BRITISH COLUMBIA'S COMMUNITY FOREST PILOT PROJECTS: CAN A LOCALIZED TREND SURVIVE IN AN INCREASINGLY GLOBALIZED FOREST SECTOR?

by

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B.A., Simon Fraser University, 1992

Thesis Submitted in Partial Fulfilment

of the Requirements for the Degree of

Master of Arts

in the Department

of

Geography

SIMON FRASER UNIVERSITY

January 2004

APPROVAL

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Title of Thesis:	British Columbia's Community Forest Pilot Project: Can a Localized Trend Survive in an Increasingly Globalized Forest Sector?
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ABSTRACT

This research examines the Community Forest Pilot Project (CFPP) implemented in British Columbia in 1998. Under this program, the government has allocated forest land and managerial autonomy to ten communities. For many, the CFPP represents a chance for forest-dependent communities to influence their future in a way that conventional forestry has never enabled. Expectations of the project are high. However, as with much of the academic literature on community forestry, which tends to focus almost exclusively on the necessary internal or community level conditions for achieving 'success', this government initiative has not adequately considered the external pressures within the increasingly globalized forest industry that may limit the success of individual community forestry initiatives. Therefore, the research considers if and how British Columbia's CFPP, as a localized trend, will survive in an increasingly globalized forest sector.

This question is addressed in two stages. First, a conceptual model of the key factors affecting the viability of community forestry is developed. The model draws upon multiple bodies of scholarship that reflect the multiple scales in which community forests exist. The rationale for this derives from the simple but underappreciated fact that community forest initiatives are influenced and can be constrained by factors beyond the community. In the context of British Columbia, some of these supra-community factors include an onerous provincial forest tenure system, shifting provincial forest policy, increasing Aboriginal engagement in land claims, demands from environmental movements, increasing firm concentration in the forest sector, highly variable international commodity markets, and punitive international trade actions. Second, the

model is 'tested' and refined based on the observed initial experiences of British Columbia's ten community forestry pilots. In short, the evidence suggests that the CFPs must complete a series of successive stages in order to ultimately achieve 'success': 1) secure a forest land base; 2) draw on community attributes; 3) comply with the regulatory system; and 4) secure markets and exist within a complex global environment. These steps are not insignificant, which may explain the highly variable progress of the ten CFPs over first five years of the project.

DEDICATION

This work is dedicated to
David for his unconditional support, and to
Anthony, whose keen mind inspired me in geography.

ACKNOWLEDGEMENTS

This research would not have been possible without the encouragement and intellectual guidance of my academic committee, Dr. Ben Bradshaw and Dr. Roger Hayter, as well as Dr. David Haley. I would also like to acknowledge the South Side community of Burns Lake, and my family and friends who offered tremendous support throughout this endeavour.

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CHAPTER 1: INTRODUCTION

This research examines the Community Forest Pilot Project (CFPP) implemented in British Columbia in 1998. As part of the Forests Statutes Amendment Act (Bill 34), the CFPP is planned to last for five years. Under this program, the government has allocated forest land and managerial autonomy to ten communities. The aims of the CFPP are to increase community involvement in local forest land, "to provide opportunities at the community level to test some new and innovative forest management models" and to maintain "forest-related community lifestyles and values, while providing jobs and revenue that contribute to community stability" (British Columbia, Ministry of Forests, 1999a:1). The key aspect of the program is its focus on community empowerment as reflected in the province's definition of the community forest tenure; "[to] allow communities to manage local forests to meet local economic and social needs" (British Columbia, Ministry of Forests, 2000a:1).

1.1 Context to British Columbia's Community Forest Pilot Project

British Columbia's economy largely developed based upon high rates of natural resource exploitation, especially within the forest sector. The forest industry, which is dominated by high volume timber extraction and clear-cut logging, has provided significant returns to the province (Marchak *et al.* 1999). The industry, through the forest tenure system, has also provided wealth to many British Columbians, and employment

and stability for many workers, at least from the 1940s to the 1970s (Marchak *et al.* 1999; Hayter 2000a).

Despite the immense wealth generated by the forest sector, its mass export-oriented production has made it and forest-dependent communities vulnerable to the fluctuations of commodity markets thereby producing periods of boom and bust since the 1970s (Robson 1996; Hayter 2000a; Stiven 2000). In addition, the industry has relied on mechanization and automation of logging, which has resulted in fewer jobs and less value per unit of wood cut than in any other industrialized forest economy in the world (Fulton 1998 as cited in Gunter 2000; Marchak *et al.* 1999). Lastly, forest-dependent communities in British Columbia are experiencing conditions of uncertainty and vulnerability because of impending resource exhaustion and increasing pressure from environmental groups (Clapp 1998; Markey and Pierce 1999; Hayter 2000a). While there are differing estimates concerning an appropriate annual allowable cut (AAC)[1], critics of the industry such as M'Gonigle (1997), Burda (1999), Marchak *et al.* (1999), and Gunter (2000), contend that forest resources in most of British Columbia have been mismanaged and the AAC in many areas has been set higher than what is ecologically sustainable. However, Hayter (2000) recognizes that in the 1990s, not all of the AAC was consumed for market and cost reasons, despite fears of wood-fibre shortage. Nevertheless, of late, British Columbia's forest sector has been characterized by plant closures, layoffs and corporate losses, leading many to declare a state of crisis in the industry (e.g. Beckley 1998; Marchak *et al.* 1999).

[1] The AAC refers to the volume of timber approved every five years by the Chief Forester of British Columbia to be logged annually.

In British Columbia, a push for greater public involvement in forest planning has developed as it has become clear that traditional models of forestry cannot address community interests. The leases granted to forestry companies do not mandate them to maximize employment and income for communities, nor protect ecosystems (Duinker *et al.* 1991; M'Gonigle and Parfitt 1994; Booth 1998; Burda 1999; Hayter 2000a). Rural communities, especially single-industry towns, have come to realize the value of diversifying their economies and are thereby seeking more input into how the forests are managed. Community forestry is increasingly seen as one of several ways in which this desire can be met (Duinker *et al.* 1991, 1994; Beckley 1998; Inglis 1999; Gunter 2000). Hence, the development of the CFPP can be viewed as a direct response to the uncertainties facing many forest-dependent communities and their demands for increased control of the resource base.

For many, British Columbia's community forestry licenses represent the beginning of tenure reform in the forest sector and offer local communities a chance to influence or shape their future. Expectations of the project are high. However, as with much of the academic literature on community forestry, which tends to focus almost exclusively on the necessary internal or community level conditions for achieving 'success' such as strong leadership or full community involvement, this government initiative has not adequately considered the many external pressures and constraints within the increasingly globalized forest industry that may limit the 'success' of individual community forestry initiatives. In the specific context of British Columbia, some of these supra-community pressures and constraints include an onerous provincial forest tenure system, shifting provincial forest policy, increasing Aboriginal engagement in land and resource claims, increasing demands from national and international environmental

movements, increasing concentration in the forest sector, highly variable international commodity markets, and punitive international trade actions. In light of these external pressures and potential constraints, this dissertation considers if and how British Columbia's Community Forest Pilot Project, as a localized trend, will survive in an increasingly globalized forest sector.

This primary question is contemplated via two secondary questions: what are the key constraints to the implementation and functioning of British Columbia's CFPP; and, what are the key enablers to the implementation and functioning of British Columbia's CFPP? Potential constraints, which can exist at the community level, the provincial level or beyond, may include a lack of forestry knowledge, conflict within the community, a lack of financial support for start-up costs, a restrictive revenue appraisal system, severe forest health concerns, countervailing duties, or international trade agreements. Potential enablers can also exist at different scales and may include community enthusiasm and support for the community forest, experience in and knowledge of the forest industry, adequate transfer of authority to the community, collaboration with First Nations, and access to niche markets.

1.2 Research Objectives

In order to address the above research questions, two objectives are proposed:

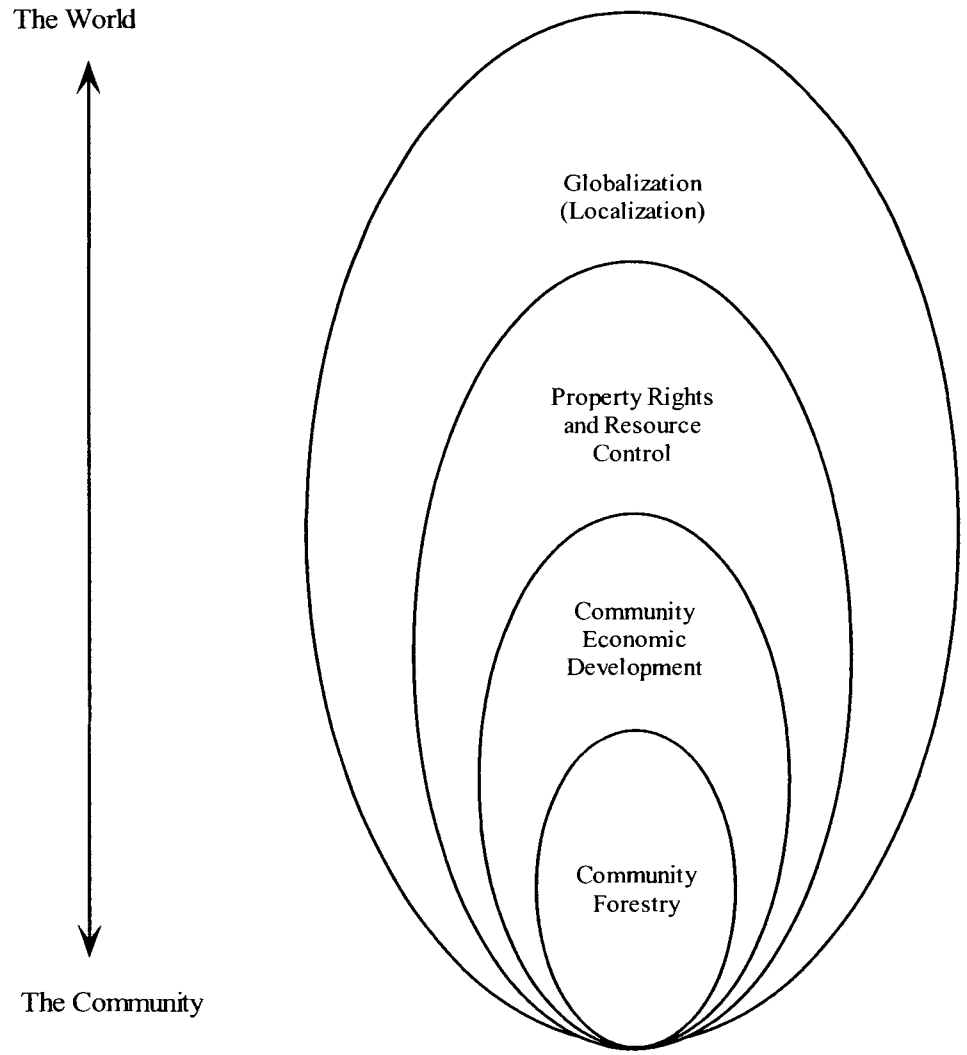
1. develop a conceptual model of the key factors affecting the viability of community forestry; and
2. 'test' and refine the conceptual model based on the observed initial experiences of British Columbia's ten community forest pilots (CFPs).

