Collective Woodlot Management in Nova Scotia:

A Case Study of Conform, Ltd.

By

Todd Schatzki

Submitted to the
Department of Urban Studies and Planning
In partial fulfillment of the
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Small private woodlots present barriers to attainment of a number of recognized forest policy objectives, due to their fragmented size, dispersed spatial distribution, and the diverse goals of their owners. This fragmentation and diversity is particularly problematic for (1) the reliable production of adequate forest products supply, and (2) the more recent goal of maintaining forest ecology values. Collective forest management offers the potential to address many of the economies of scale, market, information, and contractor reliability problems deterring proper forest management. Collective management also provides an administratively efficient, reliable, and financially effective mechanism for delivering forestry assistance. Collective woodlot management has not been widely adopted or successful in other regions. Nova Scotia's Group Venture program, however, has successfully created eighteen companies and cooperatives collectively managing shareholders woodlots. This paper analyzes the formation, operations and organization of one particularly independent and productive Group Venture, Conform, to examine the conditions that shape its success. More specifically, this paper evaluates the impact of member characteristics, physical resource conditions, market conditions, and internal rules and organization on the success of this case of collective forest management.

Collective Woodlot Management in Nova Scotia: A Case Study of Conform, Inc.

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Chapter 1 - Introduction

Small woodlot owners have presented a persistent barrier to the attainment of a number of social goals in the forest management. Fragmented size and spatial distribution of woodlots and diverse goals of owners make inducing coherent and coordinated action among them a difficult problem for forest policy makers. Traditionally, "the small-woodlot-owner problem" has primarily focussed on low productivity on non-industrial private woodlots, and its impact on the long-term supply of forest products for society. More recently, concerns have grown over the effect of management upon forest ecology values, with some observers particularly concerned about the impacts of stand-by-stand management models on the maintenance of large-scale regional ecological systems.

The "small-woodlot-owner problem" results from both the fragmented size and spatial distribution of woodlots and diverse goals of woodlot owners. Land fragmentation results in poor management economies of scale, small and infrequent harvests, and potentially difficult and expensive woodlot access, making investment in management services or equipment economically unattractive. Reinforcing this disposition toward non-management are changing values and attitudes of small woodlot owners, who are increasingly value their woodlots more for firewood, investment and amenity values than forest products production. Declining management knowledge of woodlot owners and the mistrust of contractors and foresters present additional barriers to proper management. The

¹ Clawson 1979; Sedjo and Ostermeir 1977; Task Force of the Society of American Foresters 1978; Blouin 1988.

² Sonner 1993; Baskerville and Regier 1986.

result is that many woodlots are not managed, or are sporadically harvested in an unsound manner.

Broad recognition of "the small-woodlot-owner problem" during the 1970s led to a burst of programs and policies to increase small woodlot management. Education, cooperative extension, tax incentives, grants and cost-sharing were among the government responses. Little attention was directed toward the potential of collective forest management to address some of the economies of scale, market, information, contractor reliability, and owner apathy problems deterring proper forest management. Based upon programs in Quebec and Sweden, Nova Scotia created the Group Venture program which has assisted in the development of eighteen collective management companies in the Province. Collective management provides the government with an administratively efficient, reliable, and financially effective mechanism for delivering forestry assistance. Increased woodlot management is encouraged by providing woodlot owners with a more attractive management option than those already available. Thus, long-term supply concerns are addressed by encouraging more woodlot owners to manage woodlots for production, and future resource conditions are improved by regulating the funded treatments. Collective management also potentially improves rural economic conditions by providing woodlot owners, typically disadvantaged by provincial forest policies promoting industrial producers, with an opportunity to increase economic returns from their woodlots.

Group Ventures actively manage about 5% of all small private forestland (woodlots less than 1,000 acres) in the province, and about 17% of all private

forestland within Group Venture service areas.³ The eighteen individual Group Ventures vary greatly in the size of their membership, amount of land managed, and level of wood production and government funded forest improvement performed. These differences reflect local land ownership patterns, local resource conditions, group goals, and organizational efficiency.

This thesis analyzes the conditions under which one particular Group Venture, Conform, Inc., is created and maintains productive and successful operations. Conform is chosen because it has the greatest independence from government funding, and is one of the top producers and most active forest managers. While these criteria may not be sole indicators of success, they indicate an organizational health and vigor that is often difficult to induce in collective management efforts, particularly those supported by the government. Member characteristics, physical conditions, market conditions, and internal rules and organization are analyzed to identify the factors most important to Conform's success.

Research relied heavily upon interviews of key personnel in Conform, the Department of Natural Resources, and several other individuals with particular experience with Group Ventures (see Appendix II for a complete list). Most interviews were performed in Halifax and the Musquodoboit Valley, Nova Scotia over the period of March 9 to 18. Interviews were informal and varied in length from one hour to about four hours. In addition to these interviews, written sources on forestry in Nova Scotia and the Group Venture Program were used,

³ Agfor 1991; Reed 1987.

including: meeting minutes, financial statements, and miscellaneous written materials from Conform; government reports and newsletters; and academic histories and analyses. These sources were supported by general forestry literature addressing small woodlot owners, woodlot cooperatives, and related forestry issues. These sources are combined to generate a history of the Group Venture Program and the formation of Conform, and a description of Conform's operations and organization.

In Chapter 2, I examine how government policy, the evolution of forest industries, and changes in woodlot owner characteristics left the government with a declining forest resource base, and a particularly difficult "woodlot owner problem." Low prices for wood, due to a highly oligopolistic market, promoted inactivity on many small private woodlots, or inclined many owners to take marginal revenues from a growing rank of contractors. Forest conditions declined as standard forest practices of clearcuts and selective removal of high quality trees left the Province with "trash" forests with poor yields and few sawlogs. Government activities promoted many of these problems by encouraging the development of a few pulp mills through low-cost public land leases, diluting or diverting market reform, and failing to regulate forest practices.

Declining resource conditions and declining management incentives represented a potential downward spiral for Nova Scotia's forestry sector. Without improved resource conditions, new productive capacity to improve market conditions (and therefore management incentives) would not be created. Reversing this situation, much the government's doing, necessitated government intervention. With market reform facing stiff opposition from the forest industry,

a lack of funds for a new round of state land purchases, and lack of support for forest practices regulation, the government had no alternative but to provide direct incentives for improved forest practices. The decision to promote collective management companies was based upon the potential for better efficiency in distributing and coordinating use of forest improvement funds, better economic efficiency through improved economies of scale, and more direct educational channels.

In Chapter 3, I examine the history of one collective management company, Conform, Ltd., considered one of the most successful in the Province. Antecedents to collective forest management are considered in the Musquodoboit Valley's economy, forest economy, and past organizing experiences. The events surrounding Conform's formation, as well as its history of operations and organizational change are next detailed. Conform was preceded by a history of interest in woodlot owner issues, particularly the fairness of wood prices, and other local organizing efforts. Despite some initial opposition by a local sawmill owner and a number of surrounding communities, and problems with officials in the Department of Lands and Forests, Conform formed with fifteen initial members and goals of expanding to eventually own equipment and manage 30,000 acres of land. Conform quickly became one of the most productive Group Ventures when measured by the amount of Forest Improvement work performed and the volume of wood marketed. Acting on a business philosophy, Conform shown organizational vigor and independence not common from forest collectives.

In Chapter 4, I analyze the conditions under which Conform is able to

successfully organize. This analysis considers the membership characteristics, physical conditions, market conditions, and internal rules and organization in identifying the factors most important to Conform's success. It was found that a local organizational disposition and presence of skilled individuals, control of the means of production, management on a profit-oriented business philosophy, development of good internal decision-making processes, and a number of particular management decisions were important factors in Conform's success.

CHAPTER 2 - The Group Venture Program

Wood production from small private woodlots is a persistent problem for the forestry sector throughout North America.¹ In Nova Scotia, the large dependence upon small woodlot owners for wood supply makes this problem particularly acute. About 52% of woodlot acreage is in small ownerships (1000 acres or less), while 27% is government owned Crown land, and 21% is large private ownerships, primarily industrial.² This ownership pattern, which has the highest small woodlot concentration of all of the Canadian Provinces except Prince Edward Island, emerged after generous land grants to political friends and settlers left the most productive lands in private hands. This practice continued into the 1920s, when the amount of private ownership was even larger than present, before a large public repurchase program starting in the 1930s left the present ownership pattern³.

Production shares are somewhat lower for the small private owner, though still significant: over 1983 to 1986, 43% of wood production came from small ownerships, 39% from large ownerships and 18% from Crown lands.⁴ This reliance places Nova Scotia's 30,000 small woodlot owners in an important position in the Provincial forest policy decisions. However, despite this important

¹ For the United States see Clawson 1979; Stoddard 1961; Task Force of Society of American Foresters 1978; Sedjo, R.A. and D.M. Ostermeier 1977. For Canada see Blouin 1988; New Brunswick Private Woodlot Resources Study 1983.

² Reed 1987:5.

³ Sandberg 1992:9-10.

⁴ Reed 1987:5.

status, economic conditions for woodlot owners are poor. Wood prices are the lowest in North America, active woodlot management gives poor returns, price and contractor information is poor, and efforts to organize collective marketing have met with resistance.

To address long-run supply concerns the Province created the Group Venture Program which promotes collective management of small woodlot to improve economies of scale, disburse forest improvement funding, and increase woodlot owner education. This chapter analyzes the conditions under which government action came to support this program. The chapter starts by describing the how the combination of government policies promoting an unregulated and oligopolistic pulp industry, structural changes in the forest sector, and changing social characteristics of woodlot owners led to a declining resource base requiring substantial public assistance for its maintenance. To encourage broad participation and efficient use of funds, collective management was promoted as a mechanism for delivering forestry assistance. The options available to public officials for delivering forestry assistance are described along with the eventual Group Venture Program design. The history of woodlot owner organizing is also recounted to show how this previous experience may have contributed a large number of leaders interested in collective management and increased woodlot owner understanding of organizing efforts and the source of problems they face in woodlot management.

Forestry in Nova Scotia: Historical Antecedents to the Group Venture Program

Evolution of the Group Venture Program follows two connected paths in the history of Nova Scotia's forests -- one path emerges from the changing forms of production on the land while the other involves the changing role of government in promoting the forest industry. Combined, these paths led to continued degradation of the forest resource and declining levels and quality of forest management. This decline necessitated government intervention in an effort to avert long-term supply shortages.

Forest use and ownership changes in Nova Scotia are similar to those experienced in other regions of Canada and the United States. Prior to the 1950s and 60s, owners relied more upon woodlots for sustenance. Woodlot activity represented a major form of income in rural areas without many opportunities -- for many, winter woodlot harvesting supplemented farming incomes. Woodlots also produced wood fuel, lumber and fencing material for use on the farm. Sawlogs, the primary forest product at the time, were harvested through high-grading practices -- the better quality trees (both height, dimension and straightness) were harvested, leaving the lower quality trees to grow. Over time, tree sizes acceptable to end users continually diminished, leaving either over-aged, low quality, or immature forests. Pulp harvesting was somewhat limited, and where it occurred, relied upon clearcutting methods.

During the late 1950s and 1960s, a number of changes to rural economies and Nova Scotia's forestry sector changed the outlook of small private woodlots. First, as alternative income opportunities grew and agricultural intensification was

⁵ Baskerville and Regier 1986.

promoted, management and harvesting activity by woodlot owners diminished. Employment shifts to more urban areas led to migration out of the rural countryside. Intensification of agriculture led to larger farms, fewer farmers and fewer jobs on the farm. The Province directly promoted intensification through the Nova Scotia Farm Loan Board program in which farmlands are purchased by the Province and leased to farmers with near or adjacent property until they can be purchased outright. This program hoped to consolidate farmland ownership into larger holdings to provide better economies of scale in agricultural production. As this intensification increased, farmers' attention increasingly focussed upon agriculture and not the woodlot. Many farmers also sold their woodlots rather than continue forestry production. For the entire Province, farm woodlot acreage declined from more than 1.8 million acres in 1951 to less than 1.4 million acres in 1961.6

Woodlot management became an increasingly uneconomical investment of time or funds.⁷ As will be shown, market conditions did not support adequate wood prices to give woodlot owners reasonable returns upon their woodlots. As self-management became uneconomical, owners increasingly turned to contractors for sporadic management and harvesting activities.⁸

The second change was the addition of two large pulp and paper mills and the continued decline in sawlog production, due to previous high-grading

⁶ Redpath 1974:20. Referencing Atlantic Development Board. Forestry in the Atlantic Provinces. Background Study No. 1. Ottawa: Queen's Printer for Canada, 1968.

⁷ See Dwyer 1974; Musquodoboit Valley Development Board [1964?]; Huber 1988.

⁸ Sandberg 1992:14.

practices, which shifted the market shares of the two products. Since the early post-war peak, sawlog production has declined by one half, while pulpwood production has increased nearly seven times. In the late 1980s, about 80% of wood produced was pulpwood.

Nova Scotia's government had taken aggressive steps to lure the Stora and Scott pulp companies into Nova Scotia. The most prominent of the incentives were long-term leases to Crown forestlands with very cheap stumpage rates. These cheap Crown rates set such a low base for private stumpage values that investment in forest management was impossible. With forests already degraded from previous high-grading practices, pulpwood prices providing little incentive to manage, and other income opportunities becoming more promising, land owned by small woodlot owners became unmanaged and unused.

After about a decade of heavy harvesting for pulp wood (often on Crown lands), concern began to arise about the future supply of wood to fuel Nova Scotia's forest industry. Despite early warnings by the 1964 MacSween Royal Commission, which had recognized that wood prices were so low that "the producer, at best, could not do better than earn substandard wages with little or nothing for stumpage or maintenance," little was done to remedy the situation. Throughout the late 1960s and early 1970s, three successive joint Federal-

⁹ Reed 1987:4.

¹⁰ Department of Lands and Forests 1990:49.

¹¹ MacSween 1964.

Provincial Agriculture and Rural Development Acts (ARDA)¹² provided minimal funding for forest management on private lands. These early efforts were predicated more upon rural development goals, than concerns about long-term supply.¹³ This prioritization, however, was to change in coming years.

In the early 1970s, the spruce budworm infestation provided the acute event that escalated government and forest industry concerns about woodlot supply. The infestation affected 3.4 million acres (32% of Nova Scotia's forest land) by 1980, ¹⁴ and destroyed about 13 million cords of softwood. ¹⁵ The Province's initial policies stressed large private land purchases to insure that a larger block of productive forest would be available for Crown leases. This policy was not new to the Province who had been actively consolidating and increasing public holdings since the 1930s. These Crown lands became the landbase that was leased to the Stora and Scott companies during the 1960s to lure them to the Province. ¹⁶ Federal interest in funding land purchases was limited, however.

Without Federal support for large land purchases, Provincial and Federal negotiations focused upon funding for forestry assistance programs. When the General Development Agreement of 1977 between the Province and the Federal government was signed, it contained substantial funding for forestry assistance

¹² Prior to 1966, known as the Agricultural Rehabilitation and Development Act.

¹³ Clancy 1992.

¹⁴ Johnson 1986:308.

¹⁵ Blouin 1988:8.

¹⁶ Sandberg 1992:9-10.

including incentives for management on Crown forests, industrial forests, and small private forests. In addition to the Private Lands Program, serving non-industrial owners, the agreement included the Group Venture Program which would allow for incorporation of companies or cooperatives of landowners to collectively manage forests and provide government funded forest services.

While supply concerns were driving the Federal and Provincial governments toward the necessity of assisting forest management, ineffective forest practices regulations further deteriorated operating conditions for private woodlot owners. Legislation promoting good forestry practices has been relatively unsuccessful in Nova Scotia. The first such attempt, the Small Tree Conservation Act of 1942 provided some regulation of forest practices until it was replaced by the less effective Forest Improvement Act in 1965. Setting diameter limits on allowable harvesting, the Small Tree Act promoted the high-grading practices that often left over-aged, rather than young trees. The Forest Improvement Act, modelled on Swedish forestry regulation, relied upon regional forest practices committees to develop forestry practice guidelines. These committees, however, were unstable, unable to develop guidelines, and eventually replaced by a Provincial body. The Act, in the words of former Department of Lands and Forests official Ralph Johnson, "has neither proved popular nor workable in Nova Scotia."17 Some even contend that the primarily goal of the Act's passage was the repeal of the Small Tree Conservation Act which provided some limitations to expanding pulp wood harvesting that relied upon clear cutting of often less than mature trees.

