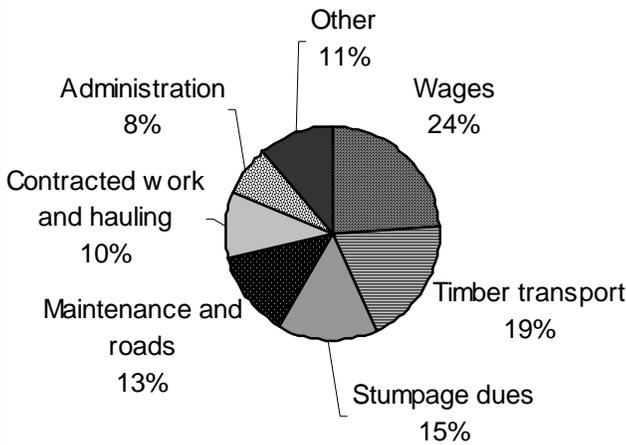
Fig. 1. Average annual income of forest tenants



Breakdown of costs and revenue

Forest tenants generate an average gross income of \$106,105 annually, almost 80% of which comes from the sale of harvested timber (Figure 1). The expenses of managing the tenant farms average \$74,658 annually and include wages, stumpage fees and timber transport costs (Figure 2). The average net income of tenant farmers is \$31,447. In addition to the income gained by the tenant farmer, wages are paid to employees and contractors of the operations, thus providing additional employment for individuals in the community.⁷

Fig. 2. Average annual expenditures of forest tenants



It is important to highlight that 14% of the income of tenant farms is derived from provincial subsidies.⁸ The Québec government provides subsidies for silviculture on private woodlots through the Private Forest Development Program. The province views the tenant farms as private woodlots, thus allowing access to the available funding. This situation is unique to Québec; the Ontario government has no equivalent program for private-land forestry.

The Model Forest collects approximately \$200,000 per year in stumpage fees, an average of \$8000 from each tenant. To date, the stumpage fees have been reinvested in the Forest Tenant project fund for silvicultural and construction operations, salary taxes, and establishment of a compensation fund for the tenants. The Model Forest is planning to provide Abitibi-Consolidated with a portion of the stumpage fees in the near future.



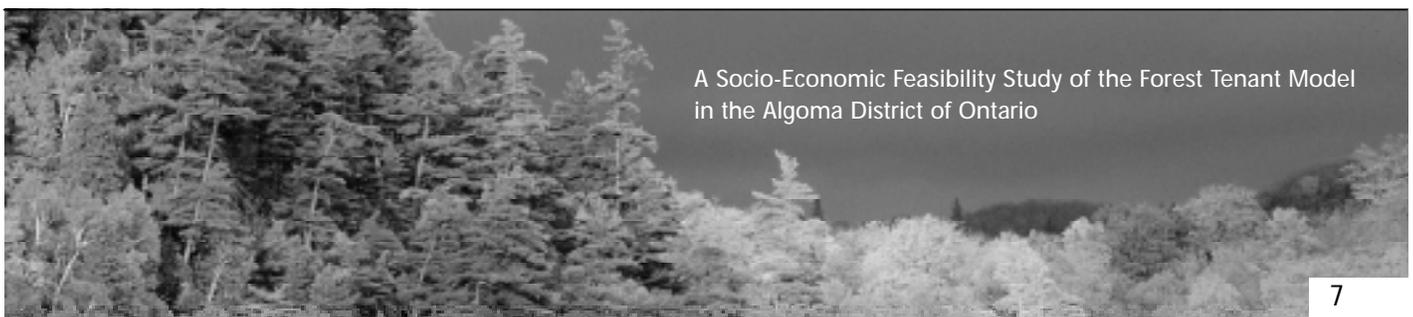
Advantages and disadvantages of the Forest Tenant Model

The Forest Tenant project has produced substantial benefits for the individuals involved and the local communities. The 25 tenant farmers have the opportunity to work independently in the forest and earn a decent income. When surveyed, many indicated a high degree of satisfaction with the system in terms of both monetary and non-monetary benefits. Prior to implementation of the model, 88% of the tenant farmers received employment insurance for part of the year. An estimated \$165,000 per year is saved on employment insurance now that these individuals have a stable income. The non-monetary benefits include a sense of pride in the work and the forest, the ability to enjoy the environment and to cooperate with the other tenant farmers. The Forest Tenant Model provides individuals who would otherwise not be able to afford the purchase of enough land to run a viable operation, an opportunity to manage a woodlot. In addition, the Model Forest provides an important source of support that allows the tenant farmers to plan forest management activities and operate a business.

The benefits of the Forest Tenant project extend beyond the 25 tenant farmers. Each tenant hires an average of 2.5 employees and sub-contracts additional work to local businesses. The majority of spending for operating the Forest Tenant project, including maintenance and repairs, and fuel and supplies, occurs within the region and therefore contributes directly to the local economy.⁹

The Forest Tenant project also has ecological advantages when compared to the historical forest management system. There are more people working in the forest, resulting in more intensive forest management. Silviculture is aimed at restoring a more natural species and age class distribution and improving the quality of wood that can be harvested over time. The landowner, Abitibi-Consolidated, will therefore benefit from the improvements to the forest condition in the long run. The operations are not highly mechanized. All operations are carried out through the more labour-intensive method of chainsaw-felling and skidding). Clearcuts are limited to four hectares, and the use of herbicides and pesticides are prohibited. The multi-resource management plans ensure that non-timber resources and environmental values are maintained during harvesting. The model places value on non-timber resources by allowing the forest tenants to gain economic benefit from them, thus providing incentives to manage all forest resources sustainably. The formation of cooperatives to collectively develop recreation, hunting, fishing and non-timber forest products allows for a diversification of economic benefits flowing from the forest to the community.

One disadvantage of the Forest Tenant model as it has been applied in Quebec is that Abitibi-Consolidated retains the right to determine the destination of timber harvested from the area.



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Some participants feel that they would receive larger profits if the wood could be sold on an open market. Additionally, this provision restricts the ability of forest tenants or the local community to establish value-added processing. To date, the percentage of the forest tenants' income that is derived from non-timber resources is very low. When surveyed, some of the forest tenants expressed disappointment that non-timber resources have resulted in little profit. This may reflect the fact that establishing the timber-management component of the program was a priority during the first years of operation. Hopefully, over time more attention will be focused on developing non-timber opportunities.

3. STUDY AREA

The Algoma District of northern Ontario covers approximately 50,000 km² and has a population of 118,567. The City of Sault Ste. Marie is the major urban centre in the Algoma District and contains 63% of the population. The rest of the population is dispersed in smaller communities clustered along Highway 17, the TransCanada highway.

The Algoma District is situated primarily in the Great Lakes – St. Lawrence forest region and extends into the boreal forest region in the northern portion of the district. Extensive logging since the middle of the nineteenth century has significantly impacted the overall forest condition. High grading and inadequate renewal of certain species has shifted the forest composition to a greater percentage of white birch, poplar and hard maple and less white and red pine, yellow birch and red oak. The high grading also favoured the retention of poor quality trees, resulting in many areas of hardwood forest with relatively low commercial value. Past logging has also depleted the area of forest in over-mature age classes and increased the portion of middle-age classes^{10,11}

There are two provincial licence areas that cover most of the Algoma district: the Algoma Forest Management Unit (FMU) and the Northshore FMU. The Algoma FMU is 1,002,200 ha in size, 59% of which is managed Crown forest. The remainder is divided between patent land, federal land, provincial parks and conservation reserves, and First Nation reserve. The majority of the forest is made up of sugar maple and white birch working groups, followed by balsam fir, jack pine and white pine. Black spruce, yellow birch and eastern cedar make up a small percentage of the forest, while white spruce, red maple, eastern hemlock, red oak, red pine, larch and ash each account for 1% of the total Crown forest.¹²

A Sustainable Forest Licence (SFL) for the Northshore FMU was issued to Northshore Forest Management Inc. in 1999. The licence covers 1,238,630 hectares, 77% of which is managed Crown forest with the remainder divided between patent land, provincial parks and reserves



and First Nation reserve. The forest contains white and red pine, hemlock, yellow birch, sugar and red maple, red oak, basswood, white elm and poplar, with small amounts of cedar, balsam fir and white and black spruce. The dominant working groups are jack pine, poplar and white birch (61% combined). Past logging practices have resulted in the decline of several high value species, including red and white pine. The majority of the forest lies within the middle age classes, with 34% between 41-60 years old and only 9% older than 100 years.¹³

There are seven First Nations in the Algoma district – two in the Algoma FMU (Garden River and Batchewana First Nations), and five in the Northshore FMU (Thessalon, Mississauga, Serpent River, Sagamok Anishnawbek and Whitefish River). Six of these First Nations (excluding Whitefish River, which is a member of the United Chiefs and Councils of Manitoulin Island) together form the North Shore Tribal Council, which in turn is part of the provincial treaty organization called the Union of Ontario Indians or Anishinabek Nation. The Robinson Huron Forest Company and the Mitigaawaaki Forestry Marketing Co-operative are both affiliated with the North Shore Tribal Council and provide technical support to the First Nations. The Anishnawbek people have lived in the region for over 6,000 years and continue to depend on the forests for food, shelter, cultural and spiritual values and economic activity.