1.2.1 Conceptualizing Community Forestry

The first objective is to develop a conceptual model that identifies the likely factors affecting the viability of community forestry. This model is developed based on the literatures on community forestry and community economic development, property rights and resource control, and globalization (localization). The rationale for drawing on this broad range of scholarship derives from the simple but underappreciated fact, as argued in Taylor (2000) based on the case of Community Forestry in Mexico, that community forest initiatives are influenced and can be constrained by factors beyond the community. The supra-community factors of particular interest to Taylor (2000) include neoliberal policies, such as the privatization measures recently adopted by the Mexican government, and wider acts of globalization (i.e. larger political economic restructuring), which the author suggests serve to undermine community capacity and self-organization. The larger point of Taylor (2000) is that the viability of community forest initiatives is not solely a function of community characteristics. This suggests a need to conceptualize the factors that affect the viability of community forestry at scales above that of a community and its forest alone.

In order to identify the factors affecting the viability of community forestry, the conceptual model draws upon multiple bodies of scholarship that reflect the multiple scales in which community forests exist (see Figure 1.1); this is termed a 'multi-scalar' approach. This review begins with that scholarship which is most directly relevant to the issue of community forestry viability and then expands to incorporate that scholarship which identifies the wider context within which community forests exist.

Figure 1.1: Framework of the Relevant Scholarship for Conceptualizing Community Forestry



The first body of scholarship that is reviewed is *community forestry and community economic development.* Given the considerable overlap of the community forestry and the community economic development literature, they are reviewed as one body of scholarship. As the phenomenon of community forestry has developed, a growing portion of the scholarship on community forestry and community economic development has sought to identify the factors that determine the success of individual ventures. The result of these efforts has been a number of normative models of community forestry. While these models are instructive, they tend to be based on a rather static view of the larger industry in which community forests exist. As a result, they tend to focus almost exclusively on the internal community factors that determine success, without paying adequate attention to key factors beyond the confines of the community.

The second body of scholarship that is reviewed pertains to *property rights and resource control.* Issues of tenure, security, and ownership are central to the discussion of the constraints and enablers to the implementation and functioning of community forestry. Increasingly in British Columbia, the use, control, and management of the forest resource base is being contested as private firms, environmental groups, Aboriginal groups, and even foreign governments challenge traditional provincial government regulation of the industry (Hayter 2000a). The CFPPs add to this challenge as they represent a significant shift within the forest industry to include communities as key players. The scholarship on property rights and resource control provides insights on how communities can influence the management of resources and the degree to which levels of ownership may affect a community's decision-making power.

Lastly, the scholarship on globalization (and localization) is reviewed. This scholarship recognizes many supra-community factors and conditions that affect communities, but also compels us to recognize that these external factors are sometimes reproduced or minimized by local actions. Through globalization, forest-dependent communities are rapidly being drawn into a competitive international economy. Globalization, as manifest in neoliberal policy reforms, is reshaping the forest sector and current forest policy in British Columbia. In particular, community forestry in British Columbia is influenced and shaped by the global forest industry. That being said, local actors are not helpless in this process; indeed, as Taylor (2000: 3) claims, local actors (e.g. forest-dependent communities) are "transforming their social and economic institutions unpredictably, appropriating and acting on new external structures".

1.2.2 Testing the Conceptual Model

The second objective is to 'test' and refine the conceptual model based on the observed initial experiences of British Columbia's ten CFPs. This is done via a multi-method approach including intensive analysis of one CFP, the Village of Burns Lake Community Forest, and subsequent analysis of the remaining nine CFPs. The results of the intensive investigation of the experiences of just one CFP were used to formulate a survey questionnaire for the remaining nine CFPs. The intensive investigations provide detailed insights in one case while surveying of the remaining nine CFPs provides more general refinement based on a complete representation of the 'population'.

The initial experiences of the 'population' of the ten CFPs are assessed to confirm, refute and refine this conceptual model. In short, the evidence from the ten CFPs was drawn upon to identify the combination of factors found within initially

successful community forestry pilots, and thereby considers the overall feasibility of British Columbia's Community Forest Pilot Project. The remainder of this section details the data collection methods for each of these two approaches and outlines the method for analyzing the resulting data.

The case study method is a classic tool of intensive analysis. Most appropriately, it is also one that has regularly been used in investigations of resource community dynamics in Canada (see for example Reed 1995). The case study method can be used to accomplish various aims: to provide description (Kidder 1982 in Eisenhardt 1989); to test theory (Anderson 1983 in Eisenhardt 1989); or to generate theory (Gersick 1988, Harris & Sutton 1986 in Eisenhardt 1989). In these latter two instances, case studies are deemed particularly useful for identifying the causal links among real-life phenomena that are often too complex to be revealed through survey or controlled experiments (Yin 1994). Case studies are best used when research must understand both a particular phenomenon and the context within which the phenomenon occurs (Yin 1994). According to Yin (1989:14), the method "allows an investigation to retain the holistic and meaningful characteristics of real-life events". Yin (1994) also suggests that single case studies are appropriate where the case represents an extreme or unique case, or where the case study is a revelatory case, and where there is an opportunity to observe and analyze a phenomenon previously inaccessible to scientific investigation.

The Village of Burns Lake CFP is an appropriate site for a case study for two reasons. It was the first CFP to sign a formal agreement with the Ministry of Forests on July 7, 2000, and so it was expected to have the most to contribute in terms of information and progress of the community forest. Further, prior to this research, this researcher had lived and worked in Burns Lake and had prior knowledge of, and insights

into, the community and the workings of the forest industry in the area, not to mention contacts with community members.

Yin (1994) suggests that an important aspect of case study data collection is the use of multiple sources of evidence that converge on the same set of issues. These sources may include documents, open and closed-ended interviews, archival records, and direct field observations. For the intensive investigation of the Burns Lake CFP, data were collected via document review, observation and interviews.

In order to provide both background to the Burns Lake CFP and more formal data with which to refine the conceptual model, a number of documents were drawn upon in the course of the research. This included:

- British Columbia Ministry of Forest published material, including sections of the Forest Act that applied to the Community Forest Agreements, the expected responsibilities of the new tenure, the role of the community forestry advisory committee (CFAC), and the criteria for evaluating and monitoring the CFPs;
- The Burns Lake Land and Resource Management Plan (LRMP), which had just been completed prior to the application of the CFP and thus it was subject to these higher level plans;
- The Burns Lake Community Forest Pilot Agreement Proposal, which identified the administrative model, the location and size of the community forest land base and the management plan objectives, and provided a sense of the various community characteristics, the level of community involvement, and the community's desires and objectives for their community forest; and
- Local and Provincial news coverage of forest issues and opinions.

The researcher visited Burns Lake two times over the course of this research and attended two community meetings indirectly related to community forestry in the Burns Lake area. Two meetings, the provincial task force on the Mountain pine beetle and the Joint Venture meeting concerning the establishment of a small local sawmill, provided

insight into the make-up of the community, their forestry concerns and how they identified 'the community' (i.e. its physical and social boundaries). Given the small size of the community, many of the local residents involved in these meetings were also interested in the Burns Lake CFP.

The time spent in the Burns Lake area permitted many informal interviews and communications with local residents. Informal conversations allowed the researcher to gain insight to the perspectives of a larger number of community members than would have been possible using only interviews and documentation. Field notes were recorded during these visits and were used to refine interview questions and generally contribute to the analysis of results.

Sproull (1995: 162) describes interviewing as a method to "elicit ... opinions, attitudes, values, beliefs or behaviours", while Berg (1989: 13) describes it as a "conversation with a purpose." The interviews were conducted with ten key informants involved in the Burns Lake CFP (Appendix A) in August 2000 in Burns Lake, Danskin and Houston. The respondents represented a cross section of community members who were involved in the community forest process and were identified via a snowball surveying approach. Four of the participants were contacted prior to arrival in the case study site, four participants were recommended by respondents, and two participants were identified as a result of attending a Lakes District meeting concerning the Mountain pine beetle and Spruce bark beetle infestation.

The format of the interviews was open-ended and semi-structured in order to capture a particular respondent's area of expertise, to enable them to focus on a specific area of their choosing, and to accommodate respondent time availability. Each interview lasted approximately 90 minutes. Ethics requirements for adequate information,

consent, and confidentiality were addressed prior to the interviews (Appendix B), and a summary of the data from these interviews was compiled and returned to each of the informants for possible feedback (Appendix C).

The questions that were asked in the interviews derived from the conceptual model. For example, in order to obtain information regarding the background of the community in forestry management, questions focused on the composition of the community forestry board and level of their expertise. In order to obtain information regarding their knowledge of and opinions about community forestry, questions focused on the size and type of the land base of the community forest, the perceptions of constraining and enabling factors to the community forest process, and future plans for their community forest. Although specific questions were developed, there was opportunity throughout the interview for respondents to discuss additional topics that they saw as relevant.

Babbie (1989) raises ethical concerns of social research and suggests ways to 'rule out the observer effects'. Participation should be voluntary, the research process should allow for confidentiality and anonymity where appropriate, observations should be recorded with detailed and frequent field notes and it should identify and minimize personal biases and preconceived notions. This last concern was particularly important for this researcher as time had been spent living and working in this community prior to this research; however, every effort was made to adapt each of these above practices in the research process. Further, Simon Fraser University's ethical approval process was followed and the option for confidentiality was available.

The results of the intensive investigation of the Burns Lake CFP and especially the interview data from the ten key informants were used to formulate a survey

questionnaire for the remaining nine CFPs. Representatives for each of the CFPs were sent this questionnaire in February 2002. In order to ensure that all the CFPs were surveyed, the questionnaire was sent by mail and email, and then administered via telephone. Only one of the respondents was not reached by phone but the survey questionnaire was answered through the mail.

The interviews were close-ended in order to provide greater uniformity in the format of the responses (see Appendix D). The questions were divided into three sections: questions regarding the membership and progress of the community forest; questions regarding potentially enabling and constraining factors to the community forest; and questions regarding the future of the community forest. Respondents were asked to select answers from a list provided by the researcher; the answer categories were mutually exclusive but the option to select more than one answer was available. In order to ensure that the response categories were exhaustive and that all the possible responses were included categories of 'not sure' and 'not applicable' were provided. Questions were also carefully worded in order to avoid misinterpretation. The time for each follow-up phone interview was approximately 45 minutes to one hour depending on the respondent. The ethics requirements for adequate information, consent, and confidentiality were addressed prior to the interviews.