¹⁷ Johnson 1986:301.

The impact of limited forest practice regulation upon small woodlot owners has been significant, as it has allowed unfettered increases in the mechanization and scale of harvesting practices utilized by large contractors and mills. Increased mechanization and scale lowers the harvesting costs of the large operators. Because large mills can easily switch between supply sources, lowered management costs on their own lands forces woodlot owners into ever declining returns and pressure to use degrading harvesting practices. Most woodlot owners, however, are unwilling to allow the type of harvesting and management performed by the mills upon their lands, so they have often allowed their woodlots to fall out of production.

The historical conditions leading to concern about future wood supply are found in both the industrial development of forestry in Nova Scotia and government policy toward the forestry sector. Government policies and decision have clearly contributed to the need for major investments in forest management. In many ways, the Nova Scotia government's actions promoted the poor conditions for woodlot management and necessitated such a large public program. Support of low wood prices, through cheap Crown leases and discouragement of woodlot owner marketing efforts, have created a condition where small woodlot owners have very little incentive to manage their woodlots. Through the repeal of the Small Tree Act and the general failure to implement the Forest Improvement Act, the Province also failed to provide standards for resource management that could have sustained resources better. Baskerville, in describing conditions in New Brunswick, contends that current resource problems arise because:

"Clearly it has been primarily the resource-based *industries* that have been developed, secondarily the *regional economy*, and tertiarily the *local economies* - but the resources have not been developed at all. The *resources* have been characteristically run-down or ruined by resource development." ¹⁸

While it may appear that this problem arise because of the high percentage of forest owned by small woodlot owners, experiences in other countries indicate this condition does not always lead to supply problems, undermanagement, and a need for government investment. In Sweden, for example, a combination of highly regulated forest practices, strong forest product marketing boards, and strong woodlot ownership associations has led to a situation where wood prices are higher, management incentives are higher, and intensive management occurs. In Nova Scotia, efforts by some within the government to adopt more progressive legislation covering forest practices, market conditions, and Crown leases have been consistently met by the pulp and paper company's ability to garner political support at high levels. Economic blackmail and the threat of pullout have been used successfully by the pulp mills in every political battle for the past twenty-five years.

¹⁸ Baskerville and Regier 1986:82.

¹⁹ Sandberg 1988.

Evolution of Woodlot Owner Organization

As government agencies confronted the problems of long-term supply, woodlot owners faced the changing forest economy with a different set of concerns. With initial government support, woodlot owners organized in an effort to improve economic conditions for woodlot management. Though efforts focused upon marketing boards, development of leadership, organizational skills, and a more knowledgeable woodlot owner populace may have contributed to the quick formation of Group Ventures.

Though many woodlot owners turned to other occupations for income, forestry still remained an important part of income for some owners. These owners faced several problems in maintaining forestry incomes: static prices for wood products, unreliable and limited markets for wood products, declining forest conditions, and less competitive management technologies compared with increasingly mechanized contractors. The worst of these were "disorganized" marketing conditions because "the pulp wood producer was completely at the mercy of the shipper of the pulpwood." The effect of these problems was to squeeze the woodlot owner into a position of increasingly marginal production.

Efforts to address these problems are difficult since woodlot owners are many and dispersed. Marketing Boards regulated a number of agricultural products (milk, hogs and wool)²¹ under the Natural Products Marketing Act,

²⁰ Clancy 1992:34. Quoting: Nova Scotia, Royal Commission on Provincial Development and Rehabilitation. **Report on Forest Industries**. Halifax, N.S. 1944.

²¹ Contract Agreement 1966:Appendix B, p. 2.

though attempts to include forest products in the early 1960s, after the large land lease to Stora greatly increased market oligopoly, were unsuccessful.²² To mollify woodlot owner concerns, the Province in 1964 convened a Royal Commission to study the problem. Lack of woodlot owner organization was targeted as a major problem by the Commission:

"...the root cause of most of the problems of pulpwood production is lack of organization. This handicap leaves them in a position where they are not able to do very much to improve their economic standing or to participate effectively in programs which may be designed from time to time by government and other for their benefit. ... The involvement of these producers in any systematic program of forestry development including utilization and conservation is utterly impracticable except on an organized basis."²³

Rather than develop marketing boards, however, the Province supported an ARDA program to provide organizational and educational assistance to woodlot owners through the Extension Department of Saint Francis Xavier University in Antigonish. Though the goals were broad, priority upon marketing problems was clearly expressed by the Extension Department: "...the need for improved prices for wood products is of immediate concern to the woodlot owner presently while the need for woodlot consolidation, management and conservation is not so

²² Clancy 1992.

²³ MacSween 1964:28.

immediately felt."24

This project resulted in the formation of 18 county associations and, eventually in 1969, the Nova Scotia Woodlot Owners Association, which acted as an umbrella organization. Though the Association concerned itself with a broad set of issues, the organization's efforts focused upon development of a marketing board for pulpwood. In 1970, NSWOA presented a formal marketing proposal to the Nova Scotia Marketing Board, which regulated the individual product marketing boards, beginning a two-year deliberation that polarized woodlot owners and mill operators. It is not possible here to detail the history of this policy process, though this history had a clear impact upon the eventual form of legislation and future of efforts to formalize the marketing structure.²⁵

The Pulpwood Marketing Act of 1972 allowed for the formation of exclusive bargaining agents to negotiate with pulp mills over prices and quotas. ²⁶ Though it lacked the teeth of a strong marketing act (for example, binding arbitration was not included), the Act changed the marketing relations for pulpwood because "henceforth, the contending interests in the pulpwood market would have to work within this framework." ²⁷ Changes would be slow in coming,

²⁴ Contract Agreement 1966:2-3.

²⁵ Those interested should refer to Clancy.

²⁶ A quota is an annual agreement between a mill and wood producer (woodlot owner or contractor) for the delivery of a fixed quantity of wood, often on a regular schedule. Traditionally these were negotiated individually between the mill and the contractor or woodlot owner.

²⁷ Clancy 1992:154.

however. Attempts by the NSWOA to gain bargaining agent status were rejected in 1974 and 1975 due to a combination of opposition from the pulp mills, procedural difficulties by the Pulpwood Marketing Board, and ambiguity over what constituted the majority representation necessary to attain bargaining agent status.

These failures led to a change in NSWOA's constitution that diluted its power as a representative of woodlot owners. In 1979, membership expanded to include "operators", such as contractors or sawmills operators, to fit the Pulpwood Marketing Board's new producer definition which interpreted production as preparation for sale, rather than owners of wood on the stump (production being the act of harvesting, not the growing of trees). This membership expansion was therefore necessary for the NSWOA to gain the majority it needed to become a bargaining agent. Though the new NSWOOA (Nova Scotia Woodlot Owners and Operators Association) could now further the development of marketing boards, woodlot owner representation had become diluted and marketing conditions now favored the seller of wood (i.e. contractors) and not owners of wood on the stump.

NSWOOA successfully became bargaining agents for the districts around Stora (1979) and Scott (1982) and agreements were reached with both companies. In both cases, several subsequent agreements have been made. Prices have increased substantially over the period of agreements (from about \$26 per cord in 1979 to \$45 per cord in 1988), though this growth is roughly comparable to growth

in end product prices.²⁸ Since wood prices before the marketing agreements did not keep pace with end product prices,²⁹ one might conclude that marketing boards have improved market conditions and promoted fairer wood prices. Prices in Nova Scotia, however, are still significantly less than regional prices, particularly those of neighboring New Brunswick (who has until recently had a more strict marketing structure) where prices are \$10 to \$15 dollars greater per cord.³⁰ Many observers have concluded that the marketing structure has been only partially effective at providing fair prices for producers and woodlot owners.³¹ A marketing district has never been established for the Bowater mill, though its prices are comparable if not higher than those of Scott or Stora.

Though woodlot owners benefit from increases in wood prices, since the changes in 1979, the NSWOOA has been less of an advocate for woodlot owners. It has subsequently undergone organizational difficulties: a split off by the Stora marketing district, and a dilution of membership. Many of these problems may stem from the multiple interests within the Association and its inability to develop a core of goals.³² Coincidentally, this is the period in which the Group Venture movement arose. While the political role of the Group Ventures has tended not to be significant, it has begun to supplant the NSWOOA as the main representative of woodlot owners. Political involvement increased with the

²⁸ Reed 1987:41.

²⁹ Reed 1987:41.

³⁰ Reed 1987:39-40.

³¹ Reed 1987; Curtis 1988; Curtis 1987; Clancy 1992.

³² Another significant factor was wood quota and allocation restrictions that left many producers with inadequate quotas in the marketing district (NSWOOA-SSD 1984).

formation of a centralizing Group Venture organization in 1987. Members of group ventures have also played a significant role in NSWOOA activities, including Presidency and inclusion in the negotiating teams.

This history indicates that small woodlot owners in Nova Scotia are aware of the need for collective organizing and capable of such organization with minimal assistance. The dilution, and subsequent fractionalization, of the NSWOA was largely a result of changes in government policies regulating wood marketing, rather than a clear sign of woodlot owner incapacity to organize. The history also indicates that the primary issue of concern for woodlot owners is wood price and the marketing structure for wood sales.

The Group Venture Program

At the time of the Group Venture Program's initiation, the problem of stimulating productivity from small private woodlots was new to forest policy makers. Efforts had continually been confounded, however, as an understanding of the changing woodlot owner interests was only just emerging. Increasingly, small woodlot owners are more likely to own land for amenity or investment than for production. Surveys consistently indicate that wood production is a less important reason for owning forestland than fuelwood use, inclusion in residence or farm holding, investment, or personal satisfaction.³³ In a 1981 survey of Nova

³³ Birch 1988; Birch 1986; Birch and Widmann 1987; MacQuarrie 1981; SWOAM 1991. On average, those that manage for timber production have large woodlots than those who do not.

Scotia private woodland owners, MacQuarrie found that timber production ranked fourth behind inclusion in permanent home, inclusion in farm, and fuelwood as the "main reason for owning" forest property.³⁴ Only 28% had sold wood products over the past two years and 40% undertook no woodlot activity at all over the previous five years. The problem that has confounded extension foresters and economists attempting to promote woodlot production is that woodlot owners do not act like classical rational economic actors. Programs intended to give adequate incentives to promote management activity often fail because woodlot owners have other interests in woodlot ownership or woodlots are too low a priority among other activities.³⁵

Policy recommendations have included appropriate tax policies, improved market information, extension services, owner education, and management assistance. Among these policies is the direct delivery of forestry assistance to non-industrial forest owners. At the time, many potential mechanisms existed for providing assistance. The Private Forest program serving individual owners had been operating for many years and a continuation of this program could have been seen as adequate. The most prevalent forms of government forestry assistance programs operate solely on an individual basis, including all Canadian provinces (with the exception of Nova Scotia and Quebec) and the Northern New England States of Maine, New Hampshire and Vermont. In most cases, these programs follow the same model: a management plan (of varied detail) is developed with partial assistance, and management is undertaken with partial

³⁴ MacQuarrie 1981.

³⁵ Boyd 1984.

assistance available for selective silviculture practices and, in some cases, services such as road building. Programs differ on mandatory terms of management, requirements that plans be carried out, and stipulations on assistance.³⁶

In Nova Scotia, initial forestry assistance efforts under ARDA led to the development of the Private Lands Program in 1973 which provided direct assistance to individual woodlot owners. As this program encountered difficulties, officials within Department of Forests and Lands began to look at collective management in Quebec and Sweden as models for increasing woodlot management by small owners. After a number of exploratory trips to study these programs, a pilot project was started in West Pictau in 1975 to test the collective forest management concept in Nova Scotia. Initial success and interest by Federal officials led to the inclusion of the Group Venture Program in the Federal/Provincial General Development Agreement. The program's success has led to continued funding under the three subsequent joint federal/provincial agreements and the Group Venture Program is partially funded through more permanent provincial legislation (see the list below.) Each agreement has provided increased levels of funding to allow additional Groups to operate: eight groups were funded under the first agreement, another ten under the following agreement.

³⁶ Griffiths Mueke Associates 1989.

Figure 1

Group Venture Program Chronology

- 1975 West Pictau Pilot
- 1977 General Development Agreement (GDA) 1977-82
- 1979 By Spring, 8 Groups have signed agreements with Province.
- 1982 Forest Resource Development Agreement (FRDA) 1982-89
- 1984 Six more Groups begin operations.
- 1985 Two more Groups begin operation.
- 1987 The final two Groups begin operations.
- 1989 Cooperation Agreement for Forestry Development (CAFD) 1989-91
- 1992 Cooperation Agreement for Forestry Development (CAFD) 1991-95

A Group Venture is a company or cooperative that collectively manages its members woodlots. Collective management provides a number of benefits to the government: more efficient usage of government funding through blocking of multiple parcels and economies of scale in operations; increased administrative efficiency; more reliable follow through on management plans; and more direct service and education. Government funding for operations costs (three staff and office costs) and forest improvement work is the most significant government incentive for Group organization.

The Program is administered by the Department of Natural Resources (formerly the Department of Lands and Forests) who approves funding and

oversees Group Venture operations. The Group Ventures are then responsible for developing management plans on member woodlots and performing approved forest improvement activities, which include building or improving forest access roads and fire ponds, boundary improvements, and silviculture treatments.³⁷ The original concept called for Group Ventures to become viable businesses that are independent of Operations funding from the government.³⁸ Forest Improvement funding would continue, however, for the next 20 to 30 years until the Group's role as "trash collectors" -- i.e. harvesters of degraded forests -- for the forestry sector has been completed.³⁹

Group Ventures⁴⁰ provide full-service management for their members: obtaining forestry assistance funds, developing management plans, insuring silviculture work is performed, marketing member's wood, and educating of members. Some early declarations included other goals such as ownership of harvesting equipment and the development of milling facilities. To receive funding under the Group Venture Program, organizations must agree to a number of responsibilities:⁴¹

³⁷ Allowable silviculture work must follow government standards and generally includes most activities except harvesting.

³⁸ Agfor 1991:16-7; **Group Management Viability Study** 1982.

³⁹ Blouin 1988:9. There have been some discussion of obtaining management funding through the marketing agreements with the pulp mills. This practice has been used in other regions where forestry assistance is less available, such as the southern United States.

⁴⁰ Greater detail of Group Venture operations is available in the Conform case study in Chapter 3.

⁴¹ Hundert 1987:19.

- Enter into a forest management and marketing agreement with shareholders;
- Develop management plans to proscribe road, fire pond and boundary improvements, and needed silviculture work;
- Implement management plans;
- Collect 5% commission on all marketed forest products from managed lands to offset operations costs.

Through consolidation of multiple small woodlots under single management, government officials hoped to stimulate management and harvesting from private forest owners. Group Ventures were seen to deliver many particular benefits toward this goal:

- A more efficient delivery mechanism for forestry improvement assistance than a Private Lands program using Department of Lands and Forest's foresters and administration.
- Better follow through with management activities after the development of a management plan.
- Blocking of adjacent woodlots under single management to improve the management economies of scale. Benefits could be accrued from

minimizing road building, batching management activities, and coordinating wildlife and non-timber management.

- Improved service quality, reliability and access for all range of silviculture treatments. Problems often exist in individual programs where contractors have little incentive to keep to management and quality standards, or perform jobs with marginal economic benefits.
- Improved management conditions created by the larger volumes of wood handled by Groups and the manager's ability to devote time to market development provide potential advantages in price, market access, and market quotas. Landowners also reduce their risk of being cheated by contractors who underprice or do not report entire loads.
- Full-service woodlot management for those with little interest, inadequate knowledge, or too little time to manage their woodlots. Absentee landlords could also be provided with a means of managing their woodlots.
- More direct and personal landowner education through interaction with Group Venture foresters who generally have more time and interest in educating landowners than contractors. In addition, many Group Ventures sponsor field days, or show landowners other woodlots under management as a part of educational benefits.