4. STUDY METHODOLOGY

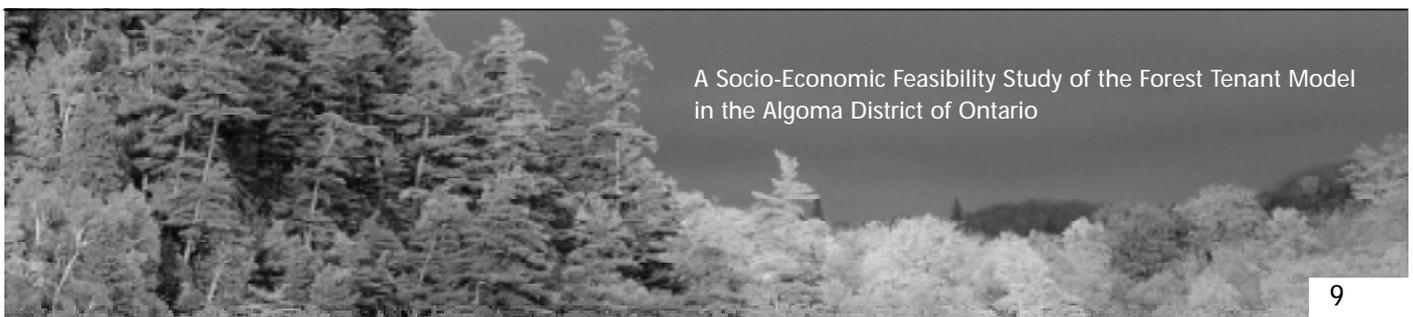
Assessing the socio-economic need for community forestry in the Algoma district

The social and economic need for community forestry was assessed by examining the demographics of the Algoma district, allowing a comparison of population and employment trends of the conditions that existed prior to the start-up of the forest tenant model in the Bas St. Laurent region. This information was obtained from the Statistics Canada website.¹⁴ The degree of local control over forest management planning and implementation was also considered.

Information on Aboriginal demographics and employment in the forestry industry were obtained from the Class Environmental Assessment for Timber Management in Ontario¹⁵ and the First Nations Strategic Business Plan for Forestry¹⁶

Assessing interest in the Algoma district for the Forest Tenant model

Interest within the Algoma district for the Forest Tenant model was assessed through a number of workshops, presentations, and interviews with local people, First Nation communities and organizations, large private landowners, the forest industry, independent logging operators, and government staff. A list of meetings and participants is provided in Appendix A.



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Assessing the economic viability of the Forest Tenant model in the forests of the Algoma district

The economic feasibility of the Forest Tenant model in the Algoma district was assessed by carrying out a detailed timber economic analysis on an area of forest within the district. This analysis was augmented by a consideration of the potential for non-timber economic contributions.

An area of forest was chosen for the detailed timber economic analysis that had an up-to-date high-quality Forest Resource Inventory on which to base the analysis. This forest is broadly indicative of the common forest types in the Algoma district; it is a Great Lakes - St Lawrence forest type, consisting predominantly of tolerant hardwoods like sugar maple, yellow birch, red oak, red maple, with smaller proportions of eastern hemlock, white pine and red pine, and poplar and white birch as common early successional species. No active forest management has occurred on this forest since 1992. It is generally considered to be a well-managed forest, with a greater proportion of forest in mature and older age classes.

Because the analysis involves calculations of costs and revenues, the landowner's identity will not be divulged in this public report. Should the landowner decide to pursue the Forest Tenant model on this land, it can make itself known to FedNor and/or other agencies potentially interested in supporting the project.

The timber-economic analysis was performed by the Robinson Huron Forestry Company using three models developed by their chief forester.¹⁷ The first model summarized the volume of timber available for annual harvest using forest resource inventory (FRI) for the land. The second model used assumptions of merchantability and utilization to estimate amounts of timber product from the annual available harvest. The third model used estimates of cost and revenue to determine the economic feasibility of the timber production. All inventory data, and calculated growth rates were based on actual measures from the forest.¹⁸ Selection harvests are assumed for tolerant hardwoods, shelterwood harvests are assumed for red and white pine, and clearcut harvests are assumed for poplar, birch and spruce. All other assumptions and estimates of model inputs were based on local industry standards. A list of all relevant model inputs are described in Appendix B. Key expected costs and revenues per cubic metre of product that were used as inputs to the model are listed in Appendix C.

The forest area consists of seven smaller discrete operating units identified based on road access. The timber economic analysis was done for each operating unit individually to explore whether these units would make appropriate forest tenant management parcels. Comparing



the average predicted annual income from each of these operating units to the average annual income of the Forest Tenant project in Quebec gave some indication of relative feasibility of the model in the Algoma district.

The potential economic contribution from non-timber forest products was assessed by considering existing and future opportunities for non-timber forest management. The study made specific use of a community research report on non-timber forest products carried out by the North Shore Tribal Council to consider opportunities on First Nation reserve.¹⁹

Assessing the feasibility of the Forest Tenant model within the institutional framework in Ontario on Crown land, private land, and/or First Nation reserve

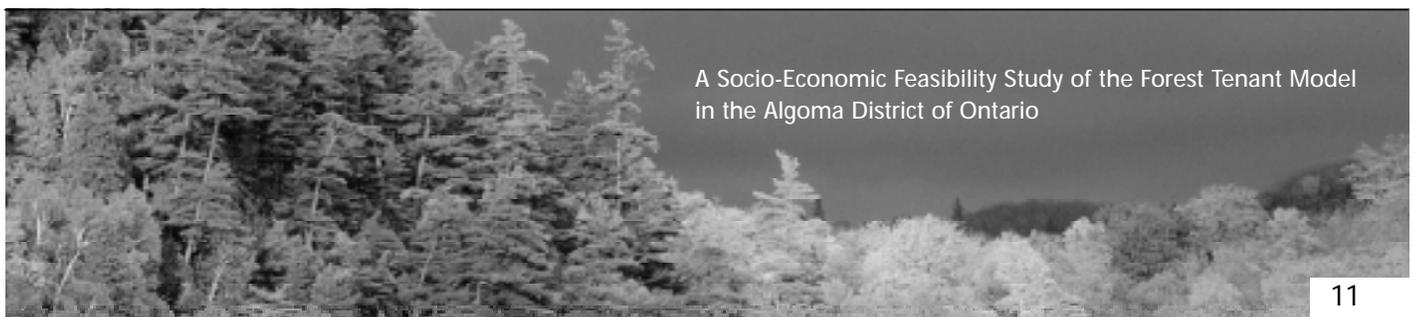
The feasibility of implementing the model in the Algoma district was assessed by examining the institutional opportunities and obstacles presented on private or public land and on First Nation reserve. This assessment required an analysis of the legal frameworks governing forestry on public land, private land and First Nation reserve, as well as a consideration of current management models and licencing arrangements in place in Ontario. The analysis considered the implications of the following legislation:

Public land:	Crown Forest Sustainability Act and its associated regulations and policies for Crown land management and licencing
Private land:	Municipal Act, which empowers municipalities to create tree-cutting bylaws on private land
First Nation reserve:	Indian Act and associated regulations that control the cutting of timber on First Nation reserves

5. RESULTS

Is there a social and economic need for community based forestry in the Algoma district?

The population of the Algoma District declined 5.5% between 1996 and 2001, while the population of the province of Ontario grew 6.1%.²⁰ The unemployment rate at the time of the 1996 census was higher in most towns in the Algoma District than the provincial average of 9.1%. Sault Ste. Marie, Iron Bridge and Blind River had unemployment rates of 12.8%, 20.9% and 18.8% respectively.²¹ The dependence on resource-based industries varies between the towns within the district, with forestry and wood processing providing an important source of employment.



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Table 1 shows population trends, unemployment levels, and the number of people directly employed by primary resource-based industries in the Algoma district. Most communities declined in population between 1991 and 1996 and experienced high levels of unemployment.

Table 1: Population trends, unemployment levels and the number of people directly employed by primary resource-based industries in selected towns in the Algoma district.

Town/Twp.	Population	Population. Change (%) 1991-96	Unemployment Rate (%) - 1996	Employment in resource- based industries (primary)
Espanola	5454	-1.3	14.0	100
Webbwood	563	-4.3	10.8	10
Nairn	419	-3.2	15.9	20
Massey	1171	-1.3	17.6	25
Northshore	678	-7.0	23.2	60
Elliot Lake	13588	-3.6	15.3	695
Blind River	3152	-6.1	18.8	70
Iron Bridge	777	-5.6	20.9	85
Thessalon	1485	-3.8	10.0	85
Bruce Mines	653	-4.5	11.5	20
Spanish	899	-3.0	25.8	55
Goulais, Searchmont	7383	-.09	17	265
Sault Ste. Marie	80054	-1.7	12.8	725

Source: Statistics Canada, 1996 Community Profiles (<http://ceps.statcan.ca/english/Profil/PlaceSearchForm1.cfm>)

The Algoma FMU is managed by Clergue Forest Management Inc, which is owned by five companies: St. Mary's Paper Ltd., Domtar Inc., Weyerhaeuser Canada, Midway Lumber Mills Limited and Columbia Forest Products Ltd.²². Contractors harvest the timber allocations of each of these companies.²³ This arrangement gives forestry contractors and workers little direct control over forest management planning.

Northshore Forest Management Inc. is the licence holder for the Northshore FMU. The company is governed by a board of directors with four shareholders represented: Domtar Inc., Midway Lumber Mills Ltd., St. Mary's Paper Ltd. and the Northshore Independent Forestry Association (NSIFA) Inc. Domtar Forest Resources has been hired to conduct forest



management within the Northshore Forest and is responsible for allocating harvest areas to the 31 independent licensees that hold overlapping forest resource licences. Most of these independent loggers are represented by the NSIFA.