Sproull (1995: 74) defines *validity* as "the degree to which an instrument measures that which is supposed to be measured." This research attempted to ensure validity by undertaking both an in depth analysis of one CFP as well as analysis of the remaining nine CFPs. A summary of findings for the in depth case study was reviewed by the researcher's advisor and each of the key informants. This step served as a test of bias and subjectivity, and served to ensure the accuracy of the findings.

Babbie (1989:127) refers to *reliability* as " the likelihood that a given measurement procedure will yield the same description of a given phenomenon if that measurement is repeated." Yin (1994) states that reliability can be achieved through the use of formal case study protocols. That is, the method of investigation should be pre-determined and replicable. For a case study to be considered reliable, it must be possible for a later researcher to follow the same procedures as described by an earlier investigator and yield the same outcomes. Although a degree of subjectivity is inherent in this research, it is likely that a future researcher would derive similar observations following the same case study protocol.

The research sought to capture the diverse experiences of each of the ten CFPs. The data collected through the investigations were used to determine the progress to date of each CFP and to identify constraining and enabling factors. These factors were those that CFP participants identified themselves, as well as those derived from this researcher's own analysis. Once this arm of the research was complete, the findings were used to identify the combination of factors found within initially successful CFPs, and to consider the overall feasibility of the program.

Eisenhardt (1989: 540) suggests that within-case analysis involves detailed case study write-ups for each site, which "are often simply pure descriptions, but they are central to the generation of insight." Moreover, becoming familiar with each case allows their unique patterns to emerge before generalizing patterns across cases. This familiarity accelerates cross-case comparison. Eisenhardt (1989) also suggests that within-case analysis and cross-case comparison, which allows for tentative themes, concepts, and even relationships between variables to emerge, is a highly iterative process. Further, it is important to constantly refine theory with reference to data,

"iterating toward a theory which closely fits the data" (Eisenhardt 1989: 541). The empirical investigation aimed to 'test' and refine the model of the constraints and enablers based on the diverse experiences of the ten CFPs. This iterative process involved data from multiple sources: secondary source material such as websites, documents and newspaper articles; observation of two meetings; open-ended interviews and standardized survey-interviews. This information was used to refine the conceptual model in order to identify the constraints and enablers to the implementation and functioning of British Columbia's CFPs.

1.3 Dissertation Outline

The remainder of this dissertation is as follows, Chapter Two describes the phenomenon of community forestry in British Columbia and around the world and in so doing reveals the diversity of definitions and objectives of community-controlled forestry initiatives. It provides numerous global examples of community forestry and provides details of British Columbia's CFPP. Chapter Three reviews several relevant bodies of scholarship in order to develop a conceptual model that identifies the factors affecting the viability of community forestry. Chapter Four provides the findings from the intensive analysis of the Village of Burns Lake CFP, while Chapter Five provides the findings from the analysis of the remaining nine CFPs. These findings are used to refine the conceptual model of the constraints and enablers to the implementation and functioning of British Columbia's Community Forest Pilot Project. Lastly, Chapter Six identifies the overall conclusions of the research, and its scholarly and practical contributions.

CHAPTER 2: THE PHENOMENON OF COMMUNITY FORESTRY IN BRITISH COLUMBIA AND AROUND THE WORLD

There is growing concern over the environmental impacts of forestry and a growing awareness that, if the ecological systems of forests are not nurtured and sustained, the economies and communities that rely on the forests will not survive. Marchak *et al.* (999) contends that in British Columbia, many forestry regions are approaching or have already reached a state of resource exhaustion, and many members of the public have come to identify current institutional mechanisms for forest management as the cause (Beckley 1998). While publicly owned, much of the commercially productive forest land in British Columbia is leased to large forest product corporations and managed primarily for the production of fiber resources (Beckley 1998; Marchak *et al.* 1999). The forestry profession and governments must contend with increased public questioning of this system of forest management.

As with other examples of community forestry, British Columbia's CFPP represents a forest management model with different objectives than traditional, industrial forestry. The CFPP is designed to create more flexible and adaptive management of the forest resource, to increase communities' and First Nations' participation in local forest management, to create sustainable jobs, and to reduce conflict between various stakeholders (British Columbia, Ministry of Forests 1997a). Given these objectives, the CFPP may address some of the problems facing governments and the demands for the democratization of forest management.

Community forestry is practiced all over the world in many different ways. This chapter describes the phenomenon of community forestry in British Columbia and around the world with the aim of identifying the many definitions and objectives of community forestry. Secondly, it reviews a number of examples of community forestry, which reveal the various forms of community forestry and the various reasons for growing interest in it. These examples also reveal the ways that people struggle over land and the diversity of land tenure arrangements. Lastly, this chapter provides some background to the development of British Columbia's CFPP. Throughout the world, and specifically in British Columbia, the use, ownership and management of forest resources and forest land is being contested, and there is a growing desire for the right to use forest resources for the good of local forest-dependent communities.

2.1 Definitions and Objectives of Community Forestry

A review of the growing scholarship on community forestry reveals a number of definitions. For example, Duinker *et al.* (1994: 711) defines a community forest as "a tree-dominated ecosystem managed for multiple community values and benefits by the community." Similarly, Brendler and Carey (1998: 21) define community forestry as the management of forests "with the express intent of benefiting neighbouring communities". Further, they describe three attributes that are shared by most community efforts: residents have access to the land and its resources; residents participate in decisions concerning the forest; and the community protects and restores the forest. In examining community forestry in Durango, Mexico, Taylor (2000:3) identifies community forestry as a "regime of common property management that pursues sustainability by linking local people's social and economic interests with forest conservation".

This latter sentiment is commonly echoed in the literature. For example, Carey (1998:44) defines community forestry as "a method of ensuring rural people have access to a portion of the benefits derived from nearby forests...[and] a meaningful role in decision-making". The United States Forest Service defines community forestry as lands owned and operated for forestry or "allied purposes" by the community (village, city, town, school, district or other political sub-division) for the purposes of that community (in Duinker *et al.* 1991). Duinker *et al.* (1991:131) define it as "community development based on multiple resources in forested ecosystems," stating that community forestry exists when a "community is satisfied with its involvement in and benefits from" managing the forest area. Community forestry is also defined as the "practice of forest management where local people participate in various ways to obtain a sustainable return from the forest" (Mallik and Rahman 1994: 731). Finally, community forestry involves the deliberate development of a relationship between a community and the forest so that all members "have a means of direct involvement in the management of the forests, with a goal of benefiting the whole community" (Duinker *et al.* 1994: 713).

These many definitions of community forestry can be usefully divided into three categories reflecting the different objectives of community forestry (see Table 2.1). The first is small-scale industrial forestry, or community forestry for primarily economic gain. The second is social forestry, which seeks to change people's attitudes about forests. The third is ecological forestry, which is concerned with maintaining the integrity of existing forests, slowing deforestation rates, and promoting reforestation. While these categories do not perfectly account for all the definitions and descriptions of community forestry, they provide a useful framework for understanding the various forms of community forestry.

Table 2.1: Categorization of Community Forestry by its Primary Objective

Small-Scale Industrial Forestry	Social Forestry	Ecological Forestry
...transfer of some level of control of forestry operations from large, industrial forest companies and government to the community (Luckert 1999). ...scaling down of the parameters of conventional forestry to the level of the village or community (Hausler 1993). ...replaces the limitations of scientifically derived forestry with those of social equity and participation (Klooster 2000). ...activities of forest industry enterprises and public forest services, which encourage and assist forestry activities at the community, level (Hausler 1993). ...commercial monocrop plantation forestry on a smaller scale (Hausler 1993).	...tries to change people's attitudes about trees and induce many farmers to plant fuelwood trees for their own needs on their own lands (Cernea 1993). ...not only to motivate people to plant trees, but promote the kind of tree growing that will best supply fuelwood, small timber, grasses and income to the small producers, and to provide increased benefits to the poorer strata (Cernea 1993). ...rural people should participate in government decisions that affect their use of government forest areas... ...government forest areas should be turned over to communities or small farmers to manage for their basic needs... ...communities should process and market their surplus forest products free of government controls...(Pardo 1995).	...mitigate the effects of deforestation and threats to biodiversity from unsustainable logging of tropical forests in developing countries (Cernea 1993;). ...mitigate the effects of increased pressure on forests for fuelwood consumption and agriculture expansion (Cernea 1993; Skutsch 2000). ...mitigate the effects of over harvesting and inadequate reforestation in northern temperate forests (Marchak *et al.* 1999). ...should include a long term ecological and sustainable approach to forest practices – such as eco-system based planning (Burda 1997, 1999; Curran and M'Gonigle 1997; Hammond 1991; M'Gonigle *et al.* 1994).

2.1.1 Small-scale industrial forestry

The harvesting methods and intensity associated with community forestry are not necessarily different from large-scale industrial forestry. Industrial forestry is based on large-scale, export oriented commodity production, and can be defined as the "production of all manner of wood-based products for national and international markets" (Brendler and Carey 1998:21). For many reviewers, community forestry is simply industrial forestry at a small scale. For example, Luckert (1999) sees community

forestry as the transfer of some level of control of forestry operations from large, industrial forest companies and senior governments, to community members. Hausler (1993) also sees community forestry as a smaller version of industrial forestry; it is a "scaling down of the parameters of conventional forestry to the level of a village or community woodlot" (86).

Klooster (2000) also identifies community forestry as a smaller version of industrial forestry but realizes that it can equalize access to limited forest resources through increased participation. Hausler (1993) distinguishes community forestry from large-scale industrial forestry that contributes to community development only through employment and wages. Rather, community forestry includes "activities of forest industry enterprises and public forest services which encourage and assist forestry activities at the community level" (Hausler 1993:86). These definitions do not challenge the industrial nature of forestry, but rather the size of the operation and the players in charge. Therefore, for most, community forestry is simply "commercial monocrop plantation forestry on a smaller scale" (Hausler 1993:86).

2.1.2 Social forestry

Social forestry has developed primarily as a response to the issue of deforestation in the developing world (Eckholm *et al.* 1984; Foley and Barnard 1984). It includes programs as diverse as 'out-of-forest trees' (Cernea 1993: 5), 'agroforestry' (Fortmann 1985), 'farm forestry' (Foley and Bernard 1984), and 'urban forestry' (Mcpherson and Johnson 1988).

Cernea (1993) identifies social forestry as distinct from industrial forestry because it tries to change people's attitudes about trees in order to promote

reforestation. Further, its goal is not to create an economic base or create an industry but to reforest the land, and "induce a large number of farmers to plant fuelwood trees systematically for their own needs and on their own (and other available) lands" (Cernea 1993: 6-7). For Sharma (1993), the units of management in social forestry are the farm and the village community.