Despite these potential benefits, programs attempting to promote the formation of collective enterprises are often unable to create broad and stable

action. Barriers to the success of the Group Venture Program might arise because of difficulties with the formation and sustenance of the Groups, or conflicts within the Groups or between Groups and program administrators. Potential problems include inadequate incentives, mis-match of program goals with local goals, mistrust of organizing efforts, improper organizational structures, appropriation of benefits by local elites or cliques, and past bad experiences with organizing or government programs. While some of these problems arose, initial interest in the program by communities was tremendous. The first GDA agreement called for eight Group Ventures to be formed over the period of 1977 to 1982, but within several months, applications for eight new Group Ventures had been received and agreements were signed for all Groups by Spring of 1979.

Conclusion

Group Ventures, with their own independent association and partial funding secured through provincial legislation, have a achieved relatively strong and permanent status in Nova Scotia. The Group Venture Program has grown from a total of eight Group Ventures, about 50,000 acres under management, and about 300 management plans in 1980, to 18 Group Ventures, about 286,500 acres under management, and about 2,250 management plans in 1990. Despite this growth, Group Ventures still manage only about 5% of all private forests and only about 17% of private forests within their designated service areas.

⁴² Department of Lands and Forests 1980,1990.

It is debatable whether this level of woodlot participation and management adequately meets the province's goal of increasing woodlot productivity. These modest gains have also been achieved at a relatively high price (\$6.5 million Canadian in 1989-90, and about \$36.5 million Canadian over the program's history), prompting criticism that the program is a poor use of public funds. The program's impact on small woodlot owners themselves has been mixed. While management ease for many is facilitated by Group Ventures, and economic conditions are somewhat improved, Group Ventures have not been able to address the fundamental market and price problems which are at the root of woodlot owner and management problems. These impacts will become more evident in Chapter 3 which describes the formation of and operations of Conform.

The need for government action to increase long-run supply was created by a combination of inactive management on small woodlots, poor management and renewal practices, and the crisis of the Spruce Bud Worm infestation. These problems were partially the result of changes in the structure of the forest industry, such as the growth of pulp markets, growth of contractors, and the changing desires of small woodlot owners, and government policy, such as failed forest practices legislation, large forest leases to pulp companies, and unstable marketing structures. The high percentage of woodlots owned by small private owners necessitated a policy by the government to increase productivity from these forests. Of the many options available, collective management was tried first as an experiment and subsequently as a full-scale program after some initial successes.

Though government support has generally been strong, many DLF officials

have been unsupportive and outright opposition has been expressed by people questioning the prudence of large expenditures on Group Ventures, and Forest Assistance in general. This thesis can only speculate on the impact of this opposition upon the rules and administration of Group Ventures, particularly with regard to the discretion and flexibility of funding.

CHAPTER 3 - Case Study of Conform, Inc.

The previous chapter dealt primarily with programmatic issues in promoting collective forest management amongst small woodlot owners in Nova Scotia. In this chapter, Conform, Inc. is examined to determine the conditions and factors leading to a specific case of successful collective forest management. Conform is studied because it represents a potentially promising models of collective forest management. Success is defined in terms of the organization's ability to maintain activity. Indicators of success include: independence from external funding; ability to insure access of services to members; ability to attract and support new members; and consistent performance in implementing forest management and marketing.

First, I present a brief social and physical history of forestry in the Musquodoboit Valley. This history examines some of the pre-existing conditions that led to eventual success of collective management. Events surrounding the Conform's initial formation and the initial development of group objectives are described next. Finally, the operations, organization and philosophy of Conform that allow it to one of the most productive Group Ventures are described. Within this description are many group and management decisions which led Conform down a more organizationally sustainable path.

Social and Forestry History of Musquodoboit Valley

The Musquodoboit Valley is situated about 50 miles north-east of Halifax

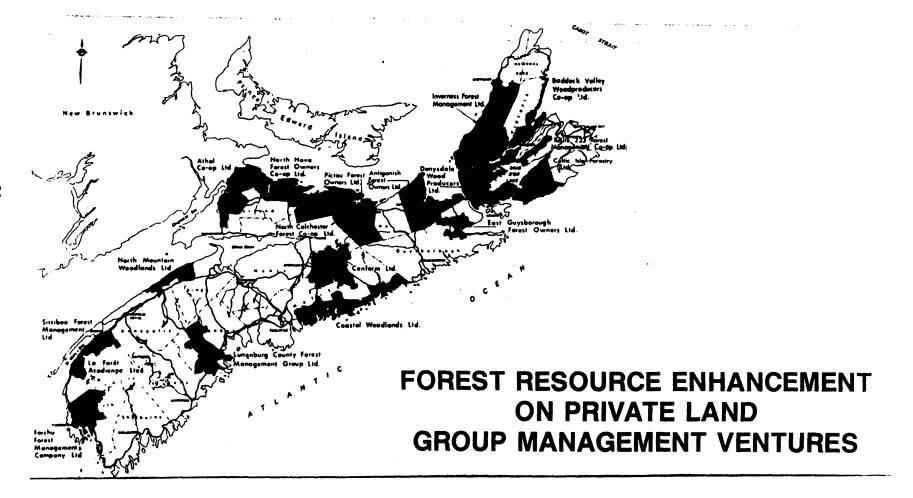
in a valley formed by the Musquodoboit River running about 20 to 25 miles northeast-by-southwest (see map on following page). The Valley is relatively isolated despite its close proximity to Halifax. Access to the region is entirely via secondary roads. Population of the Valley in 1966 was about 4,500 across about 12 towns and hamlets, and has declined slightly since. Towns in the regions are small. Middle Musquodoboit, the largest, has a gas station, an agricultural co-op, a drug store, two restaurants, and a hospital.

Agriculture, forestry and limestone quarrying are the mainstays of the local economy. The economics of these industries have been adversely affected by changing technologies, the result being a declining contribution of resource activities (agriculture and forestry) to income. Land owners with five or more acres received only 25% of their income from resource activities, while those for whom farming was the major source of income (only about 200 people) received only 60% of income from resource activities.² The valley floor is mostly farmland where hay and pasture for beef and dairy cattle is the most common crop. In 1969, 48% of farm income came from milk sales, 18% from cattle sales, and 12% from hog sales.³ Income through secondary production (sawmills and produce transportation) is significant. The remainder of the region's income is earned through "off-farm" income, including services, professional, and transfer payments.

¹ Redpath 1974:1, and other interviewees.

² Redpath 1974:38.

³ Redpath 1974:12.



A small proportion (about 9% in 1969)⁴ commute to the urban areas of Dartmouth-Halifax or Truro. Despite numerous plans and efforts, tourism has never been significant in the Valley.⁵

The Valley sides are mostly forested and often connected in ownership to the farmlands on the valley floor. The result is "a pastoral landscape which reflects nearly two centuries of settlement." An estimated 80% of the Musquodoboit watershed's 176,000 acres is forested. As of 1969, over 60% of forestland was owned by small woodlot owners, over 20% by industrial owners, and about 15% by the Crown. A 1982 study indicates few significant changes: 54% of the region was owned by small woodlot ownerships, 24% by large companies, 6% by the Crown, and 16% was classified as "other lands". Land tenure tends to be very stable. Of land owners, about 45% had resided in the Valley for longer than 50 years, while only 10% percent had resided for less than 20 years. Further, 75% indicated no interest in selling property. Over time, however, rural to urban migration has somewhat reduced the Valley's population.

⁴ Redpath 1974:21. Referencing Connor, D.M. and D.W. Magill. **The Role of Education** in **Rural Development**. ARDA Research Report No. RE-1. Ottawa: Queen's Printer for Canada, 1965.

⁵ MRDB [1964?]; MRDB [1968?].

⁶ Redpath 1974:2.

⁷ Redpath 1974:20.

⁸ Redpath 1974:20. Referencing Conner, J. Musquodoboit River Valley Study: Socio Economic Report. No. 15. Wolfville, N.S.: Acadia University Institute, 1964.

⁹ Group Management Viability Study 1982:22. Area defined as Conform's initial service area.

¹⁰ Redpath 1974:14.

Characterization of the region's people is difficult. General impressions based upon interviews indicate that the Valley has a strong work ethic in agriculture and forestry that has made it a productive agricultural region in the past. This approach is one that sees land as productive assets. This success is somewhat in contrast to the rest of Nova Scotia, which has the reputation, warranted or not, of being less industrious. These impressions, which are very subjective, may be affected by the nature of this study and should be treated as such.

Forestry is one of the traditional occupations in the primarily agricultural region. Farmers often cut wood during the winter when crops cannot be grown. Reliance upon the forest began to diminish, however, due to a number of factors. First, the flight of many landowners to more urban areas left many lands without local owners. Few of these owners continued to produce on their woodlots, though many sold their land. The 1969 survey of landowners showed that about 21% of owners (and 15% of the acreage) were non-residents of the valley. The second trend was the declining returns to forestry. While there had been little economic analysis of the small land owners production decisions, most farmers and foresters realized that returns on their efforts in the forests were marginal, and certainly not worth the investments in equipment, management or roads. In 1969, income from forestry accounted for only 7% (or, \$62,000) of gross income

¹¹ Redpath 1974:21.

¹² The MacSween Commission, which relied heavily upon price data collected in Musquodoboit Valley, stands out as a notable exception.

from resource activities (forestry and agriculture). Large farms produced little from their woodlots, though non-farmers¹³ actually received from 54% to 69% of their resource activity income from woodlots. Most forestry income (72%) came from small farmers and upper income non-farmers.¹⁴

The last trend was the increasing intensification of production on farmlands which diverted attention from forests. The Nova Scotia Farm Loan Board program, promoting consolidation of farmland ownership into larger holdings, had twenty-seven participating farmers (about 10,000 acres) in the Valley by 1969.

As farms consolidated, increased attention was required by farmers to their growing businesses, which gave less time for the declining forestry venture.

Though Musquodoboit Valley forestry community seems to share many characteristics with the rest of the province, in a number of ways it is distinct. First, a higher than average number of people seem to rely upon woodlots for income or did in the past¹⁶, though there is no data to confirm this point. In a 1969 survey of landowners, 39% indicated that they regarded woodlots as "a source of regular or occasional income." Second, forestry seemed to be proceeding on a somewhat technologically "backward" pace. During the 1960s when power saw use became widespread, local woodsmen often continued to use

¹³ Farming not the major income source.

¹⁴ Redpath 1974:11.

¹⁵ Redpath 1974:8.

¹⁶ This impression gained primarily through discussions with people familiar with the region.

¹⁷ Redpath 1974:21.

simple bucksaws. This partially reflected a growing split between contractors -generally working for pulp mills -- who were able to invest in the new equipment,
and woodlot owners who did not have large enough lots to warrant such
investments. The result, as one local put it, was that woodlot owners either "did
something else or they did forestry the old way."

Before Conform, forestry and the forests in Musquodoboit Valley were very different than they are today:

- Before the growth of the pulp industry, forest practices relied upon high-grading, or selective cutting, 18 of good trees for sawmills. Over reliance upon this practice has resulted in "trash" forests with species or tree quality that cannot be used by the sawmill industry. 19
- Though not significant in earlier times, clear cutting became the predominant practice with the growth of the pulp industry in the 1960s.

 The scale of this practice, requiring heavy equipment, has contributed to the growth of contractors as woodlot owners became increasingly unable to afford machinery investments. The effect on the forest resource has been highly degrading particularly when areas cut are very large, with numerous

¹⁸ High-grading, or selective cutting, is the practice of cutting the high quality trees and leaving the remainder to regenerate. High-grading can produce excellent un-even aged forests if performed properly, or degraded forests with poor quality, over-aged and genetically inferior trees, is performed improperly.

¹⁹ See Thurston 1983. In this article, Murray Prest, a long-time regional resident, sawmill owner and forest practices advocate, contends that some, he in particular, selective cut to promote the growth of higher value red spruce.

problems stemming from even-aged management (e.g. herbicidal spraying), and soil and sapling damage from heavy equipment.

- Little management, particularly silviculture, occurred because it was not economically feasible. The mills gave little incentive to manage well, and even discouraged good management through poor practices on their own or Crown land.
- Interior land became increasingly inaccessible because of lack of roads and the decline of markets. This land was essentially unmanaged, which given the past high-grading practices, often resulted in unhealthy forests.
- Access to markets was very limited. Those with large woodlots and regular annual harvests could obtain quotas with the mills. Without a regular harvest, however, selling wood was much more difficult. The only real option was to sell through the pulp mill representative at whatever price he was willing to pay. Some would harvest before obtaining an agreement which left them at the mercy of the mills. Many sawmills did their own harvesting on their own or leased woodlots, making sawlog markets difficult to penetrate.
- A lot of wood was cut by landowners during the winter to supplement income. Many owned their own equipment, though much of it was not used to full capacity.
- Woodland was of little value. For example, in the 1960's, one 600 acre lot

sold for only \$1,200. Both the lack of access to markets and the inability to access much of the timber reduced land values.

Resource Condition

Nova Scotia's forests are classified within the Acadia Forest Region with a mixture of northern coniferous species with some hardwoods. As classified by the Department of Development, Conform's region is a combination of Sugar Maple-Yellow Birch-Fir Zone and Red Spruce-Hemlock-Pine Zone. Regional forests are classified as about 76% merchantable, 10% immature or regenerating, and 13% low density. Of the merchantable regions, about 60% is softwoods, 13% is hardwoods, and 26% is in mixed stands.

Over time, resource quality declined from a productive standpoint with little sawlog potential, and increasingly overaged and overstocked forests. Almost all forests within the region have been cut over at some point in history, most several times.²³ Many lots are overmature, with trees of low quality species (such as firs) or with small dimension, poor straightness, and many imperfection. Overcrowding, due to lack of management, also results in diminished growth and lower quality trees. Forest inventories during the 1960s revealed that:

²⁰ Goldsmith 1980:85.

²¹ Goldsmith 1980:84.

²² Conform 1977a. The region considered is a 150,000 acres and is not the initial service area (it may be Conform's proposed service area).

²³ Forestry has been practiced for about 350 years on Nova Scotia (Goldsmith 1980).

"volume per acre yields in age classes over 60 years were less than expected, due primarily to cutting, and to a lesser degree, mortality due to age, low densities on poor sites, and lack of management in establishing new sites. The softwood trees remaining in the older age classes (over 60 years) are primarily suited for the chemical pulpwood market, with a limited potential for sawlogs."²⁴

Many factors contributed to this forest decline: increased non-management and neglect by woodlot owners, poor economic incentives to manage, and past high-grading and current clear cutting practices.

The spruce budworm did not impact the Musquodoboit Valley the way it ravaged Cape Breton and, to a lesser degree, North Central Nova Scotia. Other regions of Nova Scotia, however, have more optimal conditions -- western Nova Scotia, in particular, has excellent resource conditions that have prompted consideration and merit of the development of a new mill. Statistics of the eight Group Ventures indicate that Conform had either the highest or second highest average merchantable wood volume per acre each of the first four years. While this may indicate that Conform's region has the best resource conditions, it may also indicate that Conform is more successful at attracting owners of better quality lots to the company, or be a result of measurement biases.

²⁴ Redpath 1974:20.

²⁵ Sandberg 1988:16.

²⁶ Nova Scotia Department of Lands and Forests 1980-83.

Previous Organizing Efforts in Musquodoboit Valley

The Musquodoboit Valley has had a number of previous experiences with community organizing efforts. The implementation of the joint federal/provincial program ARDA prompted the formation of a local development group, the Musquodoboit Rural Development Board (MRDB). The MRDB's agenda under ARDA was broad economic development, with committees addressing agriculture, business and industry, tourism, human resources, education, churches, recreation, fisheries, and forestry. Early forestry efforts were focussed upon obtaining better pulp wood prices which were necessary to making forestry practice a viable business enterprise.²⁷ According to calculations and a survey of local woodlot owners by the Forestry Committee of the MRDB, current wood prices made forestry a marginal, if not losing, enterprise.²⁸

As a part of efforts to obtain better wood prices, the Forestry Committee advocated organization of member of the forestry sector, including woodlot owners, contractors, and workers in forest products production. There is "no coordinating point for shipping or any other forest activity. The forest producer and small woodlot owner is totally an individual, sometimes thought to be at the mercy of very large and well organized business concerns." The Committee also pointed to the need for maintaining the quality of forest management to improve the returns to forest owners. When Conform formed fifteen years later, these

²⁷ MRDB [1964?].