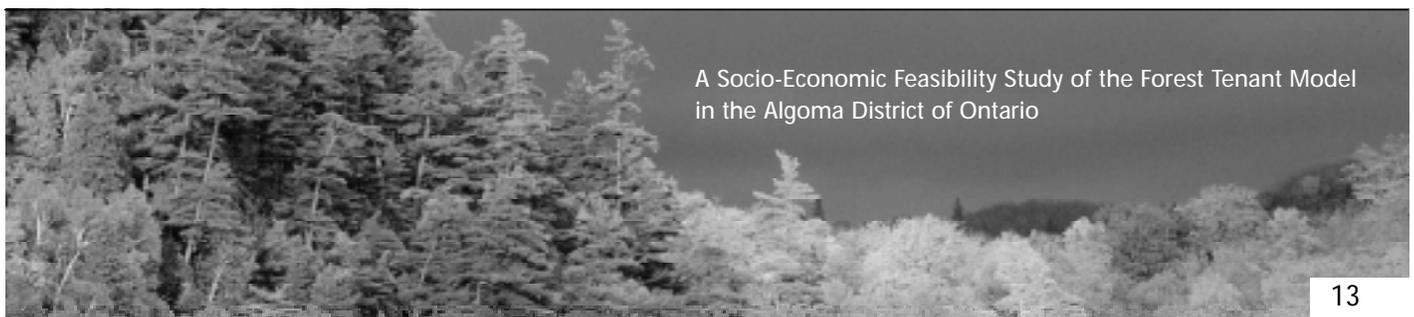
The abundance of overlapping forest resource licences reflects the historic development of forestry in the area, which resulted in many small, independent logging operations harvesting within the Northshore Forest. Independent licences are welcome to sit on the planning team, which is responsible for writing the forest management plan, and are active on several sub-committees overseeing implementation of the plan, including health and safety, forestry operations and compliance. Domtar, Midway Lumber and St. Mary's Paper have the first right of refusal for most of the wood harvested from the Northshore licence area, therefore the overlapping licence holders do not determine the destination of the timber.

The participation of Aboriginal people in the forest industry in the Algoma district is very low. Previously, First Nation contractors conducted a large portion of the silvicultural work, however, the number of First Nation people employed in the forest industry has declined significantly over the past 30 years. In the Northshore Forest, for example, Aboriginal people only fill 3.7% of all forestry-related jobs, although they comprise 17% of the total population.²⁴ Further, very few First Nation people are involved in forest management. Most work for someone else providing manual labour.²⁵ This exclusion from forestry has resulted from a long and complex history involving the relationship between First Nations and the Crown and is not the topic of this report. However, three key contemporary factors contribute to the continuation of this exclusion.

First, poor past management of forests on reserve by the federal Crown has resulted in degraded forest conditions that in most cases preclude the possibility of sound management and profit without an onerous restoration investment.^{26,27} Second, provincial Crown resources within Aboriginal traditional lands²⁸ and adjacent to reserves are typically already allocated to non-Aboriginal interests.²⁹ Third, lack of access to capital to finance new projects and companies inhibits First Nations from seizing opportunities and new allocations when they become available.³⁰ Fourth, most reserves are too small in area to provide self-sufficiency. Only a very small (less than 0.27%) amount of Ontario's and Canada's forest area is First Nation reserve.³¹

Is there interest in the Algoma district for the Forest Tenant model?

Most of the individuals interviewed to assess the relevance and value of the Forest Tenant Model in Algoma felt that the model had merit and that it could potentially improve the quality and local benefits of forest management. However, differing opinions existed about whether



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or not it should be considered for application on private land, Crown land or First Nation reserve.

With the exception of First Nations, interviewees were generally not supportive of the model being applied on lands for which they were responsible for management. Rather, there was an interest in preserving the status quo of licencing and forest management. Therefore, the Ministry of Natural Resources district manager felt that the model could be applied on private land or First Nation reserve but not Crown land. Private landowners did not express any interest in the model on their land.

Northshore Forest Management Inc. and the NSIFA also both said that they felt the licence and management structure of the Northshore FMU met many of the objectives of the Forest Tenant model due to the high number of independent local entrepreneurs having harvest and timber sale rights as well as their involvement in the planning and overall management of the forest. There was also a concern expressed that introducing the Forest Tenant Model on Crown land in Algoma would require dislocation of current licence holders and contractors.

Most of the interest in the Forest Tenant Model was expressed by local First Nations. First Nation interviewees felt that the model had merit on all types of land: First Nation reserve, Crown land and private land. Key potential benefits of this model identified by First Nations include:

- i. More permanent employment
- ii. More First Nation members working on the land than there would be if contractors harvested for the community
- iii. Revenue associated with managing and selling products would provide more of a work incentive than would contracts
- iv. People would be self-employed and more self-reliant
- v. An opening of opportunities for First Nation forest management and additional forestry jobs on Crown land
- vi. More likely than the industrial model to ensure that all resources are conserved for future generations
- vii. Opportunity for restoration of degraded forests on reserves
- viii. Alleviating management workload of First Nation staff

An interesting parallel was drawn between the Forest Tenant model and traditional Aboriginal land management. Historically, families used areas that were passed on through generations and managed for trapping, hunting, plant gathering and other activities. Although the



connection of specific families with their traditional areas has declined, traditional land management could provide guidance to the development of community-based management models for First Nations.

The biggest concern expressed by First Nations was that giving individuals exclusive rights to manage discrete areas of reserve would be inconsistent with community rights and access to that land. Some interviewees also felt strongly that the name of the Forest Tenant Project was inappropriate because of its reference to the feudal system of land management.

Many of the questions or concerns expressed by individuals were not related to the Forest Tenant concept, but to its implementation. For example, concerns were expressed regarding the start-up costs of management for both timber and non-timber values, and there were questions about how planning and operations would be implemented, monitored, and overseen. In addition, many people expressed the need for an economic feasibility study for the Algoma district to be completed before any comment could be made about whether the Forest Tenant model is relevant for the area.

The most commonly expressed concern with the model itself was the greater inherent inflexibility of forest tenants managing small, discrete parcels of land, rather than collectively sharing management of a larger forest or collection of forests. Exclusively managing small areas of forest may decrease the diversity of products available, thereby reducing the manager's ability to respond to market preferences for different products.

Is the Forest Tenant model economically viable in the forests of the Algoma district?

The estimated costs and revenues associated with forest management in the seven operating units of the forest area studied are presented in Table 2. Net revenue is what remains after all costs are subtracted from the total revenue of sales. However, many of these costs are labour costs for activities that would be carried out by the forest tenant, and therefore also contribute to the annual income of the tenant. Total annual income available to the forest tenant from all sources of revenue and labour are presented in Table 3.

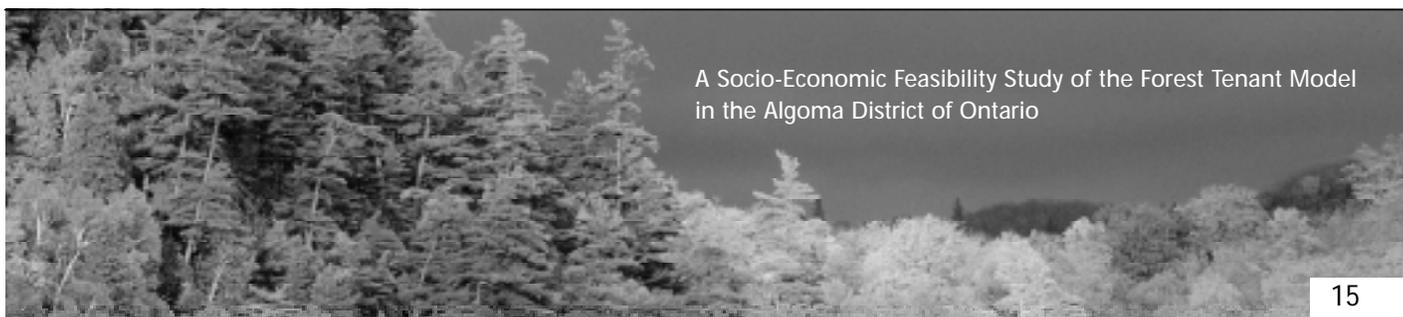


Table 2: Predicted annual costs and revenues from timber harvest of the seven operating units in the study area forest.

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7
Costs							
Harvest cost	\$27,956	\$36,394	\$31,988	\$63,182	\$30,398	\$29,148	\$24,411
Road cost \$1,106	\$1,408	\$1,233	\$2,541	\$1,182	\$1,166	\$971	
Stumpage \$9,139	\$12,002	\$12,747	\$19,095	\$9,372	\$11,981	\$7,543	
Management fee	\$2,612	\$3,327	\$2,913	\$6,004	\$2,793	\$2,755	\$2,295
Capital roads cost	\$3,703	\$4,717	\$4,130	\$8,512	\$3,960	\$3,906	\$3,253
Administration	\$2,764	\$3,520	\$3,082	\$6,353	\$2,955	\$2,915	\$2,428
Total costs	\$47,280	\$61,369	\$56,093	\$105,686	\$50,660	\$51,872	\$40,901
Revenue \$51,789	\$69,458	\$64,012	\$113,325	\$56,318	\$55,478	\$44,910	
Net revenue	\$4,510	\$8,089	\$7,919	\$7,639	\$5,658	\$3,606	\$4,010

The total estimated annual income for forest tenants working in each operating unit of the study area ranges from \$18,825 to \$45,960.67, with an average income of \$27,296. The income range of tenant farmers in the Bas St. Laurent Model Forest in 1998/99 was \$10,000 to \$60,000 with an average income of \$31,447.³² However, the average income of the farmers in Quebec across all years (1994-2000) was only \$27,962.50.³³

On First Nation reserve and private land, the opportunity exists to increase this average annual revenue by either decreasing stumpage fees, or re-investing them in the forest to defray costs of management.