Cernea (1993) distinguishes between historic[2] and current definitions of social forestry. Current usage recognizes that forestry programs should "motivate large numbers of people to plant trees, promote the kind of tree growing that will best supply fuelwood, small timber, grasses and income to the small producers themselves, and to provide increased benefits to the poorer strata" (Cernea 1993:6). Social forestry programs thus aim to involve small farmers and those without land. Pardo (1995) echoes this definition but expands upon it in three ways. First, the primary idea behind social forestry is that rural people should participate in government decisions that affect their use of government forest areas. Second, social forestry calls for these areas of government forest to be turned over to communities or small farmers and managed by the users themselves for their basic needs. Finally, social forestry should be structured to allow communities to process and market their surplus forest produce free of government controls. Pardo (1995) claims that local communities in both the Philippines and Nepal have reached this latter stage where forest users now have full authority to grow, harvest and market commercial forest products, and to establish community-

[2] The concept 'social forestry' was apparently first used in India. It was proposed and advocated in 1973, in contrast with, and as an alternative to, "extension forestry". The objectives of social forestry in 1973 were: 1) fuelwood supply to the rural areas and replacement of cow dung; 2) small timber supply; 3) supply of grasses and fodder and provision of grazing; 4) protection of agricultural fields against wind; and 5) recreational needs (Cernea 1993:27).

based enterprises to process and market surplus products. In these cases, community groups are replacing both government forest agencies and non-local loggers.

2.1.3 Ecological forestry

Rising concern over the ecological impacts of deforestation and interest in reforesting deforested areas have contributed to increased interest in community forestry as an alternative to current forest management practices. Deforestation and threats to biodiversity from unsustainable logging in temperate forests in the north as well as tropical moist forests in areas such as Asia, West Africa and Latin America, have become the central issues of the environmental debate within forestry (Cernea 1993). Some claim (Marchak *et al.*1999), that in northern temperate forests, deforestation results from harvesting rates that are unsustainable as forests have been over cut and reforestation is inadequate. In addition, in many regions of industrial forestry, clear-cut methods are depleting ecosystem biodiversity and the regional capacity of sawmills and pulpmills exceeds both the regional forest resource supply and the international demand for products. For example, in the case of British Columbia, many have argued that current harvesting rates exceed the sustainable level by 25 percent (Dellert 1994 in Marchak *et al.* 1999). This British Columbian example points to some of the perceived causes of deforestation. British Columbia's economy is largely dependent on the extraction of timber products for export, yet as renewable resource stocks are depleted, timber volumes available to industry are reduced due to overharvesting.

In a developing world context, the causes of deforestation appear to be largely a result of population growth. The need to provide extra land for agriculture has resulted in large-scale forest clearance (Foley and Barnard 1984; Taylor 2000), and the

increasing demand for fuelwood has also put pressure on forests (Cernea 1993; Skutsch 2000). Cernea (1993) is concerned that most of the world's farmers do not routinely plant fuelwood trees, but rather 'gather' trees for fuelwood. For example, in the case of India, it is estimated that only ten percent of rural farmers plant trees for fuelwood, while the rest rely on the 'spontaneous regeneration' of trees (Cernea 1993). Tropical forests hold much of the Earth's biodiversity, yet during the 1980s, 17 million hectares of tropical forests were destroyed each year (Petesch 1992). In Mexico, deforestation is occurring at a rate as high as 700-800 hectares per year (Chapela 1997 in Taylor 2000).

Much of the Canadian literature on community forestry advocates an ecosystem forest management model that is forward-looking and less harmful to the environment (Burda 1999; Curran and M'Gonigle 1997; Hammond 1991; M'Gonigle *et al.* 1994; Nadeau 1999; Gunter 2000; Reed 1999). This position is largely based upon perceived problems with the current industrial forest model. For example, Hammond (1991: 199) sees current forest use as dominated by a "short term profit and technology ethic that favours exploitation of natural resources for immediate gain while relying on technology to overcome any social or ecological problems which arise in the future." Similarly, Marchak *et al.* (1999: 14) contend that the problem with current forest practices in British Columbia is that "neither governments nor private companies have provided ecological stewardship required to sustain coniferous forests over very long periods of time."

In summary, community forestry as ecological forestry suggests that through a long-term approach to forest management and greater reforestation initiatives, concerns over the ecological impacts of industrial forestry practices,

the increasing demand for fuelwood trees, and agricultural expansion can be addressed.

2.1.4 Summary

The three categories of community forestry reviewed above reflect its different objectives. Consistent with all of these objectives - to 'scale-down' the size of industrial forestry management to the community level, to change people's attitudes about the forest, and to slow deforestation rates – is a desire by communities and individuals that are dependent on forests, to secure more power and gain greater autonomy over their lives (Brendler 1998; Burda 1998; Carrlsson 1999; Duinker and Pulkki 1998; Haley 1996; Inglis 1999). Mayers (2000) views the political demands for local control of local forests around the world as part of a trend that is providing increased collaboration of private companies and communities. The author suggests that there is increasing interest in using forestry as a tool for local empowerment, "whereby previously disadvantaged communities and individuals benefit from taking effective control and responsibility for decision-making regarding their forest assets" (1).

2.2 Examples of Community Forestry

Cases of community-management of forest resources exist throughout the world, some highly successful and others more problematic. Taylor (2000) identifies many successful experiences with community forestry in Mexico, in particular, forests under common property management. Eighty percent of forest lands in Mexico are in communal ownership in '*ejido*' or '*communidades indigenas*', and many of these have small sawmills and value-added shops, and hire local forest technicians (Taylor 2000).

Taylor (2000:3) thus supports devolution of rights to communal groups, as there are many examples of community forestry "capable of governing access to common-pool resources and organizing owners of the sustainable use of forests." Notwithstanding this, in Mexico, policies promoting privatization of the rural commons are being justified by 'tragedy' rationales, "in which forest degradation is blamed on collective tenancy" (World Bank 1995 in Taylor 2000: 4).

The Swedish forest commons, another example of community forestry, is based on a medieval pattern of ownership and has survived for more than one hundred years. It consists of 25 000 shareholders and has prospered within the competitive international timber market. It not only harvests and sells timber, but also reinvests in the district by subsidizing farmers, building roads, and providing hunting lands and fishing waters (Carlsson 1999).

The *Magnifica Comunita di Fiemme* (MCF), a 19 000 hectare community forest in Italy, dates to the middle ages and is managed by professional foresters for the purpose of timber production. It is recognized as community property, and small and local firms are granted the contracts for logging (Duinker and Pulkki, 1998).

In British Columbia, the 4 800-hectare North Cowichan community forest is owned and managed by the municipality. As a result of unpaid taxes, the municipality acquired the land in the 1920s. In 1946, the community successfully petitioned for a change in the Municipal Act to allow it to put land in a forest reserve. By 1992, the land reserve bank account was relatively high and thereby used to enable continued management, despite declines in log sales. Profits and taxes are generated for general community use and the forest has continued to operate at a profit (Hayter 2000a).

Another example of community forestry in British Columbia is the Mission Municipal Forest (MMF), which originated in the 1930s when approximately 1 000 hectares of land reverted to municipal ownership following a property tax default. In 1945, additional Crown forestland within the municipality was turned over to Mission to be similarly managed. Given one further addition, by 1994 the total size of the community forest reached 10 400 hectares with an AAC of 41 200m^3. The goals of the MMF are to be a self-funding department, optimize revenue over a five-year cut control cycle rather than one-year periods, and manage for multiple forest resource values such as recreation, green-spaces, forest education, visual aesthetics and biodiversity. The MMF has used its surplus revenue from harvesting to support a community library and a fire truck and firehall in a remote area of the community (Allan and Frank 1994).

In the United States, community forestry can be better understood as community-based forestry interest groups. Typically it takes the form of 'projects' and 'collaborations' and is not based on any form of secure ownership, concession, or control over a single tract of forestland. The community based forestry networks include individuals who try to collectively institute projects that will improve forestry, bring economic benefit to the community, and support the elusive goal of social well-being (Brown, forthcoming).

These forestry interest groups include independent landowners involved in forestry, public forest agencies, and representatives of the timber industry, non-profit organizations, and the interested general public. For example, in New England, where smaller private lands and private industrial lands predominate, the emphasis in community forestry tends to be on preventing habitat fragmentation. In Appalachia and the South, community forestry groups are concerned about monoculture, short-term

"crop" rotation forest practices promoted on small and large holdings by the timber industry, with little care for basic watershed health and soil conservation. In the Intermountain West, a great deal of community forestry focuses on forest management to improve watersheds and to environmentally adapt to forest fires in areas where fire is a natural ecological component. Finally, in the Pacific west, community forestry groups are largely involved in public land issues, and the private land adjacent to public lands (Brown, forthcoming).

The label 'community forestry' embraces a spectrum of situations. Factors such as geographic location, demographics, unique history, and access to different markets influence the type of community-controlled models that have evolved.

2.3 The Emergence of British Columbia's Community Forest Pilot Project

In British Columbia, motivation for and interest in community forestry has been stimulated by a growing realization that traditional models of forestry have not addressed community interests and in particular the desire of local people to have greater control over the forest resource that plays such an important role in their lives. Not only do the forests contribute to the maintenance of water quality, soil conservation, flood and avalanche control, and the provision of recreational opportunities, and habitat for plant and animal species, they also are of immense importance to the provincial economy. Of British Columbia's 60 million hectares of forestland, which represents two-thirds of the provincial land base, 51 million hectares are classified as timber-productive and 24 million hectares are managed commercially. Moreover, British Columbia's forest sector accounts for approximately 50 percent of provincial exports, and approximately 60 per

cent of Canada's annual softwood lumber exports. Lastly, the provincial forest industry employs approximately 100 000 people (British Columbia, Ministry of Forests, 2001b).

Given the importance of the forest resource in British Columbia, the growing dissatisfaction with its management, the erosion of forest industry jobs, and growing concerns about the environmental impact of industrial forestry practices, support for community forestry has emerged especially from within forest-dependent communities (Beckley 1998). The demand for alternatives to traditional forest management has also come from non-local interests. For many (e.g. Burda 1999; Curran and M'Gonigle 1997; Hammond 1991; M'Gonigle *et al.* 1994; Nadeau 1999; Gunter 2000; Reed 1999), current forest practices are seen to be dominated by a short-term profit and technology ethic, and fail to address the needs of the environment and forest-dependent communities. For these critics, community forestry has the potential to be transformative, as it offers a means of providing a long-term, ecologically sustainable approach to forest management.