²⁸ MRDB [1964?]:27-35. This information was among the only factual information available for the MacSween Commission in 1964.

²⁹ MRDB [1964?]:33.

issues were still the core concerns of small woodlot owners.

While other Committees in the MRDB were, in general, more successful in generating action than the Forestry Committee, this must partially be attributed to the lack of funds available for forestry work. What little money was available targeted forest management work, and not the marketing issues that locals were most concerned about. Activity in the Halifax County Woodlot Owners, the county level arm of the NSWOA, seemed to be limited. Though NSWOA efforts focussed on marketing, the locus of its activities seemed to be in Eastern Nova Scotia, in the region of Saint Xavier's University.

During this period, one of DLF's few extension foresters was stationed in Musquodoboit Harbor south of the valley. This extension forester met frequently with a number of the foresters in the Valley to discuss a range of forestry issues, though the clearest concern at that time was price. The people involved in these informal discussions were among the members of the initial group that formed Conform. Between these two organizing forces, the MRDA and extension forestry, early discussions of the problems of small woodlot owners raised the issue of organization though none actually came to fruition. One of the barriers was lack of a structure or avenue in which to implement collective marketing. "They might have been interested in it," said this forester, "but they didn't know how to do it and neither did I." These efforts do, however, show a previous interest in woodlot owner issues and an effort to develop organizations that seems to have promoted the quick development of the Conform initiative.

Numerous efforts aside from forestry had also been undertaken. The most

significant of these was a half million dollar flood control project funded by ARDA through the MRDB. MRDB also undertook other initiatives in health care, recreation, agriculture, business development, and human resources.³⁰ Cooperatives within the region included an agricultural purchasing coop, a blueberry co-op, and a fuel oil purchasing co-op out of Truro. Thus, there was an organizational predisposition to collective management once the idea became known.

Formation of Conform

As news of the West Pictau pilot project spread and it became known that the next General Development Agreement might include funding for more Group Ventures, interest grew amongst woodlot owners in other parts of the Province. The West Pictau pilot showed both woodlot owners and administrators that wide spread implementation of Group Ventures was potentially viable. Locally and within Lands and Forests, people began communications to promote a next round of Group Ventures to arise from next joint federal/provincial agreement.

The first meetings to discuss potential for a local Group Venture in the Musquodoboit Valley began in March of 1977. Though the General Development Agreement would not be signed until June 1977, it was clear by this time that funding would be included for more Group Ventures. After meetings with the existing pilot project operators in West Pictau and government officials, a general

³⁰ MRDB [1964?]; MRDB [1968?].

meeting for those interested in the Group Venture was held on July 25, 1977, where an informal agreement was made to create Conform.³¹ The group drafted a set of five objectives that remained unchanged for several years, including:

- "1. To organize 75 to 100 forest land owners into a management unit to collectively operate and harvest their forest resources.
- 2. To consolidate the forest land of the members of Conform into a management unit large enough to support harvesting and processing equipment on a sustained yield basis. A total of 25 to 30 thousand acres would be an objective of Conform.
- 3. To provide a market for members of Conform for standing or harvested timber.
- 4. To establish and operate a sawmill and dressing mill to manufacture and market forest products.
- 5. To provide an organization through which the shareholders of Conform Ltd. may take advantage of silviculture assistance programs as outlined in the G.D.A. agreement."³²

A Steering Committee was formed to carry out the development of

³¹ Conform 1978d. Conform is an acronym for Consolidated Forest Owners Resource Management.

³² Conform 1977a.

organizational plans and arrangements, particularly the interactions with the government program. By September, fifteen people had given their firm commitment to formation of a company. This support was necessary to meet the requirements of a minimum of ten people to form a Group Venture. By October 17, Conform's proposal had been accepted for presentation to the Project Committee within the Division of Lands and Forests. In addition, verbal approval was given for Conform to incorporate as a company.

External and Local Differences

While the initial response was quick, by December attitudes had changed and there was concern that "we were making little progress with the government and in a number of cases they had not kept their word so we would have to take more drastic steps to get Conform Ltd. off the ground."³³ In subsequent months Conform would encounter difficulties with government officials on several issues, including the landowner's agreement and service area size. These disagreements reflected differences in how to best encourage woodlot owner membership and what region size Conform could adequately service.

Several particular points were debated. First, there was debate as to whether individual woodlot owners already receiving forestry assistance through the individual Private Lands Program would be forced to place those lots under management of the Group Venture if they were within its service area. Conform

³³ Conform 1978c:No. 6.

argued that such requirements precluded the ability of individuals to operate on their own and might lead to potential tensions of shareholders not wanting to be a part of the company.³⁴ While the first General Agreement (1977-82) included this provision, the subsequent agreement allowed woodlot owners within a Group Venture service area to join the individual Private Lands Program.

A second issue was the size of commission for all wood sold off managed lots. Conform wanted a lower commission (2% of the roadside price versus the government's recommendation of 5%) to discourage lot owners from placing only immature lots under management, and keeping mature, near-harvest lots out of the company. They also objected to the payment of commission on Christmas trees which were an especially valuable product. While the difference between 5% and 2% may not have a significant effect upon roadside prices, it does greatly affect stumpage prices to the landowner which are the roadside prices less the costs of harvesting. In some cases, the 5% commission could be as high as 25% of the actual stumpage fee to land owners. The concern with the commission, and a few other stipulations, was that landowners would be unwilling to sign agreements with Conform.

A third issue was the size of the service area. The service area is the region in which Conform is allowed to manage woodlots. Conform initially applied for a service area which government officials thought was too large for

³⁴ Conform 1978b.

³⁵ Conform 1978b.

³⁶ Hundert et al. 1988:9; "Summary of information from the six Central Region Group Ventures".

Conform to service, too costly to service from one site, and departed from the focus of consolidating adjacent properties under single management. Conform felt that the service area should not be used to limit the group's activities, and that the regional DLF foresters administering the private programs often had areas twice the size of Conform's submission.³⁷

These issues affected the whole Group Venture program, as well as Conform, since standard agreements had to be developed for all of the individual Group Ventures. Conform's then-president described these disputes as a negotiation in which the initial positions were taken to establish bargaining leverage. This was a negotiation where the Group Ventures had little leverage and basically had to accept the DLF's terms. Eventually, Conform agreed to the 5% commission and the reduced service area, though no commission was to be paid on Christmas tree sales. This outcome seems important because it shows that the Group Ventures had little input into the development of what was, in some cases, their businesses. This lack of input into Program decision-making has been reiterated throughout the Program's history, and, combined with the uncertainty of future funding, has made Conform wonder whether they would be better without government funding.³⁸

While these issues may appear to be relatively technical decisions, they seemed to reflect an adversarial relationship between local Group Ventures and Lands and Resources officials. Reports of public meetings indicate that

³⁷ Conform 1978b.

³⁸ Redden 1991.

government officials were held in great suspicion and the unnegotiable positions of these issues were seen as ways of controlling the Group Ventures.³⁹ These relations varied with individuals in DLF and reflected the internal split described earlier between "social" and "industrial" foresters.

Another difference, though not quite as explicit, was the degree to which business-like behavior and profit-seeking was acceptable by program administrators. While program officials and early reports explicitly state that producing "viable" and "self-sustaining" organizations is a goal of the program, people within Conform seemed to feel that administrators really desired the Groups to operate like "arms of government". Early Conform reports indicate that "it is also government policy that they always keep complete control of these companies but this is not what we are proposing." Further, there was concern "that all our objects of the company might not be correct to work under the G.D.A. Agreement." Many of Conform's efforts to develop a self-sustaining business had not been generally encouraged. The Department of Lands and Forests, for example, discouraged Conform's equipment purchase. Group Ventures have never been allowed to profit from Forest Improvement work by performing under cost, whereas contractors have been allowed to profit.

³⁹ Conform 1978a; Conform 1978c:No. 6.

⁴⁰ Conform 1978a.

⁴¹ Conform 1978f.

⁴² Group Ventures are paid at cost rate for work performed, regardless of whether work is performed above or below estimates. Contractors, however, are paid a flat rate. In addition, contractors are actually paid higher rates than Group Ventures for the same jobs. Under the new funding agreement agreed to in 1993, Group Ventures will be allowed to profit from their Forest Improvement jobs, though they will still be paid at lower rates than

Conform, with its aggressive and business-like attitude, may have had with the vision conceived by program implementers.

In addition to these disagreements with program administrators in DLF, local opposition was encountered due to the efforts of a local sawmill operator. Through appearances on television, and advertisements and articles in newspapers during the Spring of 1978, the mill owner was successful at garnering some significant local opposition to Conform. Opposition was raised by preying upon landowner fears of losing control of their land to government, and the promotion of socialism. Though the threat of competition from Conform's proposed sawmill may have had some influence upon his opposition, the primary motivation was pressure from Scott who was the primary market for wood chips produced as a byproduct from the mill owner's operations.⁴³ Scott strongly opposed the Group Venture Program for fear it would increase woodlot organizing strength in the concurrent efforts by the NSWOA to develop marketing boards. To some degree, this opposition reflected a corporate policy opposing woodlot owner organization which likely had some roots in distant decisions made by corporate headquarters in the United States.

This opposition led to a number of public conflicts within the region. The service area was reduced from Conform's original request after a chaotic public meeting in Musquodoboit Harbour and a petition in Megher's Grant.⁴⁴ At the

contractors.

⁴³ This mill owner subsequently became a shareholder in Conform.

⁴⁴ Conform 1979.

public meeting in Musquodoboit Harbor in November of 1978, the crowd was incited by speeches from the oppositional mill owner into a strong and rowdy opposition to inclusion in Conform's service area. Opposition in Megher's Grant, particularly by several large land owners, resulted in a petition for exclusion from the service area. These large landowners did not want to lose management control of their land in order to gain access to Forest Improvement funds. This opposition caused some internal problems for Conform, since the reduced service area would cut off several committed members, including Board members. In the end, Conform had little choice but to accept the service area which was agreed upon by the Board in a split vote.

The main result of these differences was to slow down the development of Conform. Shareholders did not agree to the 5% commission until September, and the service area was not resolved until January of 1979. Conform finally signed an agreement with the Department of Lands and Forests in February of 1979, and officially became a Group Venture.

Conform's Organization

Initially Conform had 15 shareholders who placed 2,065 acres of forest under management.⁴⁵ Both of these figures have grown steadily throughout Conform's history, as described in Table 1. Today there are about 175 shareholders (about 230 woodlots) that cover about 37,000 acres. Shareholders in

⁴⁵ Conform 1978e. Shareholders owned a total of 10,703 acres.

TABLE 1
Conform Annual Operating Statistics

			Produc	Avg	Tot					
	Share Managmnt		Forest in	Size of	Merch	Avg Vol	Road			Silva-
	holders	Plans	Managmnt	Ownership	Vol	per Acre	Construct	Surveying	Ponds	culture
			(acres)	(acres)	(000 ft^3)	(ft^3)	(miles)	(miles)		(acres)
1979-80		25	4250	195	7714	1815	13	17.8	2	302.6
1980-81		50	10298	206	14811	1438	14.1	17.6	6	670
s 1981-82		80	15271	191	26755	1750	19.6	42.1	5	992
1982-83		105	18708		31690		22.7			220
1983-84	83	103	19624				31.2	18.4		898
1984-85	92	117	19148				33.5	7.2	7	901
1985-86	101	125	22100				11.5	12.7		994
1986-87	126	149	25800				13.1	4.5		857
1987-88	132	158	27471				14	11	0	514
1988-89	139	167	29065				24	16	2	489
1989-90										739

Note: Spring 1993 estimates are about 170 owners, 225 management plans and 37,000 acres.

Source: Department of Lands and Forests, Annual Report, 1980 to 1990.

Conform are woodlot owners who agree to put woodlots (minimum of 50 acres) under the management of the company. Owners do not have to place all forest land under management, and many, in fact, have only a fraction of their woodlots under management. A share in the company, which was initially \$100 and is currently \$200, must be purchased for every woodlot placed under management regardless of size. At annual meetings, each share represents one vote and no shareholder can have more than 10% of the vote. The woodlot owner must also sign an agreement with the following conditions:⁴⁶

- Woodlot owner must sign a management plan for the woodlot developed by Conform's forester and the woodlot owner. Plans detail the schedule and type of work to be performed on the woodlot. Plans must be in conformance with standards developed in the joint federal/provincial agreements and approved by DNR forester.
- Payment to Conform of a 5% commission on all sales of wood products (roadside price) from managed lots (excluding Christmas Trees).
- Agreements last 10 years, during which the woodlot must guarantee to keep woodlot management under Conform. There are penalties for early withdrawal from the agreement.

During the second provincial agreement the required management term was changed to ten years after the last government assisted silvicultural treatment was

⁴⁶ The landowner agreements are common to all Group Ventures.

performed, though it returned to original policy in the subsequent agreement. As Conform wrote, "Considerable resistance was encountered to this change, to the point where some land owners have refrained from doing further forest improvement work for the above reason." Clearly, the length of the agreement may provide some disincentive to those considering joining the company, as may the 5% commission. However, the share cost and ten-year commitment of land are also commitments significant enough to insure that those joining the company are serious about their membership.

Conform agrees to insure that work in the management plan is followed, and wood from silviculture and harvesting is sold. The only cost to woodlot owners is the initial share and the 5% commission on wood sales. Most silvicultural work is paid through the Forest Improvement funds from the Department of Lands and Forests. The costs of harvesting are taken from the price received for the sale of wood.

Though most woodlot owners have Conform perform all management activities, members retain the option to do work themselves. This work is usually limited to harvesting activities since maintenance of standards for silvicultural work necessitates oversight and trained staff. Only a small fraction of members (10-15%) actually perform any work on their own woodlots. Members then receive the roadside price for the wood, less the 5% commission. Conform's equipment can be rented (currently at \$50 per hour) to perform harvesting activities. For members requiring greater income from their woodlots, this option

⁴⁷ Conform [1983?]:2.

essentially allows them to become employees and receive the revenues from the harvesting costs. For a number of members who have traditionally worked their woodlots during the winter, his option allows them to continue to generate income during these months.

The agreement offers landowners a number of benefits:

- Access to Forest Improvement funds for forest management work on their lands. Woodlot owners could access funds through the individual Private Lands Program, though assistance for roads is not as high.
- Development of a management plan in conjunction with Conform's forester.
- The option for performance all management duties and activities including insuring management plans are followed through, scheduling and arranging of work, and work oversight.
- Marketing of wood by Conform's manager, which removes the necessity of contacting and negotiating with purchasers. The potential for being cheated by contractors who under-report wood volumes is also eliminated.

While Conform becomes the legal manager of the woodlots, it always defers to the owner's preferences as management activities are undertaken. The intention is to leave landowners in control of their woodlots. Conform's staff includes a manager, office supervisor, and forester whose salaries are paid by the government through the Operations Budget. Field crews and a field supervisor are paid through Forest Improvement Funds, and costs assessed to shareholders for harvesting and work not covered by Forest Improvement Funds. The Board of Directors, comprised of seven individuals elected by the shareholders, meets monthly with the manager to oversee operations. Board members are paid a nominal fee for each meeting.

At the outset, Conform's manager and President of the Board were the same individual, which lasted for the first few years of operation before he stepped down as manager in 1981. Since this time the same manager has presided, and a number of the original Board members still remain. Relations between the Board and manager have been very stable throughout. The manager reported that there had been no need to call a vote of the Board for five to six years because all actions were agreed upon.