These estimates for the Algoma district are based on a forest with a good management history. It is important to note that in Quebec, 14% of the average annual income came from management and silvicultural subsidies. The absence of these subsidies in Ontario would result in an annual income that would be significantly lower in degraded forests in need of restoration.

A survey conducted in 2000 by Bas-St. Laurent Model Forest staff indicates that 37% of forest tenants in Quebec are dissatisfied with their level of income. When asked what level of income would satisfy them, the average response was \$37,000. Lack of profitability is the most common reason cited by former tenant farmers for relinquishing their tenancies.³⁴

One-third of the annual harvest cost for each operating unit is labour costs for contract

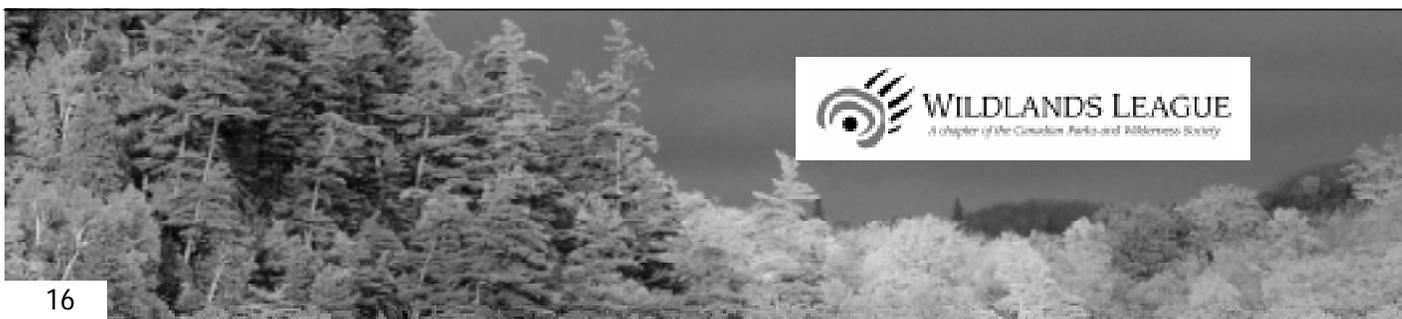


Table 3: Total Revenue available to forest tenants and contractors from management operations in the seven operating units in the study area forest.

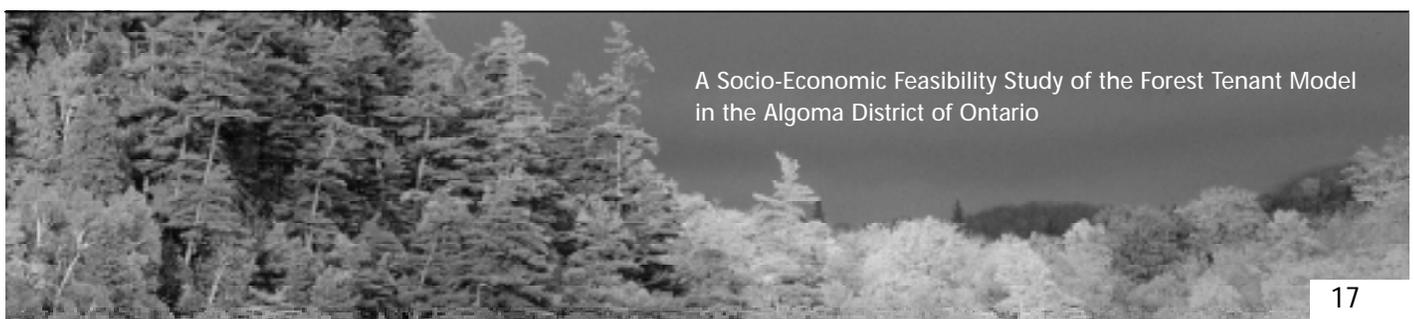
	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7
Annual area of harvest (ha)	24	32	26	33	25	23	20
Income source for tenant:							
Net revenue	\$4,510	\$8,089	\$7,919	\$7,639	\$5,658	\$3,606	\$4,010
Harvest labour	\$9,318.67	\$12,131.33	\$10,662.67	\$21,060.67	\$10,132.67	\$9,716	\$8,137
Planning labour	\$870.67	\$1109	\$971	\$2002	\$931	\$918.33	\$765
Administration labour	\$2,764	\$3,520	\$3,082	\$6,353	\$2,955	\$2,915	\$2,428
Silvicultural labour	\$ 3,046	\$4,000	\$4,249	\$6,365	\$3,124	\$3,993	\$2,514
Road maintenance labour	\$1,106	\$1,408	\$1,233	\$2,541	\$1,182	\$1,166	\$971
Total Income	\$21,615.34	\$30,257.33	\$28,116.67	\$45,960.67	\$23,982.67	\$22,314	\$18,825
Contractor:							
Harvest labour	\$9,318.67	\$12,131.33	\$10,662.67	\$21,060.67	\$10,132.67	\$9,716	\$8,137

assistance of the forest tenant with silvicultural operations. This indicates enhanced employment benefits beyond the income of the forest tenants.

The total annual harvest area within each operating unit ranges from 20 to 45 ha. This is within the reasonable range of what a forest tenant and her contractor could be expected to accomplish within a year with all associated silvicultural operations, based on local industry standards.^{35, 36}

In addition to readily quantifiable timber revenues there are potential non-timber revenue sources as well. These are numerous and diverse, as suggested by one possible definition: “NTFPs [are] those biological organisms, excluding timber, valued by humans for both consumptive and non-consumptive purposes found in various forms of forested landscapes.”³⁷

Non-timber forest resources play an important role in the Algoma district, particularly resource-based tourism



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such as hunting, fishing and canoeing. In the Northshore Forest alone, there are 137 designated tourism lakes and 270 lake trout lakes. There are 70 main base lodges and 120 outpost camps, many of which are not accessible by road. The provincial government has established 80 active Bear Management Areas and 110 trapping areas that are currently licenced to operators.³⁸

There are also many traditional non-timber forest products that are currently produced by local First Nation communities including maple syrup, birch bark crafts and ash baskets.³⁹ Such non-timber forest products continue to be of great importance to local First Nations, but they are generally not produced commercially.

Bear management areas and traplines in the province are licenced through the provincial Ministry of Natural Resources to established users. Opportunities for forest tenants to manage these resources are therefore limited due to existing tenure rights. Similarly, direct revenue from trapping, hunting and fishing licences would not be available to forest tenants because these systems are administered through the Ministry of Natural Resources. However, on private and First Nation reserve, an additional access fee could be charged to generate revenue as is currently being done by Mississauga First Nation, in the north shore region.⁴⁰ Another possible form of revenue from these types of activities could be derived from the rental of cabins and camps to anglers and hunters. The Union of Ontario Indians is set to sign an agreement that will make it the trapping authority in its territory.⁴¹

A study carried out by the North Shore Tribal Council identified a wide range of traditional non-timber forest products that are currently collected for the purpose of income generation in North Shore communities. A partial list is reproduced in Table 4.

Although some First Nations community members interviewed felt that at this point non-timber forest products are not a viable source of revenue on their own, they could increase the overall revenue available to a tenant farmer. The Mitigaawaaki Forestry Marketing Co-operative, which is an organization of the North Shore Tribal Council, is dedicated to developing strategies and business plans for some of these products and has already done so for a maple syrup bottling facility. The support and planning offered by the Mitigaawaaki Forestry Marketing Co-operative may increase the attractiveness of non-timber forest product opportunities to increase revenue for First Nation tenants if they were to undertake a forest tenant project.⁴³

Any of the non-timber forest products opportunities discussed could potentially add to the estimated annual revenue of forest tenants.



Table 4: Some common non-timber forest products currently collected for income generation in North Shore First Nation communities.⁴²

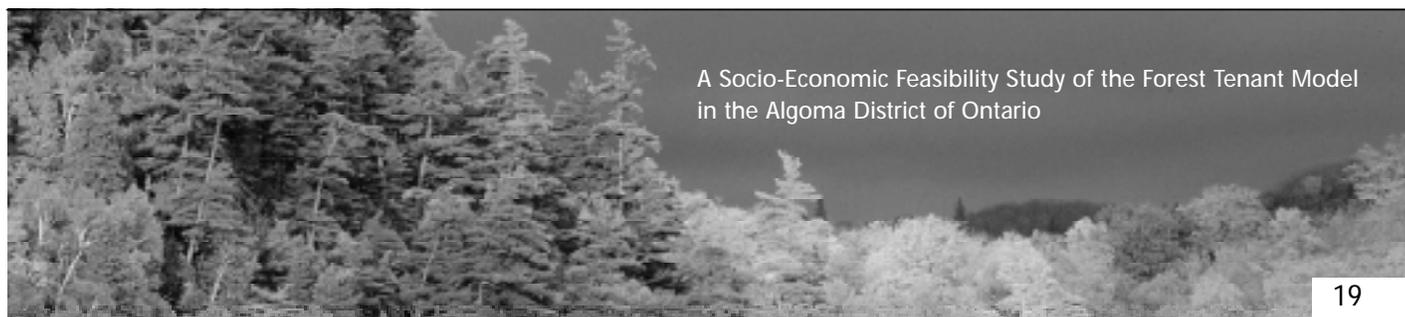
Product	Use
Maple sap	Maple syrup
Sweet grass	Pow-wows
Red willow	Dream catchers, crafts
Wild flower seeds	Restocking marshes, etc.
Evergreen boughs	Decorations
Edible berries	Jams, jellies, syrups, etc.
Moss	Wreaths
Cone collecting	Tree growing
Wild game	Canned and smoked meat
Various vegetation	Decorations
Animal hides	Clothing, footwear, art work
Birch	Tables, desks, crafts
Willow, Ash	Crafts
Mushrooms	Cooking
Ash, Birch, Oak	Canoes, arts and crafts
Conks (fungus)	Artwork
Cedar	Boxes

Two other emerging areas of economic activity in the forest sector may be able to provide additional income to forest tenants. Value-added wood products, although not directly assessed in this study, are receiving much attention provincially.⁴⁴ Using biomass, such as low grade plant material coming from improvement cuttings, for the production of energy is a potential market that could add income as well as produce lower-emission energy.