As a result of growing public support for community forestry, in 1998, the British Columbian provincial government established a new form of community forest tenure[3] under the Jobs and Timber Accord, to be implemented on a pilot basis. The community forest tenure – the Community Forest Agreement - is a new public forest licensing arrangement and represents a departure from the traditional industrial model. While there are models of local community involvement in forest management within Canada, British Columbia's CFPP is unique as it represents a comprehensive network of

[3] Forest Statutes Amendment Act SBC 1998 Chap. 29, Bill 34.

community-managed forests on public land that is unique in the Canadian context (Community Forestry Forum, March 2002).

Indeed, relative to the conventional regulatory system for forestry in British Columbia, the community forest tenure is unique. The forest tenure system refers to the legislation, regulations, agreements, permits and government policies that define and constrain a firm's right to harvest Crown timber[4]. Specifically, it refers to the contract between the provincial government and forest companies that grants them the right to harvest a specified volume of timber. In British Columbia, over 90 per cent of all forestlands are Crown land (Marchak *et al.* 1999). The provincial government derives direct revenue through the tenure system in the form of stumpage and annual rent. A pre-determined price per cubic metre, or stumpage, must be paid for all trees harvested from provincial Crown land. The holders of licenses pay annual rent and annual rates are set by regulation (British Columbia, Ministry of Forests, 1998a).

Prior to establishing a new form of community forest tenure, the Minister of Forests established a multi-stakeholder Community Forest Advisory Committee (CFAC) to develop tenure models, recommend selection criteria and communities for testing the pilot tenures, and monitor and evaluate the outcomes (British Columbia, Ministry of Forests, 1997b). The CFAC sought to create a community forest tenure that would allow for innovative and unconventional forest practices, and extend holders' rights of access

[4] Several forms of tenure provide licensees with rights to cut timber; each has different requirements and responsibilities such as maintaining a manufacturing facility. Tree Farm License (TFL) provides the right to harvest an annual amount of timber from a specific geographical area, which includes Crown and private lands, with tenure for 25 years. The Crown collects revenue in the form of stumpage, and the licensee is responsible for planning and reforestation. The Forest License (FL) provides the right to harvest a specific volume of Crown timber from an area within a specific Timber Supply Area (TSA). The term of the license is 20 years or less. The Crown collects revenue from stumpage payments, and the licensee is responsible for reforestation. Both TFLs and FLs can be replaced every five years (British Columbia, Ministry of Forests, 2001b).

to Crown timber to include non-timber botanical products and recreational opportunities. The CFAC supported a long-term tenure, which would allow for maximum flexibility in management planning and accommodate diverse community objectives, while adhering to provincial forest practices standards (Community Forestry Forum, March 2002).

In July 1998, legislation was passed to permit Community Forest Agreements[5]. These agreements are not held in common but are granted to legal entities that represent community interests. While the existing woodlot license regulations apply to the pilot projects there is the possibility of developing new regulations specific to the community forest tenure agreement. The 'Agreement' is area-based and the main portion of the land base is Crown land; however in some cases, municipal, Indian reserve, and private land can be co-managed as part of the license. The holder is given exclusive rights to harvest Crown timber and may grant the right to manage and charge fees for botanical products. After a five-year probationary period, the communities may be awarded an Agreement from 25 to 99 years to continue the management of the forest land base (Bill 34 1998c Forests Statutes Amendment Act).

As of January 1999, 60 letters of interest had been received and 27 proposals were submitted. The CFAC evaluated the proposals based on several criteria:

- Description of the proponent's legal entity;
- Location and availability of the proposed landbase;
- Identified and documented evidence of available wood supply;
- Evidence of broad-based community support;
- Business plan; and

[5] British Columbia Forest Act SBC 1978 Chap. 23 (Division 7.1).

- Preliminary forest management plan (British Columbia, Ministry of Forests, 2000b).

In July 1999, seven pilot Agreements were announced and in October 2000, three new pilot Agreements were granted due to the expansion of the community forest program (Table 2.2). In 2000, 18 new Agreements were planned and were to be awarded both competitively and by invitation. This latter category includes offers made as "interim measures" to First Nations in treaty negotiations (Community Forestry Forum, March 2002). The initial ten CFPs in British Columbia are geographically dispersed and, while not as yet determined for all, they vary in size from 418 to 25 194 hectares. The 'Agreements' are held by various legal entities: bands; municipalities; societies; associations; corporations; and partnerships (British Columbia, Ministry of Forests, 1998a).

The objectives of the ten CFPs are diverse and reflect the various style and forms of community forestry reviewed earlier. While all of the CFPs have a commercial agenda (i.e. they see community forestry as an opportunity to create employment and some revenue for the community), only some want to employ conventional industrial forestry practices (i.e. operate as small-scale industry foresters). Others are less interested in securing a large AAC and instead are choosing to focus on watershed protection and non-timber forest products such as botanicals, and eco-tourism. Still others are, given their small size, focusing on education and recreational opportunities. Finally, some of the CFPs see community forestry as an opportunity to enhance community cohesion and build bridges with various stakeholders in the community.

Table 2.2: British Columbia's Community Forest Pilots

Pilot Name	Pilot Location	Pilot Size (hectares)	Pilot Harvest Rate (cubic meters)
Bamfield/Huu-ay-aht Community Forestry Society	Bamfield	418	1 000[1]
Village of Burns Lake Community Forest Limited	Burns Lake	23 325	54 026
North Island Woodlot Corporation	Comox Valley	715[1]	2 090[1]
Esketemc First Nation	Williams Lake	25 000	17 000
District of Fort. St. James Community Forest	Fort St. James	3 582	8 290
Harrop-Proctor Watershed Protection Co-operative	Harrop, Proctor	10 860	2 603
Islands Community Stability Initiative	Haida Gwaii / Queen Charlotte Islands	24 000[1]	50 000[1]
Likely Community Forest Corporation	Likely	15 000[1]	12 500[1]
Village of McBride and District	McBride	60 860[2]	50 000[2]
Nuxalk First Nation	Bella Coola	46 000[1]	20 000[1]

Notes. Source British Columbia, Ministry of Forests, 2001b, http://www.for.gov.bc.ca/hth/community/documents/CFPA

[1] All or a portion of the number is estimated and/or unofficial.

[2] This information has changed since the time of the field research (2002); these numbers were established March 31, 2003.

Despite the relatively small size of the community forests, the community forest tenure represents a symbolic if not significant shift within the forest industry from large

forest companies to communities. Through the new legislation governing the CFPs, the prominent players within British Columbia's forest industry - the government and large industrial timber firms - have been extended to include communities.

Although community forestry exists in many different countries, across different cultures, and covers a variety of ecosystems, there are also common constraints and enablers to its implementation and functioning. British Columbia's CFPP clearly indicates a new direction in public forest management in the province. The Project is politically popular as it offers greater community involvement in local forest management and it can respond to the demands for the democratization of forest management. That being said, there are no guarantees that the individual CFPs will achieve success. Through a review of relevant bodies of scholarship, Chapter Three serves to identify some likely key factors affecting the viability of community forestry.

CHAPTER 3: CONCEPTUALIZING THE FACTORS AFFECTING THE VIABILITY OF COMMUNITY FORESTRY

This chapter develops a conceptual model that identifies the factors affecting the viability of community forestry. This conceptualization draws upon the literatures on community forestry and community economic development, property rights and resource control, and globalization (localization).

3.1 Community Forestry and Community Economic Development

A significant portion of the community forestry literature identifies community-level factors that are thought to influence the success of community-controlled forestry initiatives. The literature on community economic development (CED) compliments this scholarship in that much of it identifies internal or community-level conditions of sustainable community economic development more generally. In this sense, community forestry can be thought of as an example or component of CED, and one of great significance. The field of CED is interdisciplinary, yet relies primarily on geography and economics for its theoretical foundations (Gunter 2000). CED can also be thought of as a manifestation of sustainable development ideas (see Kula 1998). Consistent with this, much of the community forestry and CED literature is highly prescriptive in that it aims to outline the qualities of communities that are ecologically, socially and economically sustainable (Burda et al. 1997; Gunter and Jodway 1999).

The scholarship on community forestry and CED identifies a number of key internal factors or conditions within a community that are deemed necessary for a CED initiative to be 'successful'. For example, in the case of a forestry-based CED initiative, it is argued that a community must have a suitable forest land base in terms of both quantity and quality (Gunter 2000). The forest land base must not only have adequate merchantable timber in order to support a successful timber business, but also be healthy, with a range of landforms, species, and age classes, and small enough so that users can develop knowledge of its external boundaries. It is also argued that for 'successful' CED to be achieved, a community must not only support an initiative, but all members of a community, including those who are often marginalized, should be represented and participate in those resource management decisions that affect them. Further CED initiatives may be more successful when there is a sense of community identity and social cohesion. CED initiatives must also be tailored to the particular needs and objectives of a community in order that they 'fit'. Lastly, a community must have, or develop sufficient capacity to reduce its vulnerability to external forces. In the rest of this section, these many factors will be reviewed in more detail.

For many contributors to the community forestry and CED literature (e.g. Cernea 1993; Klooster 2000; Lindsay 1999; Mehta and Kellert 1998; Wily 1999; Skutsch 2000), community forestry primarily depends on the support of locals to ensure its success. Many add that this support must be broadly based; that is, full community representation is essential (e.g. M'Gonigle *et al.* 1994; Burda *et al.* 1997; Beckley 1998; Carey 1998; Mayers 2000). In order to ensure this broad representation, it is often argued that community forestry should ensure that rural people have access to a portion of the benefits derived from nearby forests. For example, in Nepal, communal forest projects

were successful because their development was based on participation by local residents who were affected and benefits were clearly identified. Consultation with the community resulted in greater community support of the projects (Lindsay 1999).

A lack of consultation and participation of local people can result in the failure of community initiatives. For example, Fellizar (1993) found that in the Philippines, government policies concerning management of natural resources have had numerous unintended consequences as strategies failed to minimize degradation of forest resources and pollution, and address poverty. Moreover, management policies or 'centralized dictums' that conflict with local practices often create resistance to community forestry activities. In Mexico, Klooster (2000) found that resistance to community forestry activities is largely a rejection of authority and is indicated by tree theft or acts of arson. In Scotland, people voted for the devolution of responsibility for forestry to a new Scottish Parliament. The Forestry Commission of the United Kingdom however, has retained much of its power. This has resulted in an ambiguity of responsibility and has raised issues of transparency and accountability (Inglis 1999).

While community forestry presents an opportunity to improve the way community members' concerns are incorporated into forest management, it is difficult to ensure that all interest groups are represented. There is concern over who is included on community forestry boards and a related concern about which interests have 'legitimate seats at the table'; just because a wide range of interests come together does not guarantee that the general public's interests are better represented (Beckley 1998).