Members in Conform must be within the service area agreed upon with the Department of Lands and Forests. After the initial service area was limited to the Musquodoboit Valley, Conform has expanded in several directions: southeast into the Mooseland and Moose River areas, southwest into Megher's Grants, and north into the Stewiacke Valley. Initially the service area was about 115,000 acres, ⁴⁸ and has grown to 178,000 acres, the largest in the Province. ⁴⁹ Of the initial 115,000 acres, about 7,000 acres is Crown land, 28,000 is owned by large

⁴⁸ Group Management Viability Study 1982:22.

⁴⁹ Agfor 1991:6.

companies, and the remaining 75,000 is small woodlot owners, eligible to join Conform. 50

Finances

Finances are split between Operations, Forest Improvement and Harvesting in accordance with the agreement with the DLF to facilitate program administration. Revenues sources include wood sales, equipment rental, and government funds. Operations costs (three staff and office expenses) are funded through DLF assistance, less the 5% commission from wood sales. Forest Improvement costs are completely funded through DLF assistance. All remaining costs, primarily harvesting and management costs not funded by DLF, are funded through wood sales and equipment rentals. Table 2 shows that total expenses (roughly equal to annual revenues since profits on operations have never exceeded about \$25,000 Canadian) ranged from \$0.57 to \$1.3 million Canadian over the fiscal years of 1983 to 1991, excluding 1988 and 1989.⁵¹ Over this same period, revenues from equipment rose significantly, from \$35,000 in 1983-84 to \$216,000 in 1991-92, and commissions have increased, though erratically, from

⁵⁰ Group Management Viability Study 1982:22.

⁵¹ Data from this range of years is used for all figures in this section.

Table 2 FINANCIAL PERFORMANCE

	Revenue						Total	% of	% of
	Conform			DLF	DLF			Expenses	Operat
	Wood Sale	Rental	Commiss	Operat's	Fors Impr	Total		Funded	Offset
1979-80	49380		2469	59108	116438				4.0
1980-81	83060		4153	56934	242896				6.8
1981-82	222380		11119	63607	446484				14.9
1982-83	105900		5295	68100					7.2
1983-84	225460	34881	11273	61694	215549	277243	567459	48.9	15.4
1984-85	524845	65393	18567	67863	264409	332272	922465	36.0	21.5
1985-86	369000	106198	18450	70256	303165	373421	950687	39.3	20.8
1986-87	427680	158654	21385	74367	369534	443901	1229167	36.1	22.3
1987-88	384920	201656	19246	79491	266422	345913	1207781	28.6	19.5
1988-89	396040		21384	58829	369356				26.7
1989-90	486780		19246	79491	265794				19.5
1990-91	503660	207214	25183	90000	207214	297214	1197714	24.8	21.9
1991-92		216002		90000	257596	347596	1296101	26.8	

Note: Estimates are used for 90-91 & 90-92 Operating Expenses and Commission offsets.

Source: Conform financial statements, and Department of Lands and Forests Annual Reports, 1980 to 1990.

Though Conform is the least dependent upon government funding of all Group Ventures, it still relies upon assistance for a large portion of its funds. Table 2 shows that government funding ranged from 49% to 29% of total expenses over the fiscal years of 1983 to 1991, excluding 1988 and 1989. At the outset of the Group Venture Program, officials hoped that Groups would eventually become independent of operating funds by offsetting costs completely with commissions. Conform, though better than most Group Ventures, is still far from this goal. The percentage of Operations costs offset by commissions ranged from 15% to 22% over the fiscal years of 1983 to 1991, excluding 1988 and 1989.

Conform has consistently shown an annual profit for its shareholders. In addition, shares have been split three times as the value of the company has grown.

Operations

Conform's operations are somewhat unique amongst Group Ventures because a large amount of work is performed by the company rather than by contractors. Ownership of equipment and hiring of crews has given Conform greater control over work performed. Few other Groups have purchased equipment or operated their own crews. Those that have purchased have very few pieces and are unable to perform extensive work. Several Groups have been

unable to make equipment pay for itself, necessitating the sale of the pieces.52

The need for greater control over forestry work became apparent early in Conform's operations. Soon after incorporating, Conform had difficulty gaining access to equipment or forestry services at the best times for their operations. Access to equipment and services relied heavily upon local contractors and equipment owners who were unreliable for a number of reasons. First, equipment owners were likely to use equipment during the best periods, giving Conform access on off-periods during bad weather or poor road conditions. Second, contractors would often delay jobs if better ones (i.e. higher paying or less demanding) arose. Third, it was often difficult to get contractors to do more difficult and poorer quality jobs such as salvage and remnant removal. Fourth, contractors often overcharged for work when they learned it was government funded.

Reliance upon others for services and equipment made operations planning and maintaining work schedules difficult. This situation was unacceptable to management, so the Board of Directors who decided to purchase a second-hand skidder from a Conform member to enable Conform to use its own crews. The financial risks of this purchase elicited some concerns: one member was wondering "How do we pay for it?" and to another it seemed like a somewhat "dubious" venture. Within a year, however, the skidder had paid off for itself by work done for Conform members, or through rentals.

⁵² Group Management Viability Study 1982:35.

⁵³ Redden 1992:2.

Conform has since purchased a number of other pieces equipment including two forwarders, a bulldozer, and a road grader. Income from previously purchased equipment has helped to fund the purchases of these successive pieces. In general, each has paid for itself in a relatively short period of time. These purchases are very important to Conform's ability to provide good services to its shareholders. Having recourse to its own crews gives Conform greater control over work schedules. In addition, Conform can demand better service from local contractors by setting a standard on price, reliability and quality that they must compete against.

In addition to controlling work schedules, operating its own crews allows

Conform to provide excellent quality service to its members. Among these are:

(1) pickup of all roadside wood even if it is not a full load; (2) pickup areas are left relatively clean, often a problem when non-local truckers are used; (3) woodlots are left relatively clean of stray logs and brush, and damage to soil and saplings is minimized; (4) follow up inspections over one to two seasons by

Conform's forester to insure that forest conditions progress properly. One source of this quality is good, reliable management and operators. Conform has managed to secure an excellent manager, an excellent forester and an excellent field supervisor (16 years with Conform). Many of the staff have worked for at least ten years. The result is real continuity, an understanding of the standards of work demanded, and a responsiveness to the shareholders (workers know they will have return is work is inadequate).

⁵⁴ Conform is being forced to use Stora union truckers in its new agreement with them. Conform's manager worries that these drivers will not pay the same attention to these quality concerns as their current local trucker.

The tighter linkage between work crews and shareholders in Conform seems to be an important factor in the quality of work performed. In typical contractor-woodlot owner relations, the lot owner usually had little control over the quality of work performed. Because of the infrequency of jobs (often every 5 to 10 years), especially with small woodlot owners, maintaining customer relations is a small concern for contractors and woodlot owners have little recourse if work is done poorly. Within Conform, however, there is much greater accountability for the quality of work, and the education efforts behind the development of management plans increases awareness of management quality.

Markets

Within the context of a generally poor market environment, Conform is in a relatively good position. Primary markets are for pulpwood, hardwood fuel, and sawlogs (see Table 3). Pulpwood markets are most critical because large quantities of low-grade softwood, the major output from current overaged and poorly managed stands, are produced in harvesting and silviculture work. Without these markets, Conform would be unable to perform much of the Forest Improvement work to increase future yields of sawlogs and higher quality pulp.

Conform's location allows for shipping to all three of the major pulp mills in Nova Scotia: Bowater-Mersy, Scott, and Stora. In the past Conform has marketed to all three mills, though currently Bowater does not take shipments as far as Conform. Sales to Bowater and Stora are arranged through individual quotas. Wood is sold to Scott through the Central Supply Division, which is the

TABLE 3
WOOD SALES (cords, except sawlogs - FBM)

	Pulpwood			Studwood	Hardwood	Sawlogs		
	Bowater	Stora Scott		Total		(fuel)		
1979-80				1333	0	0	120784	
1980-81				2221	27	86	184355	
1981-82				4741	142	728	420413	
1982-83				1021	89	837	292007	
1983-84							325000	
1984-85				8100	112	2400	336421	
1985-86	2164	1903	1900	5967	108	2841	146393	
1986-87	2885	3400	2200	8485	78	2360	300096	
1987-88	2676	3547	2455	8678	85	3357	312798	
1988-89	1098	5431	1821	8350	112	2132	311094	
1989-90	0	4234	4294	8528	118	2366	543562	
1990-91	0	3756	4023	7779	72	2565	399310	
1991-92	0	4419	4274	8693	69	1789	412384	

Source: Conform records.

marketing board which negotiates with Scott for an annual quota and price. Membership in the Division carries the benefits of an insured price and quota negotiated by the Central Supply Division. However, it also carries the liability of constraining access to that buyer, since members of the Division may sell to Scott only through the Division and within their allowed quota. Conform felt this pressure which at times became acute. In one circumstance, Conform was stuck with 2,000 cords of wood at the road after Bowater reneged on a contract. Scott was very interested in taking the wood, though to sell the wood Conform would have to leave the Division because it was beyond their quota.⁵⁵

From the outset, however, Conform was a strong believer in the market board and has stayed in the Central Supply Division through some tough times. During the early 1980s, when Group Ventures were growing and needing larger quotas, many withdrew from the Division to seek individual contracts with Scott. So Conform is one of the few who did not withdraw and was and has remained closely involved with the negotiations with Scott. Conform's president became President of the NSWOOA and the Central Supply Division in late 1983 and remained so until late 1986. The current negotiating team is headed by Conform's current manager.

Conform's position indicates a belief in the marketing boards and the need to show sustained support for it. This broader perspective on woodlot owner

⁵⁵ Two years later the wood was sold to Stora for fuel. The deal was likely facilitated by Lands and Forests officials who were concerned about the embarrassment of one of the Group Ventures "wasting" 2,000 cords of wood.

⁵⁶ NSWOOA-SSD 1984.

issues underscores a belief in the importance of woodlot ownership in tackling the marketing problems key to woodlot owner betterment. It is unclear, however, whether the decision to stay in the Division was made primarily as a reflection of ideology, business sense, or personal involvement by a few individuals, particularly Conform's President. From a business perspective, the long-run benefits appear to have offset the short-term sacrifices. Conform had a number of other markets which probably provided it with greater flexibility than other Groups. Many Groups are now attempting to reenter the Division as it becomes stronger and market condition outside of the Division become less stable and reliable. Reentry is difficult, however, due to the Division's limited quota for its members.

Sawlogs are sold to a few local mills, three of whom are shareholders including the sawmill owner who originally opposed Conform's creation. As most sawmills have difficulty obtaining adequate supply, these mills generally take all the wood Conform can generate. Further, prices tend to be consistent among them because of good competition, inadequate supply and good information. Hardwood is often sold for fuel through a few fuel-lot operations, one of which is operated from Conform's woodlot. In 1992, Conform delivered fuel wood to approximately 300 homes.⁵⁷

Obtaining quotas from the pulp mills typically requires negotiating an initial quota, and then fulfilling that quota on a regular and timely basis.

Conform has an excellent reputation for building and maintaining quotas. At first Conform was given a small quota (about 1000 cords) by Bowater, who, according

⁵⁷ Redden 1992:5.

to the first manager, did not believe Conform could fill it. Conform was able to meet and annually expand this quota (to 2,000 and 4,000 cords in succeeding years) until it had become one of the major producers in the region. By exhibiting reliability to their buyers, which other Group Ventures have been less successful at, Conform has built up solid relationships with secondary producers that are crucial to maintaining reliable market access for their shareholders. Strong management and understanding of the forestry industry appear to be major factors behind this success. In this marketing context, Conform's activities and performance have more resembled those of a contractor with goals of making and meeting quotas than a Group Venture with a focus on performing forest improvement work.

Development of internal forestry capability through equipment purchases provides Conform with the ability to access markets by giving them control over harvesting and management. To maintain market quotas, producers must supply wood reliably to the mill according to the agreed schedule. Without control of harvesting and management, Conform might lose these quotas because it would be unable to meet mill schedules. With the ability to access markets, the original goal of developing a sawmill fell to the wayside. Because of excess demand for sawlogs, control of harvesting technology is more important to market access than actual control of processing technology.

Despite the official concerns over long-run supply shortages, a continuous problem for Conform, and Group Ventures in general, is obtaining adequate quotas for their wood. Quotas are typically the limiting factor in the level of

harvesting and silviculture performed.⁵⁸ There is usually more salvage work and cleanings than markets can support. At points in Conform's history, these constraints have been large though they appear to be less significant at present. Market constraints are greater on other Groups less successful at developing markets than Conform. Some perform only silviculture treatments (as opposed to harvesting) because available quotas are filled by wood produced in these treatments.

For Conform, quota limitations become particularly acute during the wintertime when cutting is at its heaviest. Many of the Conform members who harvest their own woodlots would like to get larger quotas, but are constrained by Conform's total quota and the market needs of other shareholders. This potential conflict is managed through attention to fairness amongst members, and may be tempered by the reality that much of the wood and markets would likely be inaccessible were it not for Conform. Conform can provide some flexibility in the size of a quota to a member if it is necessary. In one case, a member in need of immediate funds was allowed a large disproportionate quota, though fairness to other members quotas was also maintained.

The Group Venture Program, and other forestry assistance administered through the General Development Agreements, may actually contribute to the perpetual market problems facing woodlot owners by maintaining the oversupply of wood. Wood supply from Group Ventures represents about 5% of total wood

⁵⁸ Keith 1992:19; Redden 1992.

supply in 1989-90.⁵⁹ Despite the concerns of supply shortages which drive this funding, none have occurred nor do any appear looming. Government supply goals for the next 20 to 25 years call for 50% to 100% increases over current supply.⁶⁰ Without expansion of markets for wood products, market conditions will become even worse for suppliers and government forestry assistance will simply become a subsidy to the secondary industries.⁶¹

Conform seems to have improved the market conditions of its members in several respects:

1) Improved price -- Stumpage and wood price increases are achieved through protection from deceptive contractors who give unfair prices or inaccurately report harvest volumes, sale of all logs placed roadside including partial loads, and obtaining regular producer prices with unregulated markets. In addition, the ability of Conform officials to be directly involved in the marketing division negotiations provides whatever price increases that can be obtained through the marketing structure.

⁵⁹ Nova Scotia Department of Lands and Forests **1990.** Figure is somewhat understated because of cutting for wood fuel, which, according to data from Reed on the all private forests, increase private volume about 16% (Reed 1987).

⁶⁰ Reed, 1987.

⁶¹ A recent effort to site a pulp mill in Western Nova Scotia does not appear unlikely to be successful after several years of discussion. Another effort by the Nova Scotia Primary Forest Products Marketing Board to initiate feasibility studies for a Finnish high-grade paper enterprise met with little interest from within the Department of Lands and Forests. Lands and Forests officials instead initiated their own study that reported resource conditions that would be unsuitable for such a venture.

2) Improved market access -- Being able to devote full attention to marketing, Conform's manager can attempt to increase quotas for members. For woodlot owners who do not harvest regularly, Conform can insure them access to markets under fair conditions. Wood can also be graded and sold to multiple markets to maximize the return on the product.

While improving both price and market access, access improvements have been more significant, particularly for woodlot owners without regular harvests. Some contend that Group Ventures have had little significant impact upon prices, particularly in the context of improving the overall market conditions and regional differences within Eastern Canada.

Shareholders

Shareholders in Conform are a diverse group of individuals with diverse interests in managing forestland. The largest landowner has about 3,000 acres under management while the smallest have about the 50 acre limit. Landowner interests in management range from forestry production to other non-production values such as wildlife, mixed species stands, and small-scale sugar bush. Few owners rely upon their woodlots for incomes -- according to the manager's estimates, only 3 to 4 rely totally upon their woodlots for income and only 15 to 25 do some or all of their own harvesting. Roughly 20 % live outside of the immediate region, and only a few (8-10) live outside of the province. In addition to those woodlot managed by Conform, many shareholders also own woodlots that they do not have managed under Conform for a variety of reasons.