Is the Forest Tenant model feasible within the institutional framework in Ontario on Crown land, private land, and/or First Nation reserve?

On public land

Licencing, planning and management of public forests in Ontario is governed by the Crown Forest Sustainability Act. Two main requirements must be met for the Forest Tenant model to be feasible on provincial Crown land in Ontario. The first is the possession of tenure, which is controlled through licencing. The second is the ability to meet all legal requirements for planning and management.



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The Crown Forest Sustainability Act stipulates that tenure for the harvest of Crown forests can be granted in two ways. The first is through a Sustainable Forest Management Licence (SFL). Although there are no clear rules or regulations favouring this result, all but one of the licenced forest management units in the province are licenced to private companies or groups of companies. The tendency is for the MNR to grant SFLs to companies that own mills. The exception to this pattern is the French Severn Forest managed by Westwind, a non-profit planning body governed by a local board of directors.

The second mechanism for tenure transfer is licencing of a Forest Management Board under section 15 of the Crown Forest Sustainability Act. No such boards currently exist in Ontario, nor has the Ministry of Natural Resources (MNR) yet developed a regulation that would facilitate the creation of such a board. In fact, the MNR committed itself in 1995 through the New Business Relationship and the Forest Management Business Plan policies to application of the SFL style of management across the province.⁴⁵

Either of these two arrangements could support the Forest Tenant model in Ontario. This would simply require the granting of a licence by the Crown to a legal entity (such as a community board, or non-profit organization) representing the forest tenants for the management of the FMU.

However, despite being possible under the current legislation and regulations, the current pattern of tenure in Ontario suggests two obstacles for a Forest Tenant project. First, the predominance of industrial licences suggests a preference for this arrangement over alternative models. Second, all the Crown forest in Ontario has already been licenced to SFL holders with the exception of two FMUs: the Kenora Crown Management Unit (569,664 ha), and the Temagami Crown Management Unit (347,982 ha). Although the CFSA gives the Minister of Natural Resources discretionary power over termination, renewal and granting of licences, there is no precedent for a company losing its SFL. It is therefore most feasible that a Forest Tenant project in Ontario would be established either as part of an existing SFL or in one of the remaining unlicenced FMUs.

The second main consideration for the feasibility of applying the Forest Tenant model on Crown land in Ontario is the ability to meet all legislated planning and management requirements. In an effort to ensure sound management of Crown forests, the CFSA prescribes a lengthy, complex and expensive forest management planning process. The cost of this process is relatively fixed, regardless of management unit size, meaning that the relative cost increases with decreasing area. This fixed cost averages approximately \$500,000.



The relatively inflexible and high cost of preparing a forest management plan on Crown land is untenable for the Forest Tenant model, which is intended to occur on a small scale and would not generate enough revenue to offset this cost. It therefore appears that the Forest Tenant model on Crown land would be most feasible if applied on part of an FMU that is licenced to some other body, such as an SFL or a Forest Management Board.

The final consideration for the feasibility of the Forest Tenant model on Crown land is pre-existing wood commitments. All of the wood harvested on Crown land is committed through Ministerial wood directives to specific mills. These pre-existing commitments would decrease the ability of forest tenants to seek out the highest possible price for their timber. Lack of access to competitive prices for timber was commonly cited as a concern by forest tenants in Quebec.⁴⁶

On private land

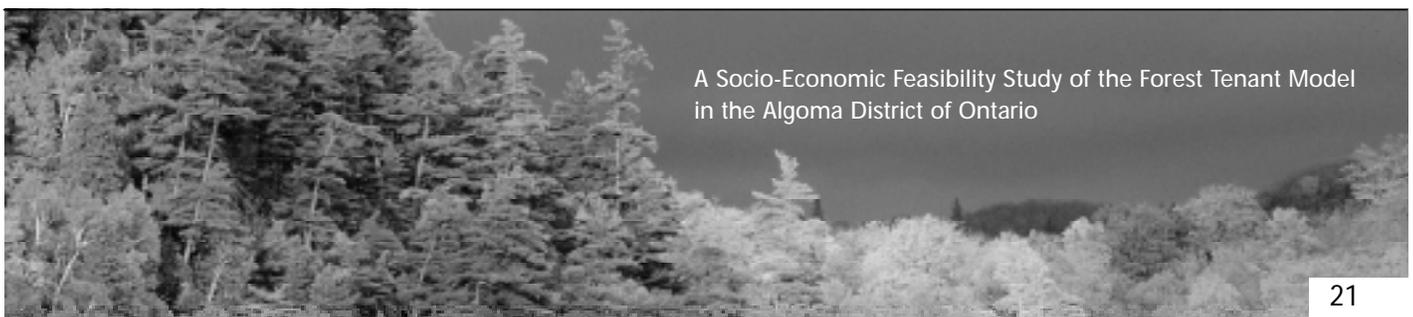
The two pieces of Ontario legislation relating to forest management practices on private land in Ontario are the Forestry Act (1990) and the Municipal Act (2001). Both acts aim to ensure 'good forestry practices' on private land by enabling municipal councils to develop and enforce tree-cutting bylaws. Both pieces of legislation are silent on the required style or structure of management, dealing only with basic planning (like the presence of an inventory) and operational requirements. As long as management under a Forest Tenant model met the broad definition of 'good forestry practices', there are no legal or administrative limitations on the application of the model on private land.

The Managed Forest Tax Incentive Program, administered by the Ontario Ministry of Natural Resources, offers lower property tax rates for privately-held forest land for which an approved forest management plan has been developed. This plan is much simpler than the plans required by the CFSA on Crown land, and the lower-tax rates may facilitate economically attractive management under this model.

The main factors affecting the feasibility of the model on private land is landowner interest in the model, and the availability of sufficiently large areas of land.

On First Nation Reserve

There are four main factors determining the feasibility of the Forest Tenant model on First Nation reserve: Indian Act control over forest management; cultural compatibility of the model; forest conditions, and community capacity.



Timber harvest on First Nation reserve is regulated by the Indian Act through the Indian Timber Regulations of 1954. These regulations stipulate that a permit, approved by the Minister of Indian Affairs, is required from the Department of Indian and Northern Affairs Canada (INAC) for any timber harvest on First Nation reserve. A stumpage rate must be charged for each harvested tree, payable to INAC, which holds the fee in a capital account for the First Nation.

The legislative authority of INAC over all forestry on First Nation reserves is a potential impediment to the implementation of the Forest Tenant model insofar as it is a limitation on the First Nation's authority to choose, implement and administer a particular management scheme. However, the issuing of permits is no longer being rigorously pursued by INAC in Canada, and the collection of stumpage fees has ceased in all provinces but Alberta, British Columbia and Saskatchewan. In Ontario and other provinces where INAC is no longer collecting stumpage fees, the First Nation is free to do so.⁴⁷ Precedent has also been set by the Wikwimikong First Nation on Manitoulin Island in Ontario to work within the Indian Timber Regulations to obtain a permit for a community forestry model. The First Nation also successfully negotiated with INAC to gain discretionary control over stumpage revenues.⁴⁸

Several of the concepts underlying the Forest Tenant model are generally compatible with traditional Aboriginal views and land-management approaches: the importance of local control and stewardship of forests; the value of non-timber resources⁴⁹; and the commitment to long-term sustainability. Although it would be misleading to imply that these values are universal among and within First Nations, they were specifically expressed in the North Shore Tribal Council study of First Nation communities along the North Shore area of the Algoma District.⁵⁰ Giving tenure over tenant farms to individuals could be incompatible with a traditional First Nation emphasis on community ownership of lands and resources. An emphasis on forest managers as stewards of commonly held land rather than tenants would likely be more culturally appropriate. Some tension may exist with any extractive resource use on First Nation reserve. Ultimately, the factors influencing a First Nation's acceptance of the model are too difficult to predict, however there appears no obvious reason why the model would not be feasible for cultural reasons.

Not including unresolved land claims there are 603 First Nation reserves in Canada, 80% of which are in productive forest areas. Two hundred and fifty of these reserves are greater than 1,000 ha in size. Many First Nation forests are currently in a highly degraded state due to mismanagement by the federal government that resulted in unsustainable harvests with little financial compensation to First Nations.⁵¹ The degraded state of many First Nation forests



will pose an additional challenge to implementing the Forest Tenant model by increasing costs and decreasing revenues from forest management, at least in the short to medium term. In the Algoma district, a diversity of forest conditions exists. Forest conditions on reserves would need to be assessed in advance of implementing the Forest Tenant model.