CED initiatives seek to encourage the participation of all community members in planning and decision-making, including those who are often marginalized (Gunter 2000). Increased participation of rural people in government decisions is seen as a

means of promoting local empowerment. This prescription is based on the principle that those most affected by a decision should participate directly in decision-making (Duffy et al. 1996 in Gunter and Jodway 1999; Notzke 1994).

Taking the notion of greater community participation further, many contributors to the CED literature support the devolution of management responsibilities for natural resources to local communities (Bagadion 1993; Burda *et al.* 1997; Clapp 1998; Fellizar 1993; Gunter and Jodway 1999; Milich 1999). This suggestion is based on a number of related beliefs. First, local decision making should provide an incentive to consider the long-term benefits of sustainable management; that is, those who are dependent on renewable resources for their livelihood will be most interested in sustainably managing those resources (e.g. Duffy *et al.*, 1996 in Gunter and Jodway 1999; Gibbs and Bromley 1989 in Gunter and Jodway 1999; Notzke 1994; Pinkerton 1993). Many believe that stewardship of the land is more easily cultivated in local communities than in organizations that manage from afar (Burda *et al.* 1997; Hammond 1997). Second, centralized management lacks the flexibility and ability to respond to local conditions. Local involvement can reduce problems associated with managerial detachment whereby those making the decisions do not have adequate or accurate information on the systems that they are considering. As argued by McCay and Jentoff (1998: 246),"local autonomy provides a way of mapping ecological feedback signals onto social choice and of promoting processes that lead to more effective communication and socially responsible decision making."

In general, these proponents of CED (Bryant 1999; Gunter 2000; Markey and Roseland 1999; Vodden 1999) claim that community forest projects tend to be successful where centralized policies allow for full participation by local residents.

Increased community control over planning and resource activities can generate greater wealth and employment in a community (Markey and Roseland 1999). Gaining community control and decision-making power over the allocation and use of local resources (e.g. land, capital, industry, and human resources) is essential to building sustainable communities and reducing dependency (M'Gonigle 1996; Nozick 1999).

Not only is community support enhanced by representation and participation in decision-making, but many believe that CED initiatives are more successful when there is a shared "sense of community identity, culture and history, and social cohesion and collective spirit" (Vodden 1999: 50). For example, Skutsch (2000) found that many villagers were reluctant to participate in projects not only because they had not been consulted sufficiently, but also because of 'factionalism'. Khan (1996) illustrates "how group conflicts and divisions amongst poorer farmers in Bangladeshi villages, which are fuelled by patron-client relations, worked against the objectives of the social forestry project" (in Skutsch 2000: 192-193).

Several authors (e.g. Skutsch 2000; Bliss 1998; Booth 2002; Carroll and Lee 1993 in Fortmann and Roe 1993; Fortmann 1988; Cernea 1993; Nadeau *et al.* 1999; Brown forthcoming), express concern over the fact that agencies that promote community forestry often consider the community as a single unit without recognizing the conflict that exists within communities. Skutsch (2000) suggests that development agencies often assume that community forestry will benefit the people, "as if they all had the same needs, desires and opportunities...even where people were identified as belonging to different groups with different needs, these categories themselves were seen as homogenous" (Skutsch 2000:191). Homogenizing terms such as the 'community', the 'people' or the 'villagers' ignore the fact that conflict can exist within

groups (Skutsch 2000). Few communities resemble the 'big happy family' that this term conjures up (Bliss 1998; Cernea 1993; Fortmann 1988; Skutsch 2000), and this lack of recognition of difference and conflict may contribute to the failure of many community forestry projects. In general then, the literature suggests that community forestry initiatives will be more successful in communities displaying a common identity and social cohesion. Where such characteristics are absent, particular efforts must be made to accommodate multiple interests and avoid conflict.

The CED and community forest literature contends that not only are community support and cohesiveness necessary for successful CED initiatives, but that community forest models must also 'fit' the communities in which they are implemented (Gilmour 1989; Cernea 1993; Sharma 1993; Morell 1997). Community forestry models should be compatible with various socio-economic and political characteristics of a community. Further, prior to establishing a community forestry model, it is necessary to recognize the specific motivations of community members. For Cernea (1993:10), success of a project occurs when the "technical and physical characteristics of the forestry program and the social characteristics of its actors [are] compatible."

For example, in order for biodiversity conservation programs to be supported by local communities, Mehta and Kellert (1998) found that the programs also had to continue to address local needs, including women's participation in community forestry, dispute settlement among forest user groups, and hunting for wild pest animals. Based on research in India, Sharma (1993) found that relevant socioeconomic needs of the affected villagers in India were incorporated into the design and planning of social-forestry programs. They were labour intensive and were a success because they could absorb 'surplus labour resources' and provide 'gainful employment'. In Costa Rica,

conservation policies were successful because of the use of tax exemption and special funds, which was proof that farmers responded to economic incentives and market signals. Most programs in Costa Rica have not recognized this and have used incentives for farmers of a non-cash nature, such as agricultural inputs, extension programs and food for work (Morell 1997).

A factor in the failure of some community-initiatives has been the inappropriateness of the model being imposed on the community (Cernea 1993; Gilmour 1989; Sharma 1993; Morell 1997). Morell (1997: 5) recognizes that "incentive programs seem to be inaccurately based on the assumption that farmers respond better to incentives of a moral or ethical nature than to market signals and economic incentives in the context of a market economy." Misinterpreting what motivates people can result in unsuccessful programs as each community has its particular needs, which may not be addressed by standardized programs. Cernea (1993) found that in many developing countries, farmers agreed to participate in tree planting programs if they were paid and would thus gain immediate rewards. In response to massive deforestation, community forestry programs in Nepal have been largely unsuccessful because they were imposed in many areas where forest resources are plentiful or where local management systems already exist (Gilmour 1989). Each community has its particular needs, which may not be addressed by national programs with standardized targets. Gilmour (1989) found that while indigenous management systems do not necessarily equate with sound forest management, implementation of government programs should be preceded by an exploration of existing local indigenous forest management systems. Furthermore, Joint Forest Management initiatives in many Indian states have failed because there has been inadequate devolution of authority to the community and only degraded land is given to

communities. Singh (2002) found that these factors have not promoted internal accountability of the forest resource.

For forestry initiatives to be successful, they must reflect the desires and the needs of the community that will be affected by those initiatives. In some cases, the needs and desires of a community will be largely economic. For example, Haley (1996) found that in British Columbia, the most significant challenges that forest-dependent communities felt that they faced were unemployment, economic instability, and provincial government-down loading of responsibilities and reductions in transfer payments. Their primary motivation for interest in community forestry was that it has the potential to address community concerns of economic instability. In other cases, the needs and desires of a community may be ecological. For example, many recognize a desire for community forestry as stemming from a growing concern for ecological integrity and that the benefits of community forestry are not simply monetary but include cultural, spiritual, medicinal and ecological values (Curran and M'Gonigle 1997). In support of this, several authors (e.g. Blakely 1989; Boothroyd and Davis 1991; Burkey 1993; Bryant 1999; Gill and Reed 1999; Gunter 2000) maintain that initiatives should use an integrated approach to development rather than one based on narrowly defined economic objectives. They feel that integrating social, economic and ecological concerns through a reduction in the amount of timber harvested, increasing 'value-added' initiatives, promoting eco-tourism, developing 'clean' high technology industries and promoting markets for non timber products, can maintain the long-term health and integrity of ecosystems and thus support the healthy development of communities.

For many authors, a key variable of 'successful' CED initiatives is community capacity. Community capacity can be thought of as the combination of a community's

commitment, resources and skills that may be used to build on community strengths and address community problems and opportunities (Aspen Institute 1996; Litke and Day 1998; Markey and Roseland 1999; McGuire 1994). From this perspective, it is a lack of community capacity that creates conditions of instability and dependency. Moreover, if a community is unable to generate viable development initiatives, external forces will have a larger role in determining the future of the community, creating or repeating conditions of dependency (Markey and Roseland 1999). Capacity, however, can be developed in a variety of forms including economic and enterprise capacity, financial capacity, social capacity, and organizational capacity (Gunter 2000; Kula 1998; Markey and Vodden 1999).

In the context of community forestry, community capacity is enhanced by a suitable forest land base and a healthy productive forest ecosystem (Vodden 1999; Gunter 2000). This is characterized by a forest that is diverse in species, landforms and age classes, and with an adequate stock of merchantable timber with a high potential for providing a diversity of benefits in order to sustain the community forest over the long term. Further, the forest land base must not only also be large enough to carry out landscape planning and to support a successful timber business, but also small enough that users can develop accurate knowledge of external boundaries and micro-environments. A community should also have reliable up-to-date information about the state of the forest ecosystem (Gunter 2000).

Community capacity also entails an available "healthy pool of human resources" (Markey and Vodden 1999; Matakala and Duinker 1991 in Gunter 2000: 52), and the existence of a dynamic leader and/or a core group of committed individuals with necessary skills and know-how (Vodden 1999). CED initiatives require willingness, an

ability to cooperate, and an entrepreneurial spirit (e.g. a "number of new enterprises, participation in business development programs and services, business success rates, local ownership of local firms and resources") on the part of the community (Vodden 1999: 44). Further, while communities may have the necessary economic resources, an appropriate leader who exhibits qualities such as "visionary, risk-taker, innovator, motivator and co-ordinator" (Vodden 1999: 45) is also critical. In short, the CED scholarship recognizes that communities are vulnerable to external forces, but contends that community capacity can be developed in a variety of ways to reduce this vulnerability.

To summarize, according to the scholarship on community forestry and CED, community forestry initiatives will be successful if a community has a suitable forest land base both in terms of quantity and quality, adequate support from the community, full community representation, and participation in decision-making. Moreover, devolution of responsibility and power should accompany a community's participation in government decision-making. Additionally, when the community exhibits a shared sense of identity and cohesion, they are more likely to support an initiative. CED models must also be appropriate in order that they fit with the various needs and objectives of each community. Further, when a community's capacity is developed, communities may be able to help themselves and become less vulnerable to external forces. According to the community forestry and CED literature, these key internal community factors are essential for the implementation and functioning of community-controlled initiatives.

The community forestry and CED literature predominately adopts a prescriptive tone. Mitchell (1989 in Vodden 1999) recognizes that while prescriptive models are difficult to implement and that "real world processes do not usually approach prescriptive

ideal" (Mitchell 1989: 272 in Vodden 1999: 42), comparison with prescriptive models can highlight process weaknesses. Further, Vodden (1999) asserts that determining favourable conditions for success based on previous experiences of communities, enhances information for communities engaging in CED initiatives. Hence, this prescriptive tone is appropriate. Where the literature is more rightly criticized is in its treatment of communities. Communities are often assumed to hold certain idealized characteristics such as a common sense of place, a natural link to the land, and ingrained community cohesion. Consistent with this, the literature tends to be community-centric with respect to the possibility for economic development; solutions rest on the assumption that communities have the ability to manage their resource base, and that they will, by virtue of being local, seek sustainable solutions to resource problems (Bradshaw 2003). In other words, the literature inadequately addresses various external conditions that might limit the economic development prospects of even the most able of communities.