Conform has never actively advertised or recruited members. New members are attracted primarily through word of mouth and seeing activity on adjacent properties. Because of the relatively slow pace of membership growth, Conform has never had difficulty immediately servicing new member's woodlots. In most cases, within a few months of joining, management plans are developed and initial work begins. Only a few (less than five) members have failed to renew their agreements after the initial ten-year period.

The philosophy of forest renewal and proper forest management appears to have spread among Conform's members. All interviewed emphatically believed that attitudes and values had changed significantly since the formation of Conform. Education is promoted through bi-annual meetings, field days demonstrating management principles and techniques, and personal interaction with Conform's forester in the development of the management plan and implementation of silviculture treatments. Conform's forester and manager often respond to membership inquiries by taking potential members on tours of member woodlots to show them the quality of work performed. Member complaints, often by people without an understanding of forest management, are responded to by showing treatments on other woodlots to educate the owner on management principles and standards.

Changing Resource Conditions

As has been noted, poor resource conditions are the primary motivations behind government funding of forest improvement efforts. The Group Ventures

role is often referred to as "junk collectors" who are collecting the remnants of past poor practices and preparing for a new generation of healthy forests. One of Conform's goals, as well as the entire Group Venture Program, is a wide-spread transformation of the forest resource in Nova Scotia. Attainment of this goal requires both broad participation in the program and implementation of improved forest practices. Despite Conform's financial success, they have still only reached woodlot owners representing about 20% of woodlot acreage in their service area. Though a few receive assistance through the Private Lands Program, most of the remainder either perform no management or manage in their manner.

Forest management on lands owned by Conform have undergone a dramatic transformation: from being underused and unmanaged, they have become intensively managed and maintained. Conform's management focusses upon thinning, cleaning, shelterwood cutting, clearcutting, and stand conversion. Management is generally aimed at producing sawlogs through pre-commercial or commercial thinning, stand conversion, and cleanings. Conform also undertakes a great deal of salvage cuts to remove overaged or poorly developing forests. Management promotes a mix of softwood, hardwood and mixed stands, particularly to suit individual land owner desires.

⁶² Conversation with Conform's current manager.

⁶³ Keith 1992:21. Most information in this section is derived from Keith and conversations with Conform's manager.

⁶⁴ Removal of a portion of trees at an early or intermediate stage to promote growth of quality trees in the remaining stand.

⁶⁵ Removal of overstory of undesirable trees to allow an understory of desirable trees to develop.

Salvage cuts and harvests may be undertaken by selective cutting or clearcuts. Clearcuts are generally performed in small areas, less than 5 acres, and generally leave trees and snags throughout the cut and near borders. "Perch trees" are also left to promote raptor habitat which can keep mice populations, which eat regenerating seedlings, low. Because Conform utilizes work crews with power saws, these practices have little impact upon the efficiency of operations. In contrast, land managed for the pulp companies utilizes large equipment that is incapable of such discriminate practices.

Conform's management is particularly attuned to wildlife concerns.

According to Keith, "They regularly leave snags, woodpecker trees, and small islands of trees within small clearcuts". 66 The high priority given to wildlife is partially a reflection upon Conform's forester who has a particular interest and concern for maintaining habitats.

Though regeneration is a major element of the Provinces overall program, Conform actually performs little because it believes natural regeneration is adequate. The effectiveness of natural regeneration is promoted by Conform's practices that tend to minimize disturbance to the land. Little spraying or ground preparation work is performed, despite efforts by people in the Lands and Forests office to encourage this practice.

From a forest productivity standpoint, forest conditions are clearly vastly improved. Current management produces mostly pulpwood from a combination

⁶⁶ Keith 1992:23.

of silvicultural practices and some harvests. Future harvests will see a much improved forest producing increasing volumes of sawlogs and higher grade pulp. From an ecological standpoint, conditions also appear improved. Past practices proved to be highly ecologically damaging, promoting low-grade, less complex forests. Overall, current management practices appear to be a vast improvement. One reservation, however, is the large areas of land opened up through the program of road building. Conform alone has built or improved about 197 miles of road from 1979 to 1988, while the entire Group Venture program has built or improved about 1,242 miles of road over the same period. From an ecological viewpoint, opening up areas of land on this scale may diminish regional ecosystems where these non-utilized played important ecological functions. Though forest practices may be greatly improved, it is still unclear whether they are better than conservation.

⁶⁷ Nova Scotia Department of Lands and Forests 1979-88.

Chapter 4 - Analysis of Conditions of Collective Action

Introduction

Previous chapters described the historical roots of the Group Venture Program, and the formation and operations of Conform, Inc., one of the more successful Group Ventures. In this chapter, I analyze the conditions and circumstances under which Conform operates to determine which factors are most crucial to Conform's formation and subsequent successful operations.

Conform is chosen for analysis because it is among the most successful of Group Ventures in several respects. First, it has among the highest levels of harvesting and provision of forest management services. This may not be the best measure of success since other Group Ventures are confronted with more difficult conditions, such as forests damaged by the Spruce Bud Worm or irregularly shaped parcels to consolidate. But, it is an important measure of organizational health and vigor, particularly since maintaining adequate and reliable volumes has been a persistent problem for woodlot cooperatives. Second, in the event of a large reduction or elimination of government funding, Conform is one of the few (if not only) Group Venture that would survive. This viability is reflected in its lesser dependence upon government funds and the likelihood that services it can provide without government assistance would still be demanded by woodlot

One group venture, La Foret, has had to consolidate the long, thin parcels resulting from the French practices of inheritance. In this practice, land divided amongst heirs is sliced along the parcels length so that all parcels have access to roads. The result is a pattern of land parcels like lines on paper.

² Simon and Scoville 1983:18.

owners.

These success criteria relate to goals that both Conform members and the government place in collective management. Members desire some combination of improved woodlot conditions, higher woodlot productivity, and better woodlot income, while government is concerned almost solely with increasing aggregate small woodlot production. So while a Group Venture may meet the goals of members by improving conditions and outputs of their woodlots, it may not meet government objectives if participation is not broad and aggregate productivity increases are not significant. These government goals add an external performance dimension to the analysis that might not exist if only the interests of collective members were considered. While there is no intention here to measure such performance, by broadening the definition of success it changes the conditions and factors identified as most important.

Another important factor is the range of management and marketing options available to woodlot owners. Basic options include non-management, self-management, management by contractors and foresters, and management by Group Venture. Owners may select one option to handle all management activities, or use different options for different elements of management and marketing. Options also affect different avenues for obtaining forestry assistance (Private Lands or Group Venture Programs), different levels of direct government involvement (government foresters versus Group Venture foresters or private foresters), and different levels of regulation (government management criteria or no regulation). To some degree, analysis of Conform's success compares the various options available to woodlot owners to determine why woodlot owners

choose collective management and how Conform creates the conditions under which they choose collective management.

In analyzing Conform, a number of important questions arise: Which factors, such as program benefits or an existing desire for the operational and marketing benefits of collective management, were most important in inducing action by Conform? Given the option to obtain funding individually through the Private Lands Program, why would local people expend the organizational energy to form a Group Venture? Why do members choose to join Conform rather than pursue funding through the Private Lands Program, or manage without governmental strings? How does Conform achieve success despite rules limiting its ability to act as an independent business? Why does Conform operate a productive and healthy collective though incentives for such direction are not present?

To organize the analysis of this relatively complex set of factors and relations, conditions are organized into four categories: physical conditions, market conditions, member characteristics, and internal rules and organization. Physical conditions refer to the physical characteristics of the resource, the geographic pattern of ownership and fragmentation, and the available management technologies and options. Market conditions refer to the potential users of forest outputs, their other supply options, the competitiveness of users, and the implications of these markets upon management options. Member characteristics refers to the socio-economic status of members, their available income options, their past relationships and organizational histories, and their skills and knowledge of forestry and organizations. Internal rules and

organization are by the most complex set of conditions. They include the options for resource extraction and maintenance, rules for collective membership and decision-making, organizational characteristics, particular group decisions, and relations with government actors who mutually determine the collective's rules and organization.

Physical Conditions

Small woodlot owners in Nova Scotia hold roughly half of its forestland, while in Musquodoboit Valley they own between 55 and 60 percent. Industrial holdings, primarily by Scott, range between 20 and 24 percent. These figures show that small woodlot owners are an important source of wood supply, and are present in large enough numbers to give a collective management company adequate wood supply.

The forest resource is generally degraded, producing large amounts of low-grade (over-aged) pulpwood and declining amounts of sawlogs. Limited markets exist for such low-quality wood, thus placing limitations on the pace of forest renewal activities. Within the generally overaged and undermanaged Nova Scotia forests, however, Musquodoboit Valley has relatively good conditions. Other regions, such as those infested by the Spruce Bud Worm, have worse conditions, while some areas, such as the province's western portion, have better.

Changes in the harvesting technology have led to changes in forest practices, a growth of contractors, and an increasing scale of operations.

Increasing economies of scale in management operations make use of these technologies on individual small woodlots infeasible. Small woodlot owners are unable to afford the investments in forest equipment and therefor must rely on antiquated technology, or contractors who are less liable to provide high quality service, more discriminating about jobs they will work, and potentially less honest in quoting prices or reporting wood harvest volumes. By blocking small woodlots and managing collective holdings as a single unit, Conform is able to achieve the economies of scale in operations that make it competitive with contractors.

Through the purchase of equipment and operation of its own crews, Conform has gained increased control over the production process which is integral to its success. This choice was critical due to the unreliability of contracting out certain tasks. By controlling the means of production, Conform is able to provide its members with higher service quality, better service accessibility and reliability, and lower costs.

Though contracting is used successfully by other Group Ventures, access to the means of production assures Conform that they have a recourse if contractors are unreliable, and allows them to set a performance baseline for services. Equipment ownership also provides potential profits several ways. First, vertical integration of harvesting and management allows all the value added and resource rents (i.e. stumpage) to be captured by Conform's shareholders. Second, profits can be earned through equipment rental and harvesting activities. These profit sources are important to Conform's finances, since, until recently, government regulations have prohibited profit making on all Forest Assistance work.

In addition to making equipment investments, Conform's ability to make these investments pay financially is equally crucial, since other Group Ventures that have purchased equipment either can support only a single piece of equipment or have failed to produce enough work to pay for them. The success of these investments can be attributed to the business experience and goals of its members, along with the physical resource and market conditions that produce a large enough base of work to make equipment viable.

Equipment ownership also allows shareholders to perform work on their own woodlots by providing them access to equipment at a reduced rate. This option gives shareholders access to an income opportunity they might otherwise not have.

Market Conditions

Market conditions are among the major factors behind inactivity on small woodlots. Low roadside prices, due to highly oligopolistic pulpwood markets and subsidized access to state forests, give owners little incentive to manage woodlots for production. Market conditions for other products (such as sawlogs) are somewhat better, though resource outputs of these products are small and necessitate improved low-grade markets if management is to increase their yields. Efforts to improve the marketing structure for small woodlot owners have been opposed by the pulp industry leading to watered-down legislation: lack of binding arbitration and lack of recognition of woodlot owners. Low- cost government leases have also lowered the baseline cost for pulpwood. As a result, pulpwood

prices are the lowest in North America and assuring adequate and reliable quota is difficult. Access to markets is also constrains woodlot management because those without regular harvests usually must go through contractors or middlemen in order to obtain quotas.

Further compounding the effect of low roadside prices, woodlot owners find themselves squeezed between by contractors attempting to maximize the margin between stumpage prices to owners and the depressed wood prices offered by mills. Given the lack of time, information, and options available to woodlot owners, stumpage prices generally suffer. Clancy describes these relations as a " 'a forest fibre chain', a network "typically characterized by key control points, representing economic actors with strong bargaining power vis-a-vis other elements in the chain."

Collective management can do little to improve roadside prices, except support external efforts, such as the marketing boards, to improve price conditions. Conform has actively engaged in this process, though the size of actual price improvements achieved is debateable. Collective management can, however, improve the stumpage price to owners dealing with contractors by appropriating contractor profits and insuring prices and harvested volumes are accurately quoted. Collective management can also improve access to market, particularly for those without regular quotas, and can batch small amounts of high quality logs from multiple woodlots to increase sale revenues.

³ Clancy 1992:143. Quoting: Winson, Anthony. "Researching the Food Processing-Farming Chain: The Case of Nova Scotia", Canadian Review of Sociology and Anthropology. (25,4), 1988, p. 524.

Located centrally in the Province, the Valley has good proximity to all three major pulpwood markets and has a number of sawmills within its immediate region. The combination of both proximate markets and good quality resource appears to be very important to the likelihood of successful forest management operations. Possessing either markets or resource quality alone does not yield the same potential. However, possessing both markets and resource quality does not insure success, as a number of other Group Ventures with conditions similar to Conform's have not achieved near its success.

Conform has an excellent record of developing and maintaining market quotas. Conform management recognizes the need to deliver agreed quantities of wood to buyers on schedule if quotas are to be maintained. The ability to reliably deliver wood relies upon Conform's control of the local means of production and the business skills and marketing experience of Conform's past and present managers.

Whether or not these improvements are significant enough to induce woodlot owners to actively manage for production is debatable. Income from woodlots will never be large until prices increase significantly, thus making other management goals more attractive or failing to overcome management apathy. However, if marketing conditions are much better - higher prices, easier access - then the incentives for collective management are less, since there is less need for a manager to develop markets and coordinate their delivery, and woodlot owners be less inclined to pay a 5% commission on sales. This tendency was noted by Bratton in early U.S. forest cooperatives: "The small independent forest cooperatives have found the going rough in times of good markets for stumpage.

In such periods, the strong stimulus of a marketing service has been needed less."4

Specific relations with market actors can effect a collective's success, since these actors can use market or political pressure to oppose the development of a collective organization. The forest industry, and pulp industry in particular, showed strong opposition to the Group Ventures, and even incited local opposition in the Musquodoboit Valley in an effort to derail Conform's efforts. This opposition reflects a perceived threat that woodlot organization may upset the balance of power in market and political relations that currently favor the pulp industry. Though Conform has never experienced a direct economic boycott by pulp mills hoping to break the collective, other Group Ventures may have encountered such boycotts or more subtle tactics to disrupt collectives. As Conform has grown and become established, these attitudes have changed: several local sawmill owners have become shareholders and market relations with the pulp mills have improved. For both sawmills and pulpmills, any potential threat posed by Conform has been outweighed by its reliability in supplying wood.

Relations with contractors has been variable. While the Provincial agreements increase the amount of work available, Group Venture, particularly those providing their own services, may supplant contractors. Conform's manager comments that though

"contractors, especially those who do not work for groups, have complained that group ventures are putting them out of business through unfair

⁴ Bratton 1949:185.

competition for forest improvement work ... Most group ventures have good working relationships with the contractors in their areas. The majority of complaints about group ventures seems to arise from a vocal minority of contractors."

Though Conform performs a large portion of its own work, much work, particularly silviculture treatments, is performed by contractors. Conform's relations with contractors seems to have been mixed, good with some and less successful with others, though has not had a significant effect either way in its success.

Poor relations between contractors, brokers (marketing middlemen) and industrial users is noted by Simon and Scoville as one of the problem areas for forest cooperatives.⁶ Basis for these antagonisms is in both increased powers the cooperative gives to the woodlot owner (such as increased bargaining power with industrial users) and the fear by brokers, contractors, and foresters of competition from, and potential replacement by, the collectives. Among seven cooperatives in the United States, some opposition by industrial users, brokers and foresters was noted, though, in general, "cooperatives enjoy reasonably good relations with the firms or market outlets to whom they sell."⁷

⁵ Redden 1992.

⁶ Simon and Scoville 1983:19.

⁷ Simon and Scoville 1983:20.

Local/Membership Conditions

Conditions in Musquodoboit Valley and among small woodlot owners generally appear conducive to the formation of a collective forest management company. Key factors are past experience with community organizations, a group of motivated and experienced woodlot owners, a history of forest management, and a small core of experienced and skilled individuals.

The breadth of human resources in the Musquodoboit region seemed to provide the right mix needed for the formation of a Group Venture. People in the region provided leadership, management and business skills, knowledge of the forestry industry, motivation and aggressiveness, and past experience with cooperative efforts. The number of people necessary to the Group's formation and management success were relatively few, however. Because of Conform's stability, only about six or seven people have been crucial to its management and growth.