A lack of First Nations' capacity in forestry planning and management is an evident problem in Ontario and in most of Canada. This lack of capacity is a challenge to implementing community forestry and would need to be overcome to implement a Forest Tenant project in many regions. This lack of capacity is not a limiting factor in the Algoma district. The North Shore Tribal Council has a record of 26 logging crews and 16 logging truck operators within the council's First Nations.⁵²

Non-timber forest products

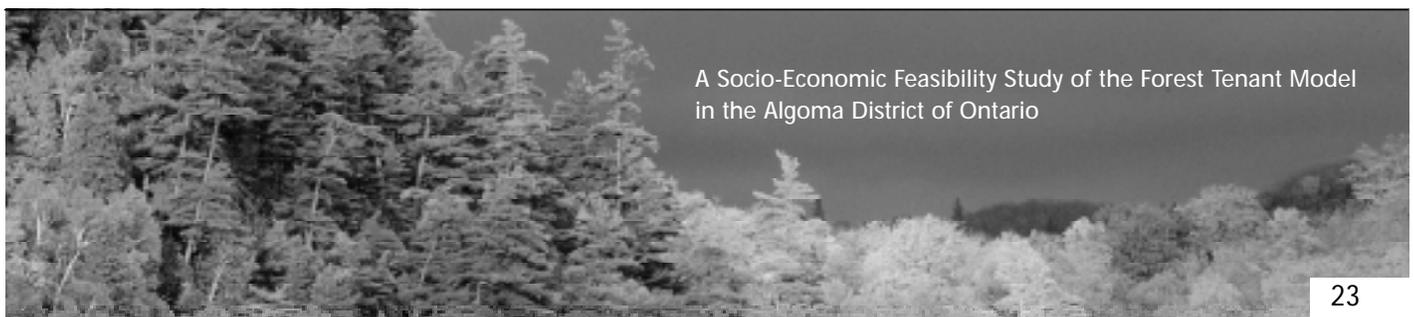
As discussed in the economic feasibility section, management of hunting, angling and trapping activities on Crown lands falls within the jurisdiction of the MNR. However, a permitting system is in place for managing cabins and lodges that accommodate these and other recreational pursuits on Crown land. On First Nation reserve such a permitting system would have to gain the support of the First Nation band council. On private land, no such permitting is required but could be instituted by a landowner.

There is no regulation or government management system in place for either the commercial collection or production of other non-timber forest products such as blueberries, maple syrup, or crafts on Crown land.⁵³ Although this means that there are no institutional barriers to these activities, guidelines would need to be developed to ensure their sustainability. On First Nation reserve, the development of commercial enterprises based in part on non-timber forest products would have to meet with community approval. It would also be important to ensure that harvesting activities did not negatively affect the ability of other community members to use these values and products.⁵⁴ There are no institutional barriers to non-timber forest product use on private land, other than landowner approval.

6. CONCLUSIONS

Is there a social and economic need for community forestry in the Algoma district?

The socio-economic conditions in the Algoma district are similar to those in the Bas-Saint Laurent region of Quebec. Both areas are experiencing a decline in population, have high unemployment levels and are resource-dependent.



The current licensing and management arrangement in the Northshore forest management unit already meets many of the objectives of the Forest Tenant model by having many small independent licence holders involved in planning and management of the Crown forest. However, this is not true of the Algoma forest management unit, which is managed by Clergue Forest Management Inc on behalf of its large company shareholders.

Neither of the tenure or forest management arrangements on Crown land adequately benefits local First Nations. Significantly lower levels of employment for Aboriginal people in forestry need to be addressed by creating new economic opportunities.

None of the forest management arrangements currently in place in the Algoma District place a large emphasis on non-timber forest products. Taking a community forestry approach could address this shortcoming.

Conclusion 1: There is a social and economic need for community forestry in the Algoma district.

Conclusion 2: The need for community forestry in the Algoma district is greatest among First Nations.

Is there interest in the Algoma district for the Forest Tenant model?

Many of the individuals contacted for the study expressed interest in the model as well as the belief that it could be used as a positive forest management tool.

The greatest interest in the model was expressed by First Nations. The model appears to resonate with Aboriginal people for a number of reasons:

- i. It proposes to redress the issue of low employment levels in forestry;
- ii. It focuses on non-timber values, which are generally of great importance to Aboriginal communities, and;
- iii. It emphasizes community control over resources.

The greatest conceptual support was expressed for applying the model on First Nation reserve. The second greatest conceptual support was for application on private land. The least amount of support existed for the application of this model on Crown land. However, it was felt by some that they would first need the results of this feasibility study before they could properly evaluate the model.



Conclusion 3: There is conceptual support for the Forest Tenant model in the Algoma District.

Conclusion 4: There is the greatest conceptual support for the Forest Tenant model on First Nation reserve and on private land.

Conclusion 5: First Nations see the application of this model on all land-types as an opportunity to increase their involvement in forestry.

Is the Forest Tenant model economically viable in the forests of the Algoma district?

The timber-economic analysis suggests that the forest area studied would yield an income to forest tenants similar to the income average over the period of 1994 – 2000 of the Forest Tenant project in Quebec, although significantly less (13%) than what was made in the 1999/2000 operating year. On First Nation reserve and private land, there is a potential opportunity to further increase these revenues by re-committing a portion of the stumpage fees to defray a portion of management costs.

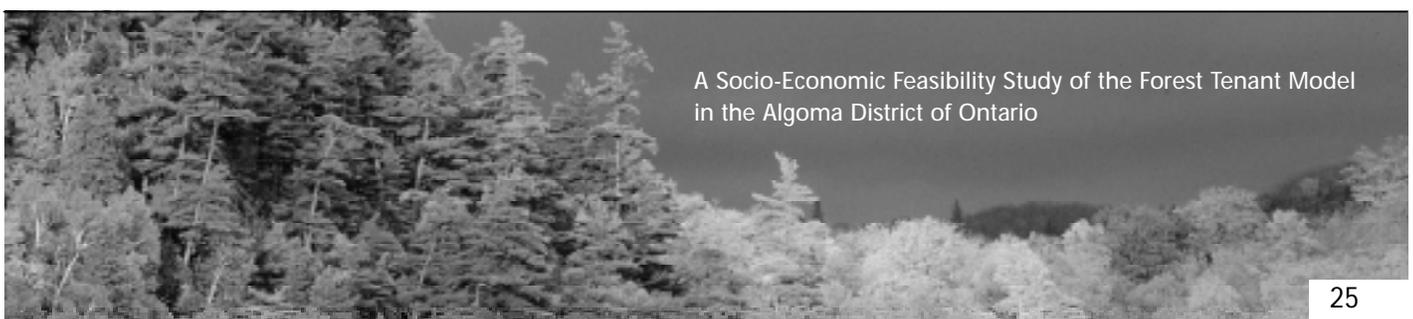
The fact that the timber economic analysis was done on what is locally regarded as a well-managed forest suggests that restoration management, or the application of the model on degraded forests would not yield an adequate income for tenants without additional funding.

The estimated income by forest tenants based solely on timber management is modest. Achievement of a satisfactory average annual income is dependent on the extent to which opportunities for non-timber products are met, and other potential initiatives such as value-added wood products and using biomass for energy production are explored..

The most promising opportunities for non-timber resource management in the Algoma district are the renting of cabins to support forest-based recreation and the harvesting and manufacture of non-timber forest products such as maple syrup and crafts. The Mitigaawaaki Forestry Marketing Co-operative is an excellent resource to First Nations interested in developing these opportunities.

Conclusion 6: The Forest Tenant model in the Algoma district will yield a modest average annual income to forest tenants based on timber management.

Conclusion 7: Revenue from non-timber forest management (or other means such as value-added wood products or using biomass for energy production) must be significant to provide a satisfactory average annual income.



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Conclusion 8: The Forest Tenant model is not economically viable in poor forest conditions without additional funding or subsidy to defray operational costs of stand improvement.

Is the Forest Tenant model feasible within the institutional framework in Ontario on Crown land, private land, and/or First Nation reserve?

On Crown land

Due to the costs and obligations of SFL holders for Crown forests in Ontario, it is not feasible for a Forest Tenant project to be the primary tenure holder for a forest management unit. Even if this were possible, the pre-existing allocation of the two forest management units in the Algoma district, and the almost complete allocation of Crown Forests to existing SFL holders in the province creates a significant obstacle to obtaining this tenure.

Although the model could be applied on Crown land as part of an existing tenure, the value of taking this approach is questionable. The large size of Crown forest management units provides an opportunity to do comprehensive planning at both the landscape and stand levels that is difficult to do in smaller forest areas. The inherent flexibility of managing a large area allows other non-timber landscape objectives like the maintenance of large intact areas of habitat to be met, as well as allowing responsiveness to changes in forest conditions or regulatory requirements. Dividing part of a forest management unit into small tenant farms may decrease this flexibility. Also, it decreases the flexibility of tenants to respond to changing market conditions or changes in their forest.

There are several characteristics of the Forest Tenant model that if adopted would lead to improvements in the current tenure system:

- iv. Increased local control over forest management objectives, strategies and operations;
- v. A greater focus on non-timber forest products;
- vi. Internalization of revenue within local communities instead, and;
- vii. Re-investment in the forest.

On Crown land, a community forestry model similar to Westwind Forest Management Inc., but with an increased focus on non-timber and broader community interests would share these positive characteristics and also allow the large scale forest planning that is appropriate to Crown forests.

Conclusion 9: It is not feasible for the Forest Tenant model to be applied as a principle tenure holder on Crown land.