McCay and Jentoft (1998: 23) recognize that "communities of resource users are not aggregates of individual acts, but result from deliberate collective action or gain a sense of identity and shared purpose through patterned interactions over time." However, traits such as unity, homogeneity, stability, and the capacity to engage in collective action should not be assumed. Communities are not static; they change over time and are often distinguished by social divisions. There is also a related concern or confusion over who constitutes the 'community' in community forestry, which thereby determines who is included in community forestry. Does 'community' only apply to people who reside within a defined area? Or, does 'community' also include the people who are not permanent residents, but who have a long-time livelihood stake or perhaps

an environmental interest in the forests? For example, Carroll and Lee (1993 in Fortmann and Roe 1993; see also Bliss 1998; Booth 2002; Fortmann 1988; Nadeau et al. 1999) express concern over the exclusion of migrant labour from community forests in the United States. They claim that this 'mobile community group', whose community is based on a shared identity or common employment, comprise much of the tree planters and non-timber workers, and yet are excluded from community forest boards' decisions. Fortmann and Roe (1993) express concern that some migrants in the United States tend to be better educated and wealthier than long-standing residents of a community and therefore have more decision-making power in community initiatives. They assert that these 'equity migrants' "set up art galleries and hurl themselves into local politics...and view the aftermath of their activities as a community development success story". In contrast, they claim, the local loggers, fishers and rural poor see it as an invasion of "undesirables...who have stolen their property" (49).

The traditional divisions of labour further complicate the question of who constitutes the 'community'. Brown (forthcoming) suggests that low-wage labour is the foundation of everyday forest management, especially reforestation-related labour. In the United States for example, much of this work is done by Mexican and Central American people who have been displaced from their country of origin by economic hardships, such as trade imbalances in agriculture. Latino workers have been involved in forest-related work for more than thirty years, but tend not to live in the forest communities, which are populated primarily by European-Americans (US-Canadian-Mexican forum, Oregon 2000). These examples illustrate that even in a recognized physical community, the definition of 'local' will differ according to who is asked. Further

it should be acknowledged that benefits to one group might entail losses to another. Communities are thus shifting and contested social and political groups of people.

It is important not to idealize communities. Gunter (2000) asserts that decision-making at the local level can lead to locally appropriate decisions and improves the incentives to consider long term benefits of sustainable management. However, one must also "temper enthusiasm about the advantages of local control by acknowledging that community members may be wrong about some things [and that] local residents do not always know best" (Stedman 1999: 49; see Clapp 1998). Indeed, Inglis (1999: 50) questions whether rural communities can "meet the new responsibilities that they have sought to take on?" There are also difficulties associated with the devolution of legal power and responsibility to smaller units of government, as communities may be unprepared to meet the demands of a complex intergovernmental system (Bradshaw 2003; McGuire et al. 1994). Moreover, communities may lack the political will and skill of larger governments, and may have less organizational capacity to take on the management of resources. For example, in British Columbia, many forest-dependent communities face problems of a small population, isolation, economic specialization, and a lack of human and financial resources (Bradshaw 2003).

The CED approach assumes that a 'bottom-up' community movement can better achieve economic development than can a government-led effort (McGuire et al. 1994). This approach assumes that communities know best, are willing to find solutions to common problems, and are concerned with sustainability. Bradshaw (2003) and Clapp (1998) contend, however, that during periods of economic decline, resource dependent communities may not be the most credible managers of local resources. Rather, in this situation, a community's priorities may change and economic interests may supercede

broader social and environment interests (Reed 1993). Poteete and Ostrom (2002) state that giving communities greater control over their forest resources does not guarantee that they will use them wisely. Schlager and Ostrom (1992) note that if an owner's discount rate is high (i.e. if they value short-term gains more than expected future gains), then they may degrade a resource through over exploitation (see Clapp 1998). Hansson and Wackernagel (1999) recognize that there are reasons to believe that local environmental movements do not always create sustainable solutions to locally perceived problems. Often they concentrate on local land use issues such as the protection of local wildlife reserves and wetlands against all kinds of exploitation, while there is less concern for the effects of local activities on other areas.

While the scholarship on community forestry and CED identifies various enablers and some constraints to the implementation and functioning of community forestry at the community level, it does not address many of the processes outside the community that may also affect the success of a community forestry initiative. Moreover, the literature advocates community control and more decision-making responsibilities to communities yet pays little attention to what is implied by increased community control and the forms these arrangements may take. To this end, the following section examines the scholarship on *property rights and resource control,* which better considers the implications of community control and decision-making power over the forest resource.

3.2 Property Rights and Resource Control

Issues of tenure, resource control and land ownership, which are the subject of a body of literature that can be identified loosely as 'property rights and resource control,' are central to a discussion of the constraints and enablers to the implementation and

functioning of the CFPP. Much of the literature (e.g. Alchian and Demsetz 1973; Berkes and Farvar 1989 in Gunter and Jodway 1999; Danielson 1991; Schlager and Ostrom 1992; Pinkerton 1993; Rose 1994; Bliss *et al.* 1998; Fortmann in Jacobs 1998; McCay and Jentoft 1998; Campbell *et al.* 1999; Gunter and Jodway 1999; Wily 1999), identifies greater decision-making power, and control over, or ownership of, the land base as key factors influencing the viability of community forestry.

Outside of direct ownership of a forest resource, there are many ways that a community can have input into its management. For example, effective control can be achieved through public pressure, voluntary associations that act to influence forestry within the locality with which they identify, legal co-operatives of small private forest owners, and gatherings of people who identify with particular forest landscapes. However, the literature assumes that the best form of control is ownership. This is based on the view that the degree to which a community owns the forest land base will largely determine their ability to make decisions that might improve their existence.

Property rights are at the heart of many debates on forestry, especially in the Canadian context. Typically these debates have focussed on the issue of whether the private sector or the government can better manage forest resources (see Alchian and Demsetz 1973). Danielson (1991) contends that the 'public-private ownership debate' is too narrow and that neither system will work to solve the 'commons problem'[6]. He equates public ownership with a commons model that is ineffective and results in the destruction of the forest resource base. Danielson (1991) feels that public ownership is merely a compromise between private ownership and no ownership.

Other contributors to the literature recognize that while property rights can be narrowly conceived of as being either private rights or government rights[7], common property resource theory (CPR) can extend the debate beyond these two categories. Gunter and Jodway (1999) and Gunter (2000) find that CPR theory goes beyond the concept of ownership, to include all of the bundles of rights that are relevant to, and govern, the management of natural resources. Property rights are important to community forestry because research in CPR indicates a positive relationship between (economic, ecological and social) sustainability and property rights. Pinkerton (1993, 1989 in Vodden 1999: 40) describes different models and relationships in which a community can be involved in the management of resources. When communities are involved in natural resource management through either 'community management' (where the community retains most of the responsibility and control), 'co-management' (where all parties share some decision-making authority and/or management responsibility) or 'cooperative management' (this arrangement simply implies some level of communication or cooperation), they can achieve ecologically and economically sustainable use patterns in forests, fisheries, wildlife, water and other common pool resource (see also Berkes and Farvar 1989 in Gunter and Jodway 1999; Gibbs and Bromley 1989; Gunter and Jodway 1999; Pinkerton and Weinstein 1995; McCay and Jentoft 1998).

[6] For Schlager and Ostrom (1992), the notion of 'common-property resource' is used to refer to property owned by government, property owned by no one, and property owned by a community of resource users. It is in this later way that common-property resource is used in the literature reviewed here.

McCay and Jentof (1998) similarly recognize common property as a positive institution, and argue that under certain conditions resource users are capable of managing the resources themselves. Many institutions have evolved for regulating access and use of common pool resources like a "social community other than the state" (McCay and Jentof 1998: 22), where management authority is delegated to, or shared with, resource users, organizations, or local communities. McCay and Jentof (1998: 22) recognize that "these arrangements may be strengthened when founded on exclusive property rights" and "that co-ordination and co-operation between users may evolve and prevent tragedies from occurring even in the absence of an external initiative."

Fortmann (in Jacobs 1998) and Campbell et al. (1999) echo this claim, citing numerous examples of successful common property resource management systems. For example, the Zimbabwean CAMPFIRE program, in which villagers were given proprietary rights to wildlife such as big game, not only reduced poaching of big game, but also added to local livelihoods. Examples like this appear to contradict Hardin's (1968) 'tragedy of the commons' thesis, which assumes that resource users, if unregulated by a central government, will maximize their individual short-term gain at the expense of ecological long-term sustainability.

The literature concerning property rights and resource control identifies factors underlying these successful common property resource management systems. The key factor appears to be the degree of clarity over whom has access to resources and who

[7] Hayter (2000a: 352-354) claims there is support within the provincial government for some limited form of privatization and identifies four motivations. From within British Columbia, privatization is seen as a way to diversify forest tenures and to provide an incentive for better forest management (Drushka 1993 in Hayter 2000a). Privatization is seen as a way to remove protectionist pressures from the United States due to log export restrictions in the province (Hamilton 1999f in Hayter 2000a). MNCs see privatization as a way to enhance flexibility in the use of timber supplies, including log exports. Lastly, financial institutions may increasingly favour privatization in order to increase their investment options.

can limit access. Moreover, whether a resource is state or privately owned has implications for the way that it is allocated. If the identity of 'right-owners' is unclear, then not only will conflict occur, but so to will inactivity in the use of a resource.

For example, communal ownership may often be associated with state ownership (e.g. public parks) where the state can exclude people from using its property. If this right is exercised by the state frequently, then the property right is more properly identified as state owned; however, if the right to exclude is seldom exercised by the state, then the users of the resource will treat it as communal. Skutsch (2000:190) recognizes that in many cases, although the State is the official owner, "many forests are being treated as open access resources and degraded." Wily (1999) examines two poorly managed woodland reserves in Tanzania that were secured for local community forests in 1994-95. Prior to this, local governments were given control of forests in order to protect against expanding settlement. Forest guards were assigned to protect the forests from the people. As a result, Wily (1999: 54) claims that the core position of the local people was to "get what they could out of the 'government' forest, for as long as they could [while the] resource belonged to the government and the government had control over its utilization." This initiative eliminated any sense of local proprietorship and local guardianship of the forest.

Whether a resource is state or privately owned can have important consequences for the allocation of resources. Communal rights to a resource include the right to use a resource but do not include the right to exclude others from using it. Alchian and Demsetz (1973) find that the bundle of property rights associated with a resource is divisible, as some rights to some uses of the resource may be state-owned and others privately owned. The authors claim that the degree of private control is

increased when additional rights of use become privately owned. However, when one obtains title to a piece of land, one does not necessarily gain absolute rights and it may be arbitrary to decide when that conversion to private control changes the ownership of the bundle of rights from public to private.