Conform's first president and manager had a history of involvement in local development, particularly the development of a half-million dollar flood control project in the mid-1960s. While he was mainly interested in agriculture, the opportunity for a significant local project in forestry prompted his involvement. This community leader's involvement shows how the Group Venture program, primarily created to promote forest management, was utilized on the local level by individuals with broader development objectives.

Other individuals also had significant experience. The current manager,

and one of the founders, is an accountant who had previously worked in a mill.

Another was a mill owner who had been an active advocate for improved forest practices and was a member on the Provincial Forest Practices Improvement Board and director and president of the Nova Scotia Forest Products Association. The head of the Forestry Committee on the old Musquodoboit Rural Development Board was also one of the founders.

The mix of human resources possessed by Conform, particularly leadership and management and business skills, seems to be lacking in some of the other Group Ventures, and are often the source of future troubles. Few of the original Group's possessed the business attitudes held by Conform's founders. This seems to be partially a reflection of the specific experiences and skills of individuals, as well as a general attitude of those in Musquodoboit Valley. In addition, much of the aggressiveness and tenacity of Conform's organizers necessary to overcoming the hurdles of local opposition and government disputes may not be so present in other regions.

Most of the founders were active managers of their own woodlots, many looking for better economic conditions under which to manage their woodlots. Though a minority, the number of woodlot owners either deriving income from their woodlots or in need of income was large enough to form the core interested in collective management. Other land owners may have past experiences with forestry that inclines them toward an opportunity to better utilize their woodlots. In addition to these factors, the community possessed other characteristics, such as a history of working on the land, stable land tenures, close-knit local ties, important to the formation of a collective management company.

Mistrust of the government by locals may increase the likelihood of owners accepting government support through an independent cooperative. Hundert et al. noted that "equally well known, is the distrust which many Nova Scotia woodlot owners have traditionally harbored about government intention with respect to their lands ...any potential program for improved management of small woodlots must ensure that the ultimate responsibility for decisions about management remains in the hands of the woodlot owners." The program addresses these fears by allowing landowners to approve management plans, implementation of which is still very much in the landowners control.

The suitability of local conditions is evident by the quick organization upon learning of the collective management pilot project in West Pictau. This quick reaction to outside opportunities was not unprecedented within the Valley. One report states that "The Board [MRDB] has been remarkably successful in involving research workers and others in the study of the valley's problems," and goes on to say that "the efforts of the board...present a model for the type of 'grass roots' involvement which is believed to be essential for change and development in rural areas of Canada." The Board had previously been able to facilitate the placement of a rural development officer within the region, gain funding for a flood control program, and assist transportation and hospital service improvements. The groundwork in community organization laid out by the Musquodoboit Rural Development Board seems to have provided a pre-existing organizational disposition that could be utilized in the quick formation of

⁸ Hundert et al. 1988:9.

⁹ Redpath 1974:3.

Conform.

Long-standing interest in marketing, and, in some cases, collective marketing or equipment ownership also appears to have contributed significantly to the quick formation of the Groups across the Province. The Group Venture Program may have tapped some dormant interest in collective management that lacked a vehicle for implementation. Organization through the NSWOA, while not extremely broad and deep, appears to have developed leadership amongst a number of individuals who then participated in the formation of individual Group Ventures. Though most of NSWOOA's efforts focused on developing marketing boards, it was involved in the formation of the original West Pictau pilot project and has been supportive ever since. For those involved in woodlot owner issues, Group Ventures represented a great opportunity to improve woodlot owner conditions by directly providing services and making forest management economical for small woodlot owners.

In reality, motivations for formation varied from region to region.

Variations often reflected regional character and economic conditions. One region with a high proportion of transplants from the central provinces ("comefrom-aways") focussed upon performing ecologically sound forest management. A great many, accustomed to receiving the benefits of Canada's social services, saw a government program as a way to employ several local individuals. These Groups tend to view themselves as "arms of government" who are implementing forestry assistance. Others, however, saw the opportunity to develop a business which is a more independent vision. Any analysis of the Group Venture Program must recognize that each locale has fashioned its organization to meet particular

local conditions, and the interests of those forming the Group. The effect of any set of incentives will, therefore, vary from locale to locale.

Internal Rules/Organization

This section addresses the complex set of rules and organizational decisions to determine which factors are most important to Conform achieving its success. Conform's organization is shaped by a combination of external (primarily governmental) and internal decisions. The legal form of membership agreements and relations between the government and the Group Venture is mostly determined by rules originating in the joint Provincial/Federal agreements, with minimal woodlot owner input. Within these government rules, Conform makes its own organizational choices and operations rules to meet its particular group goals. Because of this close linkage between Conform and the government program, some important questions arise as to the nature of this relationship: What is the impact of the government's framework upon formation and membership decisions? How Conform produces success within these external rules? How do specific relations between Conform organizers and the government administrators affect successful organization?

The Group Venture Program provides many of the basic incentives and benefits to enable collective action. The problem of initial formation is partially overcome by providing: funding of incorporation and operations costs, technical assistance on incorporation procedures, the "model" of operations developed in

the West Pictau pilot project, and a minimal requirement of only ten initial members. In addition, potential employment in the Group Venture and full funding of boundary line improvement and road construction, which are funded at only 60% in the Private Lands Program, may have provided important additional incentives. Particularly important is full funding of roads, which are very expensive and represent one of the more important early investments for forest management because of access woodlot access they provide.

The role of these incentives in spurring action cannot be underestimated. As the first manager and President says, without access to funds, we "could have organized, but probably would not have organized." Several people indicated that they probably would not have joined without the "incentive" of forest management funding. For other Group Ventures with less business-oriented goals, funding access was a, if not the, key motivation for forming. The prospects of a local government program, with new direct and indirect job opportunities, were a significant benefit in many regions where rural unemployment and underemployment are problems.

Formation necessitates the time, energy, and, often, finances of several individuals and institutions. As Olson points out, the return on these "investments" in public goods is often not great unless the person investing is receiving a very large portion of the collective benefits. Due to the temptation of others to "free ride" on these efforts, Olson concludes "unless the number of individuals is quite small, or unless there is coercion or some other special device

¹⁰ Olson 1965.

to make individuals act in their common interest, rational, self-interested individuals will not act to achieve their common or group interests." While many of the conditions do not fit Olson's assumptions, his pessimism about the likelihood of collective action seems to be contrasted by the quick, widespread formation of Group Venture's and the success of Conform.

For Conform to be successful it must meet the goals of potential members by presenting them with a better management option than alternatives, and it must operate an efficient and healthy organization with a large membership to meet government goals. Individual decisions to join Conform are based upon an internal calculation of the costs and benefits of members. The Group Venture Program provides a number direct incentives to membership and a number of potential incentive that require successful Group Venture operations to be realized. In addition, some program requirements act as disincentives, and others may result from the particular operations of the specific Group Venture.

Direct incentives include forest improvement funding and management plans, though access to these still depends upon the fair operations of the Group Venture. In addition, Group Ventures have the potential to provide improved wood marketing, management oversight, follow through of management plans, improved service quality, and the option to self-manage one's woodlot.

Disincentives include the ten-year management commitment, the five-percent

¹¹ Olson 1965:2.

¹² Conform is probably a small group under Olson's criteria, and government funding is likely considered "individualized or non-collective benefits" (Olson 1965:150) that represent a "special device".

commission, and reduced control over management criteria. These disincentives may keep some with forest near harvest, or those wanting to maintain total autonomy over management, from joining.

While the structure of the Group Venture Program has successfully overcome the problems of stimulating collective action and created the potential for large incentives to potential members, to some degree, it has created organizations dependent upon government funding for sustained operations and often lacking the membership growth and production of a healthy organization. Groups rely heavily upon government funding to maintain operations. This reliance becomes potentially debilitating at the end of a joint federal/provincial agreements when future funding is uncertain. This uncertainty creates extreme anxiety in many Group Ventures whose continued operations are at stake. This problem occurs because, in a number of respects, program design has failed to provide adequate incentives for Groups to become independent or increase activity. First, Operations funding is essentially constant for all Groups, regardless of the amount of work or activity they perform. While resource and ownership conditions differ greatly across the Province, this practice is increasingly seen as promoting inefficient operations.

Second,¹³ Operations funding, which is paid up front and calculated using estimated commissions, is adjusted to final costs at the end of each year if actual commissions are lower or higher than estimates. This practice, however, gives Groups the incentive to minimize wood sales at the end of the year if they are

¹³ Peat, Marwick and Partners 1986:V-6.

approaching their estimated commissions.

Third,¹⁴ Forestry Assistance funding is based upon work receipts (if performed by contractors) so Groups are unable to profit from this work. Many of the more business oriented Groups complain that contractors are able to profit from Forestry Assistance work so they should be able to as well. A recent reevaluation of many of these rules has resulted in a new funding formula intended to promote independence and efficiency.¹⁵ Operations funding is now based upon a number of performance measures including the size of the Group's Forest Improvement expenditures, the number of plans managed, and the number of shareholders within the Group. Flat rates are now used for Forest Improvement work so Groups can profit from this work.

The Department of Natural Resources, driven by concerns over funding and promoting efficiency, has begun to take some steps to increase incentives for improved management of Group Ventures. A new funding formula for operating budgets bases about half of a Group's operating budget on performance measures including the size of the Group's Forest Improvement expenditures, the number of plans managed, and the number of shareholders within the Group. In addition, Forest Improvement funds will be administered on a flat rate, thus allowing Group Ventures to profit (or lose) on the performance of this work. In some respects, the new formula is an effort to increase efficiency of Group Ventures and provide incentives for increasing membership to help achieve the

¹⁴ Redden 1991; Peat, Marwick and Partners 1986.

¹⁵ "New funding formula for Group Ventures" 1993:1; The Group Venture Association of Nova Scotia 1992.

government's goal of increased total small woodlot production.

These changes may lead to the dissolution of Groups unable to function on reduced operations funds due to low performance. For Conform, however, the changes will likely result in both increased operations funds, because of Conform's high ranking on performance measures, and the potential for increased profits from forest assistance work.

Conform's organizational health and vigor are evident from its ability to (1) provide all of the potential benefits of collective management to members, and (2) operate a productive and viable organization despite a lack of government incentives to do so. This organizational health and vigor, which derives largely from Conform's internal rules, relations, and decisions, is at the root of Conform's success. Though much of Conform's organizational structure is determined by Program requirements, the actual operations and organization of the company are largely the result of internal decisions. These operations include allocation of services and marketing among members, developing the means of providing services and markets, maintaining a skilled and loyal staff, and, most importantly, developing effective decision-making procedures that allow fulfillment of group goals. These crucial internal rules, relations, and decisions are often the distinguishing factors between successful and less successful collective efforts.

Relations between the manager, Board of Directors, and shareholders has been remarkably good with few conflicts over its history. The relations between the Board and the manager are very important to success and have been a source of problems in many other Group Ventures. Conform has none of these

problems and the manager operates with the complete confidence of the board. Problems in other Groups have ranged from difficulty with incompetent and uninterested managers to difficulty finding interested and competent Board members. In some cases where the manager from within the community or group of original founders was not completely competent, their dismissal has been a source of some tension and conflict for the Group Venture.

Conform has also successfully mitigated potential conflicts among shareholders. Shareholder conflicts have been minimized through efforts to maintain fairness in access to services and markets, efforts to insure high quality and reliable services, addressing problems before the cause internal conflicts, and the company's willingness to assume financial risks rather than the shareholders. The quality of the relations is a reflection of the quality and stability of managers, staff, and the Board, and Conform's ability to please shareholders. Management maintains an underlying rule of fairness in the provision of services and market quota, while still remaining flexible to the immediate needs of shareholders. The story told earlier of Conform giving a large wood quota to a member in financial difficulty reflects this flexibility. Other groups have often been less successfully or distributing market quota on less-than-equitable terms.

Conform, like many of the Group Ventures, is operated as a company, which seems to make for speedier and more assertive decision making. A few of

¹⁶ In the situation, described earlier, where Conform was left with 2,000 cords of wood roadside, Conform paid shareholders for their cuts in spite of the lack of a market for the wood.

the Group Ventures organized as cooperatives have run into difficulty with procedural necessity of obtaining consensus of the cooperative on decisions needing quick responses. In one case, a cooperatively organized Group Venture lost an offer to sell a piece of equipment because the process of obtaining collective consensus was too slow. The limited interest of many owners in their woodlots may reduce the need for a consensus structure.

Group decision-making allowed for the purchase of equipment despite potential risks. This decision was vital to achieving group goals since it insured service quality and reliability, market reliability, and a means of making profit. Such a decision requires internal communication of the problem, willingness to assume risk to achieve group goals, and the ability to make sound and incremental business decisions, all of which are difficult enough to perform in a regular business let alone a business where decisions must meet collective scrutiny.

The organizational quality is further reflected in the staff stability which has helped produce higher quality work because staff understand the companies standards and shareholders come to expect a certain type of service. This continuity allows the development of stable working relationships between staff, the Board of Directors, and shareholders. In addition to maintaining staff continuity, new individuals must be brought into the organization if transitions when personnel leave are to be smooth. Conform has continuously trained individuals to fill various future roles: the current manager was trained by the previous ones and new Board members are brought on with an expectation of bringing real contributions within three years.

Conform's success must also be attributed to the particular decisions made by the collective, and its management. The decision to run Conform like a business gives the company strong direction and focus upon its viability and serving its shareholders. This business philosophy provided the performance incentives and management criteria that were lacking from the Group Venture Program's structure. This philosophy facilitated key decisions such as the purchase of equipment, continued membership in the Scott marketing district, and the aggressive pursuit of markets quotas.

These management considerations are perhaps among the most important for a forestry collective's sustained and productive operation. Simon and Scoville¹⁷ identify a number of problems areas for management of forestry collectives, including: inadequate planning, poor membership relations, misguided business investments, losing owner interest and inadequate communications in long time lags between harvests, adjusting management to varied owner interests, inadequate capital development, and inadequate service development. Many of these problems, particularly financial problems and their associated risks, are addressed through government funding which assurances Group Ventures of incoming revenues.

One of the greatest problems facing forestry collectives is the relative disinterest of owners in their woodlots and the long time periods between woodlot management activity. Maintaining an active core and a generally interested membership can both be inhibited. Several factors seem to combat these

¹⁷ Simon and Scoville 1983:18-20.

problems in Conform, and the Group Ventures. First, Conform's business philosophy clearly focuses the goals of management, leaving less opportunity for membership to become divided to unclear on the collective direction. This focus may also cater more directly to a range of individuals than a more complex set of goals. Second, particularly within the Musquodoboit Valley, there exists a core of individuals with significant interest in maintaining the collective effort. Finally, funding of the forest renewal process, with its more continuous flow of management plans and forest assistance work, increases the frequency and level of woodlot owner involvement, thus facilitating more direct communication and organizational involvement.

Shareholders involvement in Conform's operations is relatively high. Biannual meetings draw a large percentage of owners, and Conform also holds periodic educational field days to increase woodlot owner understanding of forest management. Other Groups have had difficulties with turn-out at meetings, sometimes failing to obtain a voting quorum necessary to make certain collective decisions.

Relations between the government and Conform (and the other Group Ventures) is particularly important because of the large government role in determining collective rules and administering funding. It is unclear how much input Group Ventures have into the design of the Program. Early conflicts reflect a lack of input by potential organizers into the form of the program, resulting in much of the structure of today's Group Ventures. Though the NSWOA supported the formation of the West Pictau pilot project, it is unclear how much input was utilized in its design. Fortunately in the long run, the original design appears to

have been free from major problems, with the most significant changes occurring only recently. However, as Redden points out, "at this time woodlot owners do not have any representation at the decision making level of the forestry program." Though input is sought, it is not required and is utilized by government officials at their discretion.