Conclusion 10: The Forest Tenant model could be applied on part of a forest management unit on Crown land, with ultimate responsibility for meeting licence requirements resting with another entity.

Conclusion 11: Other community forestry models that can be more effectively applied at a large scale would be more appropriate on Crown land.

On Private land

The Forest Tenant model is well suited to implementation on private land because forests are relatively small, they offer access to forest resources that would otherwise be outside the reach of local people, and tend to charge lower stumpage fees than Crown land, thereby making more revenue available to the forest tenants.

There are no institutional obstacles facing the implementation of the model on private land. However, until now, no landowners in the Algoma district have expressed an interest in the model. The completion of the feasibility study may determine the level of landowner interest. The model may be less attractive to landowners in the Algoma district if the model cannot be applied on degraded forests. Restoration of these forests might otherwise be a strong incentive for landowner participation.

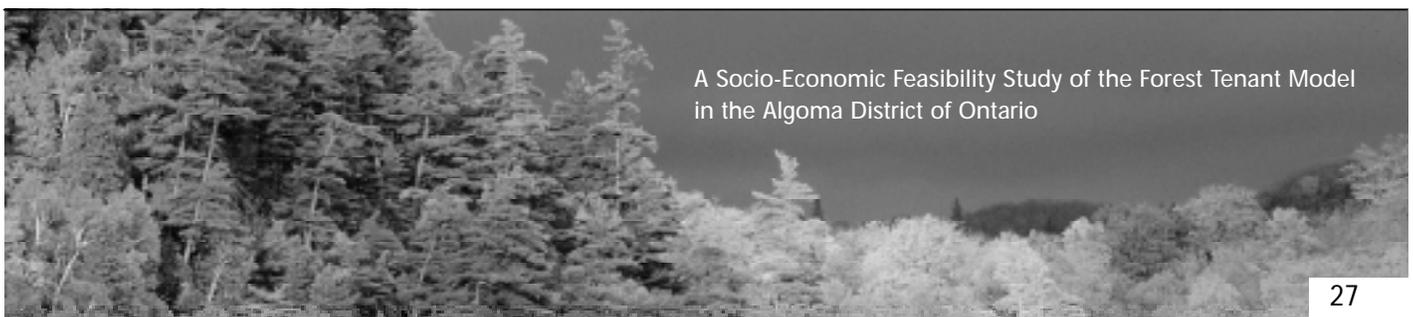
One obstacle to the application of the Forest Tenant model on private land is the absence of supporting structures such as the forest management companies that exist in the Algoma district to direct and support forestry on both Crown and First Nation land. However, the relative simplicity of planning requirements may negate the need for such oversight. The planning costs used in the economic timber model could be used to hire foresters to help with developing forest management plans.

Conclusion 12: Application of the Forest Tenant model is feasible on private lands.

On First Nation Reserve

Although the Indian Act and the associated Indian Timber Regulations provide some obstacle to First Nations implementing this model, there is precedent for working within this framework to implement community forestry.

Several factors favour this model's implementation on First Nation reserve in the Algoma district, and more generally:



- viii. There is an expectation within First Nations that lands and resources will be managed for multiple values;
- ix. There is a desire and need for increased employment in forestry;
- x. Traditional ecological knowledge and experience with non-timber forest products exists within the communities;
- xi. First Nations have access to technical support for both non-timber and timber management;
- xii. The benefits of forest management can be completely internalized within the community if the First Nation successfully negotiates discretion over the spending of stumpage fees, and;
- xiii. Traditional family management of traplines provides some meaningful analog to the forest tenant farms.

Some modifications to the model may be required to better reflect the communal nature of First Nation lands and resources. This could be done by having the overall planning being directed by a board of community members with varying interests. Also, the name of the model should be changed to reflect sensitivities expressed during the study.

The biggest obstacle facing implementation of the model on First Nation reserve is the condition of many on-reserve forests. Implementation of the model in degraded forests will require additional funding or subsidy. However, the restoration of these forests is crucial to the long-term viability of forestry on reserves.

Conclusion 13: Application of the Forest Tenant model is feasible within the institutional framework on First Nation reserve.

Conclusion 14: Modifications of the model to involve more community oversight will make the model more palatable to First Nations.

Conclusion 15: Application of the Forest Tenant model on reserve with degraded forests will require external funding or subsidy.

Non-timber forest products

Although many opportunities exist for management and revenue from non-timber forest products, this industry is not as well developed or supported as the timber industry. Support is lacking both in guidance for non-timber forest management and in operational and marketing expertise. The First Nations in the area have a distinct advantage in this area as a



result of both their long-standing traditional knowledge of non-timber forest products and the support of the Migaawaaki Forest Management Co-operative.

Conclusion 16: Management and marketing support and guidance is required for non-timber forest products.

7. RECOMMENDATIONS AND NEXT STEPS

Upon completion of the feasibility study, the following recommendations should be followed to advance the Forest Tenant model and community forestry in the Algoma district and Ontario.

Recommendation 1: Opportunities for the implementation of the Forest Tenant model should be pursued on First Nation reserve and private land in the Algoma district.

Recommendation 2: Wherever possible, the implementation of the model should focus on the involvement and benefit of local First Nations.

Recommendation 3: The model should be modified to involve community oversight of planning where the model is applied on First Nation reserve.

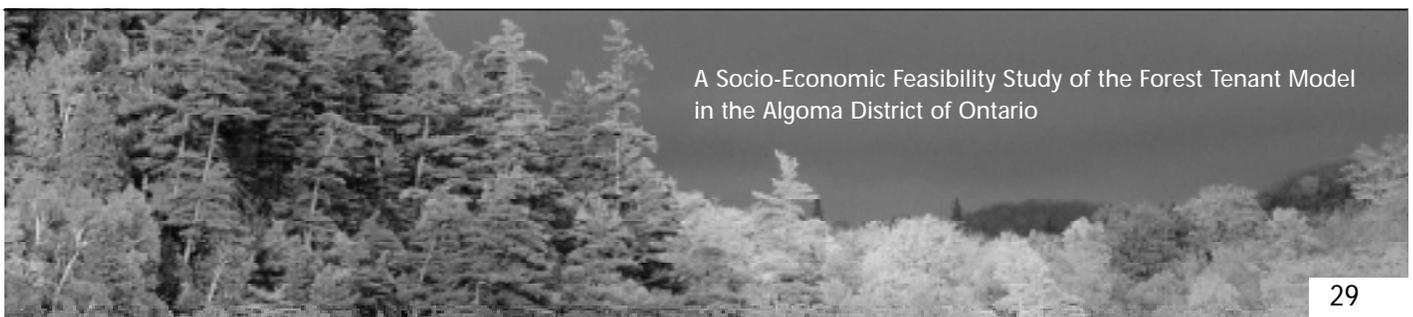
Recommendation 4: Additional funding or subsidy should be made available to First Nations to implement this model, or some modified model on degraded reserve forests.

Recommendation 5: On Crown land, implementation of community forests should follow the model of community forest management boards with decision-making power over planning and involve local people in implementation of the plan. The Westwind model serves as a starting point, but should be expanded to reflect a broader array of community and non-timber interests.

Recommendation 6: Guidelines should be developed for the commercial management and sale of non-timber forest products on Crown land.

Recommendation 7: Support Aboriginal and non-Aboriginal projects to develop guidelines and business plans for the development of non-timber forest product industries.

Recommendation 8: The economic potential of value-added wood products and using biomass for energy production should be investigated.



Next Steps

1. Distribute the Feasibility study to First Nations and local stakeholders.
2. Support First Nation community consultation on the Forest tenant model.
3. Modify the model based on First Nation concerns and perspectives.
4. Ascertain interest of private landowners.
5. Solicit requests for funding that may be required for project start-up or implementation in degraded forests in need of restoration.
6. Research and support on-going or proposed initiatives to aid in the development of non-timber forest products industries.
7. Research the economic potential of value-added wood products and using biomass for energy production.
8. Discuss with the Ministry of Natural Resources the possibility of supporting the development of community forestry on Crown land based on the Westwind model. In the short term, a focus should be on the two remaining Crown forest management units in the province that have not yet been allocated through SFLs.
9. Discuss with the Ministry of Natural Resources the possibility of developing policies and guidelines for non-timber forest products management.