Relations with some government officials have also greatly influenced the fortunes of the Group Venture program. Much of the program's success is the responsibility of the forester who directly managed the program in its early years. Endowed with past experience working with woodlot owners, this forester understood both how to work with people and the problems facing small woodlot owners. These characteristics gave him a sensitivity to woodlot owner needs and made him an advocate of the Group Ventures in interdepartmental battles. This forester's appointment represents a turning point in the program's direction as Group's were encouraged to move beyond bureaucratic holdups and focus among starting up operations. Disputes with particular officials over contract agreements were quickly resolved and Group Ventures began focusing on performing forestry assistance work.

This forester continued to represent the Group Ventures in interdepartmental battles. Group Ventures seemed to be somewhat protected from these conflicts by its implementing forester, though many limitations on operations resulted. In one case, purchase of computers from Operations funds was supported by this forester in spite of opposition from the head of his section. One

¹⁸ Redden 1992.

person characterized the difference in approach as between those trained in industrial forestry and those trained in social forestry, or working with woodlot owners.¹⁹ The industrial foresters, from this perspective, were never able to support the woodlot owners because training had biased them toward industrial solutions to forestry problems.

An important factor in developing Group independence is the system for providing funding assistance. The relationship between program administrators and Group Venture managers significantly affects the level of trust and accountability with which funding is allocated. A potential tension exists between the Group Venture's need to have funding provided flexibly at their discretion, and the administrator's need to maintain accountability and efficiency of fund usage. Funds are allocated on the basis of annual submissions that detail the amount of work to be performed and its cost. Management plans are developed in accordance with a manual of procedures and approved by regional foresters. Work is periodically reviewed to insure quality and audits of contractor costs are performed.

There appears, however, to be a good bit of leeway to insuring that all costs and work are being targeted solely to increased production. This can occur in several ways. First, some who join the Program do so simply to gain services for ends that are not consistent with program goals. Road building, for example,

For the motivated administrator, Group Ventures provided an excellent tool for increasing the amount of forestry assistance provided. One official indicated that as Director of a Regional Private Lands Program he openly encouraged and abetted the development of several Group Ventures in his region because he did not have the staff resources within his office to meet the demand for management plans and forestry services.

may be used primarily for recreational access, or people may manage with little intention of ever harvesting. In many individual programs, these practices are often discouraged through rigid stipulations on assistance and linkage between road building and silviculture work. Decond, to a great extent, Group Ventures can determine where work is performed and prioritization of work. This may or may not conform with program goals. Third, though not initially so, Group Ventures can average the costs of work performed in receiving payment.

While administrators relinquish some discretionary control over funds, flexibility in fund usage and some discretionary power are essential to development of dynamic and independent Groups. Due to changes in Group needs and everyday operations, activities often do not conform exactly with annual plans. Flexibility also encourages new members, whose interests may not be narrowly on production, to join.

Conclusion

As noted at the outset to this chapter, for the Group Venture Program to be successful, it must fulfill the goals of both woodlot owners concerned with forest conditions and incomes, and government officials concerned with long-run wood supply. Achievement of both sets of goals requires they be complimentary and not present significant conflicts between local and government interests. For

²⁰ Griffiths Mueke Associates, 1989:32-33. Requirements for US Department of Agriculture road assistance (under the Forest Incentives Act) are very strict because "of the risk of assisting road construction for primarily recreational purposes". In Maine, contracts are being written to tie road construction and silviculture.

Conform, though specific relations with some administrators and a few rules limiting activities may have inhibited achievement of its goals, in general, program rules provided an opportunity to improve the conditions of local woodlot owners. For government, though the program has induced increased woodlot management, higher management levels are desired. Program changes promoting Group Venture efficiency to attain these supply goals have even been supported by most Group Ventures, especially the more productive ones who stand to gain. Conform, for example, has advocated a funding formula basing funding levels on performance measures since the early 1980s. The importance of the complementarity of goals was noted by Hundert et al. who write, "any potential program to encourage greater productivity on small woodlots ...must meet, or synchronize with, the objectives of the owners it seeks to motivate."21 In the case of forest assistance and the Group Venture Program, this is a relatively simple task, requiring some release of control of program implementation, and some flexibility and discretion on funding use. In other cases, such as marketing reform, these goals are not so complementary, making changes less successful. Woodlot owner market reform objectives are opposed by the forest industry, creating a split amongst government administrators and politicians that inhibits significant progress.

Conform's success relies in its ability to take advantage of the opportunities presented by the Group Venture Program. Despite the lack of incentives for perform efficiently, such as fixed operations funding, and program rules limiting efficiency, such as restrictions on profiting from Forest Improvement work,

²¹ Hundert et al. 1988:8.

Conform has developed into an independent, productive and healthy organization. How Conform has achieved its success is the focus of this thesis. The analysis of this chapter has shown that a combination of physical resource, membership. market, and organizational factors were important to providing the conditions under which Conform could succeed. Important physical resource factors include a relatively good quality resource, and control of the means of production. A historical predisposition to organizing, and skilled and experienced people to play leadership roles are the most important membership and community factors identified. Need for a market intermediary, reliability as a market supplier, and proximity to markets are important market factors. Important rules and organizational factors include: internal relations reflecting confidence in management, fairness and flexibility to shareholders, and communication among all collective members; a profit-oriented business philosophy; the ability to recognize and make a number of particular management decisions crucial to achieving group goals, and the incentives and structure provided by the Group Venture Program.

Chapter 5 - Conclusion

Small private woodlots, due to their fragmented size, dispersed spatial distribution, and diverse goals of their owners, present a number of barriers the achievement of social objectives for forests management. This "small woodlot owner problem" presents difficulties to policy-makers attempting to induce particular management practices, coordinate and increase smooth production of future wood outputs, and, most recently, maintain ecological values. Collective forest management offers the potential to address many of the economies of scale, market, information, and contractor reliability problems deterring proper forest management. By managing multiple woodlots as a single management unit, collective management can provide more cost effective management, coordination of marketing and maintenance activities, and full-service management for inactive woodlots. In addition to these benefits to local collective members, collective management can help achieve government goals of increasing forest production by provide an administratively efficient, reliable, and financially effective mechanism for delivering forest assistance.

Nova Scotia's high concentration of private woodlot ownership makes the "small woodlot problem" particularly important to resource conditions and the forest economy. Through the province's Group Venture Program, collective management is promoted by providing incentives and an accepted model to local communities interested in improving woodlot production and conditions. This thesis analyzes the operations of Conform, Ltd. to identify the factors shaping its operations as one of the province's most successful Group Ventures. A number of particular factors have been identified:

- Past community experiences with grass roots local development and cooperatives that create a predisposition to the formation of organizations to address local problems;
- Local individuals with skills and experiences in business, community organizing, and forestry necessary to the formation, operations, and leadership in developing Conform;
- Control of the means of production through equipment ownership and supervising work crews to ensure the reliability, quality, low price, and growth of harvesting and silviculture operations;
- Good resource conditions;
- Good and diverse markets in relatively close proximity, which, when combined with good resource conditions, provide an adequate annual production to sustain viable operations;
- Market relationships where Conform exhibits reliability as a producer of wood products. This reliability will promote good relations and reduce the potential threat a collective organization poses to existing forest industry companies and actors;
- Market conditions where use of an intermediary is important to obtaining market access or fair prices, or the costs of obtaining information, contacts, and access are high.

- Strong internal relations between board members, management and shareholders, exhibiting confidence, fairness, flexibility, and communication;
- Business, or profit-oriented, philosophy;
- Particular business decisions to achieve some of the above conditions, such as purchase of equipment, and supporting the marketing division;
- Group Venture Program incentives, including incorporation funding and advice, operations funding, and a "model" operation to overcome barriers to formation, and Forest Improvement funding to encourage membership;

These factors are important to the achievement of Conform's success, though Conform may not represent the only model of a successful forest management collective. Other collectives, with less production oriented objectives, may also present excellent models under a different set of success criteria. Success is defined here as attainment of local and government objectives through high levels of production and management, and institutional independence, such that Conform would likely continue operations if funding was eliminated.

Support of Nova Scotia's Group Venture program, and forestry assistance in other regions, is based primarily on the goal of increasing woodlot productivity and not the maintenance of ecological values. As ecological maintenance, and other social concerns in rural areas, become a more prominent social goals, however, collective forest management may become a more attractive option to achieving these broader sets of production, social, and ecological goals. Current

woodlot management criteria usually promote long-term forest renewal rather than ecological maintenance. The ability to develop new management criteria and coordinate management on large blocks of forest land makes collective forest management an excellent mechanism to achieving this new set of ecological objectives.

The transferability of this Program to another region seems to depend upon a number of important factors. First, the need for collective management on the local level must exist, including need for market intermediaries, interest by local woodlot owners, and lack of suitable local management options. Second, a government need that supports a commitment to consistent and significant funding. Few forestry collectives have formed or continued operations with some form of government support. Third, a willingness to relinquish some control over the dispersal of funds and the objectives that individual collectives set for themselves. Fourth, openness to the expansion of acceptable management terms. It is becoming increasingly evident that woodlot owners have management interests much broader than simply timber production. If allowed to manage for all potential uses, greater membership may be attracted. The Group Venture program is relatively flexible vis-a-vis woodlots are managed. Individual programs in other jurisdictions have often showed less flexibility in supporting true multipleuse forestry.

Future Research

This thesis has focussed upon the conditions and circumstances that have

lead to collective forest management in Nova Scotia and, in particular, the Musquodoboit Valley. Analysis of other Group Ventures may provide further insight into the conditions for successful collective forest management. In addition, a more complete analysis of the Group Venture program would help determine its broad impacts upon the forest industry, rural economies, and the resource condition. Lessons from such an analysis, which should be particularly attuned to the institutional and political factors and the cost-effectiveness of the Group Venture Program relative to alternative policies, may be applicable to other regions facing similar problems.

A number of particular questions must be addressed about the Group Venture program. First, an analysis should be made of the social impacts of the Group Venture program. How are program benefits spread amongst woodlot owners, contractors, woods workers and the forest industry? What are the different social and income needs of the program's beneficiaries? A better understanding is needed of relations within the local economy, and whether the Group Ventures increases local income and investment. In reality, woodlot owners may be financially well-off compared to woods workers and contractors who rely upon the forest for their income.

Second, another important question is the impacts of Conform's, and the Group Ventures', management upon forest renewal and ecology. This analysis must consider management on collectively managed land, the program's effects upon management of non-collectively managed land, and the geographic impacts of placing more forestland under production. It appears as though Conform's

operations, though clearly more focussed on harvesting and production, are providing good forest renewal, harvesting within sustainable yields,²² and maintaining forest ecologies. However, it has also created extensive road networks that access large amounts of previously unmanaged land, subjecting them to potential degradation.

A comparative study of the institutional and policy aspects of woodlot owner organizations across Eastern Canada, Europe and the United States would provide a greater understanding of not only the effects of organizing upon forest industry structure, environmental outcomes, and rural livelihoods, but also how the entire institutional and economic context supports or inhibits woodlot owner empowerment. The performance of Group Ventures in Nova Scotia is relatively strong compared to other collective management efforts in North America. Group Ventures in Quebec operate under a very similar program, but appear to have achieved less success: participation rates average under 10% of potential woodlot owners, 23 while Nova Scotia's program covers over 17% of potential woodlot acreage.²⁴ The reasons for this difference are unclear. Wood markets are more highly regulated in Quebec, giving woodlot owners a better price on pulp wood. The improved management economies resulting from increased prices may increase woodlot owner interest in management, though it may also increase reluctance to turn management over to a Group Venture for extended periods (up to 15 years in Quebec) or pay the administration and management costs of the

²² Keith 1992:24. Keith reports that Conform is currently harvesting at its estimated maximum sustained yield.

²³ Curtis 1987:31.

²⁴ Agfor 1991:6.

Group Venture. Collective management in the United States has been much less successful, and has received much less governmental support. As a result, services are generally limited to harvesting and marketing of wood. In contrast, collective management in Sweden is much more effective, though it is bolstered by an institutional structure regulating forest practices, limiting land transfers, and supporting woodlot owner organization. The result is a system where forest management is practiced by the woodlot owner because market conditions support prices that warrant investments in woodlot management.

The problems facing the entire province with maintaining forest ecology and productivity necessitate broad government intervention. Though many observers have addressed facets of the political and institutional decisions affecting the forest resource and economy sustainability, no one has yet analyzed the entire institutional context in which efforts are made to better manage the resource. The government's economic dependence upon a highly concentrated forest industry, which precludes implementation of strict forest management regulation, necessitates promotion of a forest improvement program that all can agree upon — i.e. direct funding of assistance. For marketing conditions, however, there is no such linkage, since all cannot agree upon the need for improved market conditions. As a result, conflict between small woodlot owners, contractors, and mill owners effectively derails all government efforts to develop a stable and fair system.

The net result of this inability to fashion adequate policies for all aspects

²⁵ See Clancy and Sandberg 1992, where the authors begin to draw out a framework for such an analysis.

of the forest economy is a partial solution for resource maintenance and diminished effectiveness of policies that are successfully implemented. The effectiveness of and participation in Forestry Improvement, for example, is limited because management incentives are absent without improved market conditions. The program, if too successful at improving forest productivity, may actually perpetuate the supply glut that supports the present depressed prices, thus undermining efforts to further induce management. Unless significant new capacity is developed in the near future to utilize supply increases and improve market conditions, the program simply becomes a subsidization maintaining cheap pulpwood prices for the three existing pulpwood corporations.

Appendix I - Glossary of Terms

- ARDA- Agricultural and Rural Development Act; before 1966, the Agricultural and Rehabilitation and Development Act
- DLF Department of Lands and Forests
- DNR Department of Natural Resources
- Harvesting Cutting of trees with the primary goal of wood production, not renewal.
- Marketing Division Also, Marketing District. An region in which a certified bargaining agent negotiates with the region's pulp mill to determine the set pulpwood price for all producers, and the annual quota for all members of the Division.
- MRDB Musquodoboit Rural Development Board
- NSWOA Nova Scotia Woodlot Owners Association (1969-79)
- NSWOOA Nova Scotia Woodlot Owners and Operators Association (1979-present)
- Quota A formal or informal agreement with a mill for delivery of a fixed amount of wood, at an agreed price, on a regular schedule.
- Roadside Price The price paid for wood after harvesting left at the roadside for transport. The most common price used for quoting wood prices.
- Sawlogs Logs harvested for lumber.
- Service Area The region defining woodlot owners eligible for membership in a specific Group Venture.
- Silviculture Treatments Treatments to improve future forest productivity, such as plantings, thinnings, and salvage.
- Small woodlot owner Typically, a woodlot owner with less than 1,000 acres of land, though a criteria of 750 acres or 500 acres is often used.
- Stumpage Price Also stumpage rate. The economic rent, or value, of trees as they stand (i.e. on the stump) to the landowner.

Appendix II - People Interviewed and Contacts

Research included interviews performed in Nova Scotia over the period of March 9 to 18, along with a few phone interviews. Among those interviewed are:

Harlan Redden, manager, Conform
John Dechman, former manager and President, Conform
Albert Higgins, President, Conform
Tim MacDonnel, member, Conform, silvicultural contractor
Byron Stewart, member, Conform
Fulton Andrews, member, Conform

Arden Widden, Department of Natural Resources
John Smith, Department of Natural Resources
Peter MacQuarrie, Department of Natural Resources
Graham Langley, Department of Natural Resources
Ian Miller, Forestry Canada (t)
David Dwyer, formerly, Department of Natural Resources

Eric Hundert, Environment Canada, former manager, North Mountain Group Venture
Frank Crowdis, manager, North Inverness Group Venture (t)

(t) - telephone interview

Conform can be reached at:

Conform Ltd.

Middle Musquodboit

Halifax County, Nova Scotia BON 1X0

tel: (902) 384-2788

Information on the Group Venture Program can be obtained through:

Arden Whidden - director of Operations and Forest Management, Private Lands Department of Natural Resources 2nd floor, Founders Square 1701 Hollis Street Halifax, Nova Scotia B3J 2T9

tel: (902) 424-5704

John Roblee, chairman The Forest Group Venture Association of Nova Scotia Box 248 Pugwash, Nova Scotia B0K 1L0

tel: (902) 447-3034

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