Appendix A

List of people, organizations and communities consulted during study

Contact	Type of consultation
Brian Irwin, Executive Director, Community Development Corp. of Sault Ste. Marie and area	Workshop
Gerry Lesage, FedNor North-central region	Workshop
Tom Hernden, Economic Development Officer Garden River First Nation	Workshop
Cathy Brosmer, Clean North	Workshop
Richard Savard, Bas-Saint-Laurent Model Forest	Workshop, interview
Jacques Robert, Bas-Saint-Laurent Model Forest	Workshop, interview
Sue Parton, General Manager, Lake Abitibi Model Forest	Workshop
Steve Dominy, Ontario Region, Model Forest Coordinator, Canadian Forest Service	Workshop, interview
Tom Colgan, President, Wagner Forest Management Inc.	Workshop, interview
Serge Tenaglia, District Manager, Algoma District	Workshop
Stephen Harvey, Policy Advisor, Forest Policy Section, Ministry of Natural Resources	Workshop, interview
Sagamok First Nation Chief and Council	Presentation, discussion
Mississauga First Nation Chief and Council	Presentation
Serpent River First Nation	Workshop
Mississauga First Nation Lands and Natural Resources Committee	Presentation, discussion
Keith Sayer, Natural Resources Manager, Mississauga First Nation	Interview
Kevin Coombs, SFL Specialist, Ministry of Natural Resources	Interview
Greg Pawson, Industry Services Officer, Ministry of Natural Resources	Interview
Trevor Isherwood, Clergue Forest Management Inc.	Interview
Jim Miller, Clergue Forest Management Inc.	Interview
Phil Bunce, Northshore Forest Management Inc.	Interview
Paul Wyatt, Director, Northshore Independent Foresters Association	Interview
Martin Streit, Domtar Inc Cornwall	Interview
Jukka Heikurinen, Chief Forester, Robinson Huron Forestry Company	Interview
Fred Haavisto, Mitigaawaaki Forestry Marketing Co-operative	Interview
Sharon Gow-Meawasige, Mitigaawaaki Forest Marketing Co-operative	Interview
Peggy Smith, Professor of Forestry, Lakehead University	Interview

Appendix B

Description of harvest model parameters and assumptions

Stumpage rates	Taxes to be paid per cubic metre of product based on Crown stumpage rates. Roughly one third of the stumpage fee is available for funding silvicultural renewal.
Management Fee	The cost of planning per cubic metre of timber harvested. Based on local industry standards for given area. Roughly a third of this fee is available to forest tenants to pay for their contribution in the planning process.
Administration Fee	The labour cost of doing allocation of harvest blocks and compliance. This money is available to the forest tenants.
Harvest cost	Based on local industry standards. Consists of roughly 1/3 of cost for the labour of the harvester, 1/3 of cost for the labour of the skidder driver, and 1/3 of cost for the skidder.
Roads cost	Costs of maintaining temporary roads and trails. Available as labour to the forest tenant.
Capital roads cost	Costs of maintaining permanent secondary and tertiary roads.
Volume/hectare	Average volume per areas estimate based on actual measurements in the forest area studied.
MAI	Average mean annual increment (growth rate) of trees based on actual data from the forest area studied.
Maximum allowable harvest	Based on MAI, or growth rates of the forest.
Utilization	Proportion of harvested trees that can be utilized for products. Based on local industry standards

Appendix C

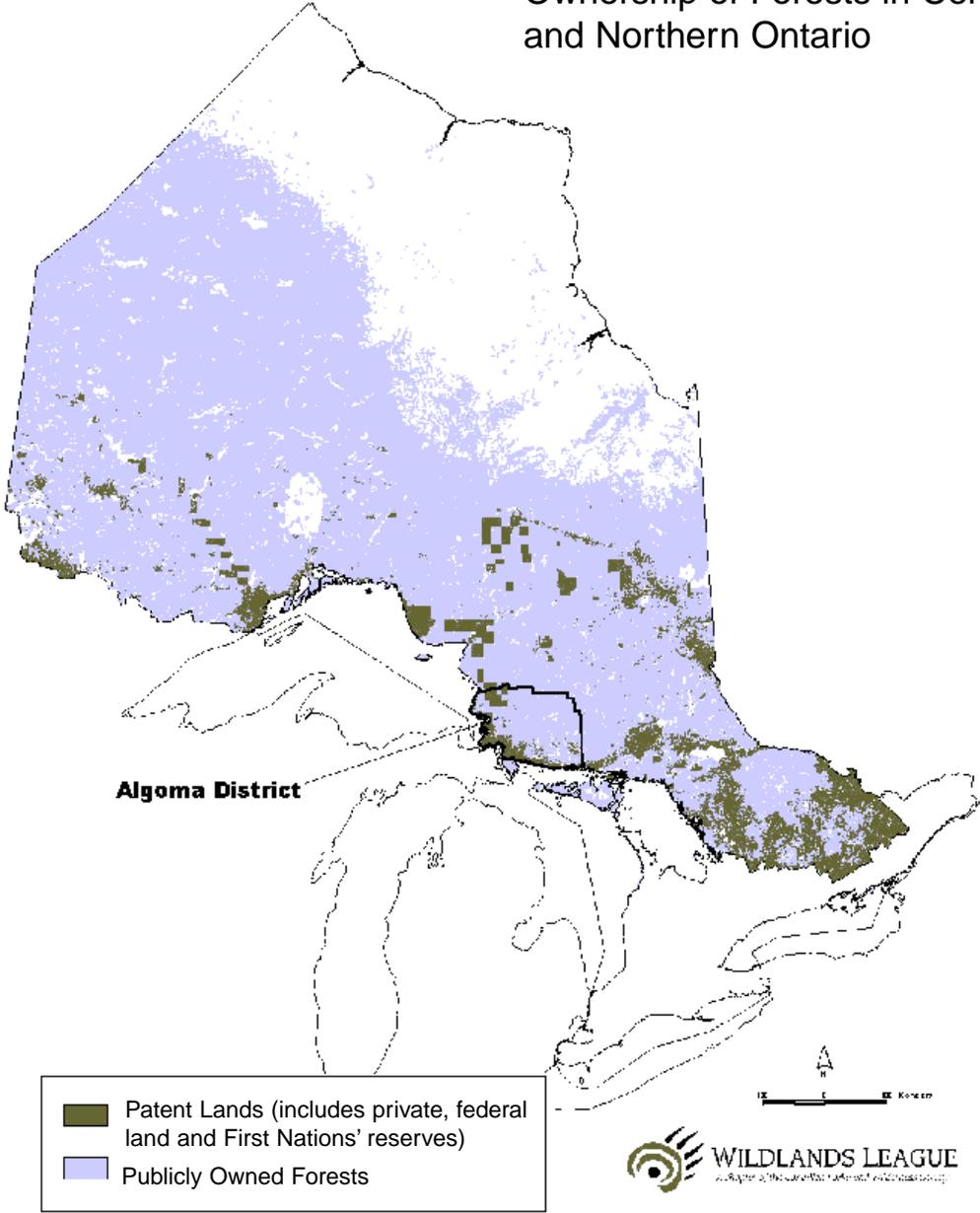
Table showing harvest model assumptions of cost and revenue per cubic metre of product

Appendix C – Table showing harvest model assumptions of cost & revenue per cubic metre of product.

SP./PROD.	White Pine		Red Pine		Jack Pine		Spruce		Cedar		
	Pulp	Sawlog#2	Sawlog #1	Pulp	Sawlog	Pulp	Sawlog	Pulp	Sawlog	Pulp	Sawlog
Prices bid Bid/cost (\$)											
Harvest Cost	\$25.57	\$25.87	\$25.87	\$25.57	\$25.87	\$28.19	\$28.19	\$25.57	\$26.48	\$25.57	\$26.48
Road Cost	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00
Stumpage	\$15.04	\$13.54	\$18.54	\$15.04	\$16.54	\$15.45	\$15.45	\$15.45	\$15.45	\$12.68	\$12.18
Mar. Fee SFL	\$2.36	\$2.36	\$2.36	\$2.36	\$2.36	\$2.36	\$2.36	\$2.36	\$2.36	\$2.36	\$2.36
Cap. Roads	\$3.35	\$3.35	\$3.35	\$3.35	\$3.35	\$3.35	\$3.35	\$3.35	\$3.35	\$3.35	\$3.35
Admin.	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50
GRAND TOTAL COST	\$49.82	\$53.62	\$53.62	\$49.52	\$53.62	\$52.85	\$52.85	\$50.23	\$51.14	\$47.46	\$47.87
TOTAL REVENUE	\$44.79	\$63.35	\$82.84	\$44.79	\$56.47	\$48.64	\$57.49	\$57.00	\$62.40	\$54.23	\$62.40
NET REVENUE (BID \$)	(\$5.03)	\$9.73	\$29.22	(\$5.03)	\$4.85	(\$4.21)	\$4.64	\$3.76	\$11.26	\$6.76	\$14.53
SP./PROD.											
	Maple			Red Oak			Yellow Birch				
Prices bid Bid/cost (\$)											
Harvest Cost											
Road Cost											
Stumpage											
Mar. Fee SFL											
Cap. Roads											
Admin.											
GRAND TOTAL COST											
TOTAL REVENUE											
NET REVENUE (BID \$)											
SP./PROD.											
	Other Hardwoods			Poplar			White Birch				
Prices bid Bid/cost (\$)											
Harvest Cost											
Road Cost											
Stumpage											
Mar. Fee SFL											
Cap. Roads											
Admin.											
GRAND TOTAL COST											
TOTAL REVENUE											
NET REVENUE (BID \$)											

Appendix D

Ownership of Forests in Central and Northern Ontario



Endnotes

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- ² U.S. Department of Commerce. 2001. Countervailing Duty Investigation of Certain Softwood Lumber Products from Canada: Response of the Province of Ontario to the Department's May 1, 2001 Questionnaire.
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- ¹⁸ Jukka Heikurinen, Robinson Huron Forestry Company. Personal communication.
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- ²⁰ Statistics Canada 2001. Community Profiles. (<http://ceps.statcan.ca/english/Profil/PlaceSearchForm1.cfm>)
- ²¹ Statistics Canada 2001. Community Profiles. (<http://ceps.statcan.ca/english/Profil/PlaceSearchForm1.cfm>)
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- ²⁷ Environmental Assessment Board. 1994. Class Environmental Assessment by the Ministry of Natural Resources for Timber Management on Crown Lands in Ontario. EA-87-02. Page 354.
- ²⁸ There is no legal definition of Aboriginal traditional lands. There is no legal distinction between Crown lands and Aboriginal traditional lands outside of First Nation reserves. For the purpose of this study, Aboriginal traditional lands are defined simply as *land occupied and used historically by Aboriginal communities* (from British Columbia Treaty Commission (<http://www.bctreaty.net/files/land.html>)).
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