Alchian and Demsetz (1973) find that there is a basic instability in an arrangement that provides for communal rights over a resource when that resource takes one form, and private rights when it takes another form. For example, in British Columbia, the North Cowichan Municipal Forest is owned by the community, yet there is concern over how to regulate access to the area without infringing on communal rights. While the community owns its community forest, there is concern over the public collecting firewood and treating it as a communal resource. The public would likely reject the idea of issuing permits to pay for firewood as this implies a formal framework that is in opposition to the idea of a community-owned forest (Community Forestry Forum, March 2002). This point illustrates the different ways that access issues become confused; there can be confusion over what form a resource will take (i.e. communal or private), and in the event of overlapping claims, there can be confusion over who has access to the land.

For many (e.g. Schlager and Ostrom 1992; Rose 1994; Lindsay 1999; Wily 1999), ambiguity over access to rights is removed when rights to benefits are secure and clearly described. Schlager and Ostrom (1992) assume that a complete set of rights[8]

[8] Schlager and Ostrom (1992) divide property rights into three main categories: operational rights (the right to harvest and retain benefits from the harvest); collective choice rights (management rights, right to exclude others and the right to sell); and constitutional rights (authority to decide who qualifies to make decisions on the granting of operational and collective choice rights). These three categories make up a complete set of rights.

will remove incongruity between 'ownership opportunities' and that more effective management will occur. Moreover, the more complete the set of rights held by an individual or group, the more likely they are to invest in authority and develop rules that define how they exercise their rights of withdrawal. In other words, if resource users face the long-term consequences of their decisions, then they have more incentive to develop these rules and, ultimately, sustainable management regimes. Therefore, rights should also be exclusive (e.g. government should not be able to assign conflicting rights to a resource), and the law should recognize the holder of the rights.

Much of the literature recognizes that clear title is essential for communities to successfully manage the forests in a sustainable way. For Wily (1999), title of the forest land removes ambiguity and insecurity, reduces conflict, and ensures that there is an incentive to sustainably manage the resources. Rose (1994: 16) adds that clear title is essential because it facilitates trade and minimizes resource wasting conflict; "unequivocal status enable[s] property to be traded and used in its highest value," while ambiguously held claims create "contention, insecurity, and litigation".

In North Cowichan, British Columbia, the community owns the North Cowichan Municipal Forest and it is not required to follow the Forest Practices code. Moreover, small clear cuts have replaced high grading of the forests, a Forest Legacy Fund for scholarships has been created, and profits and taxes are generated for community use (Hayter 2000a: 347-348). While the forest has always operated at a profit, others (e.g. M'Gonigle 1996) have argued that despite community ownership, cutting rates are set above ecologically sustainable levels and that the goals of the North Cowichan Municipal Forest are not for sustainable ecological forest management but for economic

development at the expense of the environment. If this assertion is correct, then it suggests that clear ownership of a resource does not guarantee its sustainable use.

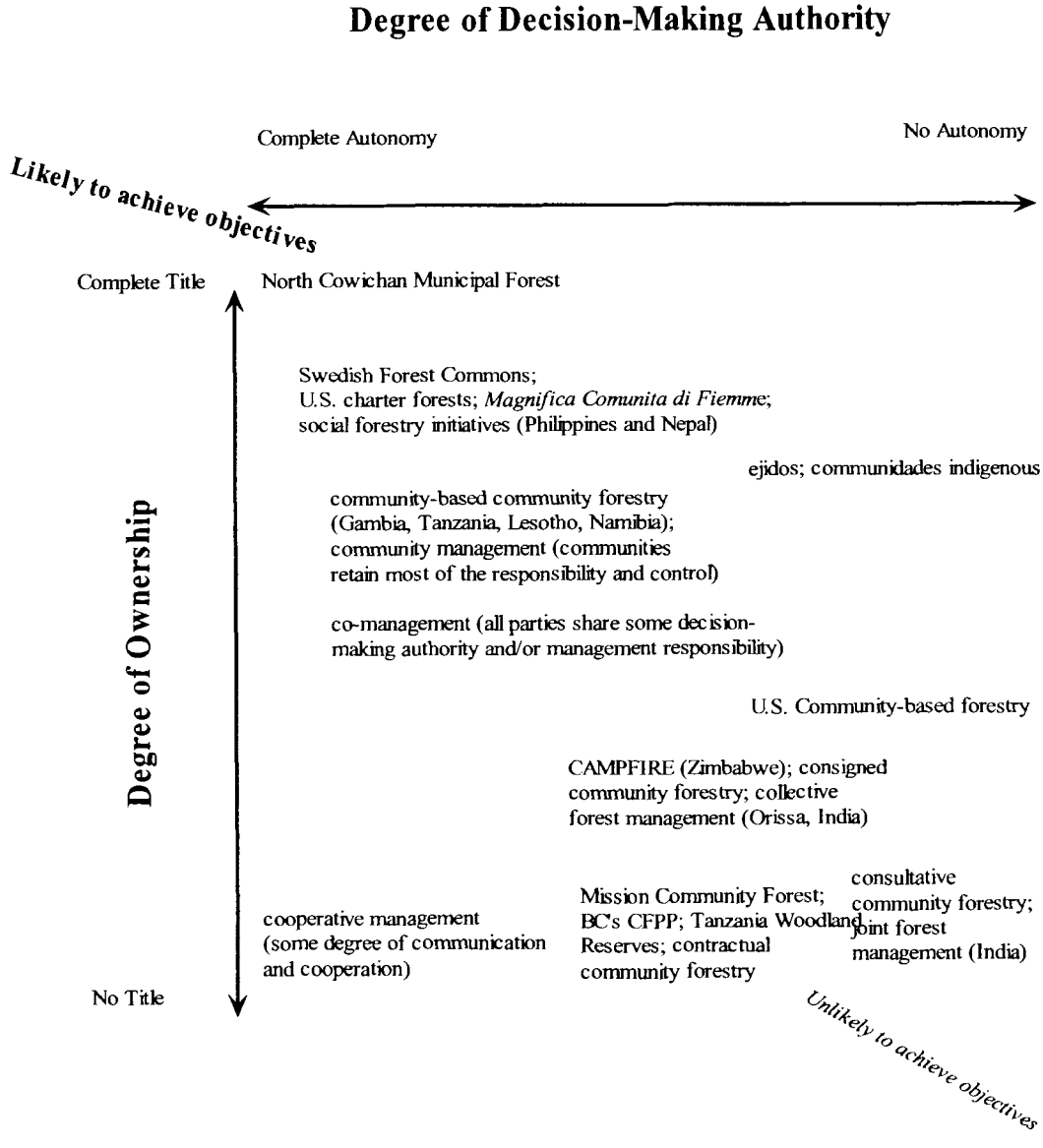
Much of the scholarship on property rights and resource control (e.g. Wily 1999; Rose 1994) contend that clear title of the land and/or control over the use and future of the resource is essential for communities to successfully manage the forests. In British Columbia, however, ownership of the land is not a requirement of the CFPP. The community forest tenure represents a legal commitment by the government to grant licenses to the community for a period of 25-99 years, if communities meet their obligations after the five-year probationary period (Bill 34 1998c Forests Statutes Amendment Act).

In summary, the literature on property rights and resource control helps to identify factors that are of primary importance to the management of the forest resource by a community, such as decision-making power. According to the literature, for the CFPs to conduct effective forest resource management, there must be clarity over who has access to the forest resource and who can limit that access. There must also be clarity over what form a resource takes and whether the forest resource is state or privately owned or a combination of both. The form that rights to a resource take must be clearly defined as this has important consequences for the allocation of resources. Further, the identity of 'right owners' must be clear and in some cases outright ownership may contribute to success as this may remove 'incongruity between ownership opportunities'. The CFPs may be successful if they have a complete set of rights which suggests the right to harvest, the right to manage and to sell their products, and the right to regulate themselves without government control. Furthermore, for the CFPs, clear

title to the adjacent forest land base may remove any ambiguity and reduce conflict among different forest users.

In short, the literature presents ownership of the resources as the ultimate form of control. However, when one examines the spectrum of institutionalized community forests (i.e. where there is an obvious recognition of a community working together), it becomes evident that ownership may look like control, but does not necessarily mean control. Further, control does not necessarily imply ownership. Figure 3.1 provides a matrix of institutionalized community forests, and the possible degrees of ownership and control. According to the literature, community forestry models with 'complete title' (e.g. British Columbia's North Cowichan Municipal Forest) are seen as more likely to succeed, whereas those with 'no title' (e.g. India's consultative community forestry and joint forest management models) are seen as less likely to succeed. Figure 3.1 illustrates that some community forestry initiatives, for example, may have ownership, but little control and decision-making power. The reason for this is due to continued political control by higher scale authorities, which is an issue that is more directly addressed in the next body of literature.

Figure 3.1: A Matrix of Decision-Making Authority and Ownership for Select Community Forests



3.3 Globalization (and Localization)

In this final section, the literature on globalization (and localization) is reviewed as it recognizes a number of external conditions that affect all communities attempting to survive and thrive in an increasingly 'global' economy. That being said, this body of scholarship recognizes that global and local forces are not only distinct, but also mutually shape one another.

Rowntree et al. (2000) define 'globalization' as the increasing interconnectedness of people and places through converging processes of economic, political, and cultural change. Hirst and Thompson (1996) assert that globalization is often used loosely as an umbrella term referring to the proliferation of distinct patterns of inter-regional trade and investment flows, each with their own coherence. With respect to British Columbia, the relevance of this perspective is clear, as sales to the United States and Japan comprise approximately 70 percent of total forest exports (Hayter 2000a: 73).

An extreme view of globalization treats it as a homogenizing force that obliterates locality and even history (Robertson[9] 1995 in Featherstone et al. 1995; see also Hines 2000). Consistent with this view is the idea that nation-states are no longer significant actors or meaningful economic units, and that the new globalized world economy dominates people's lives[10]. Echoing this opinion, Nozick (1999: 4-5) argues that due to the centrifugal forces of global development, local economies are declining and wealth is being drained out of communities by large, foreign owned corporations. Control over local communities, local identity and community cohesiveness are being lost due to the

[9] Robertson (1995: 26) considers this the 'myths of globalisation'.

integration of communities into the global economy. This anti-globalization sentiment is also reflected in popular press, as Davis (2002) argues that globalization does not bring harmony, but a "firestorm of change that has swept away languages and cultures, ancient skills and visionary wisdom" (Globe and Mail: 2002).

A contrasting view of globalization (e.g. Rowntree et al. 2000; Giddens 2000) suggests that it is more benign and that globalization is more than simply the growth and expansion of international trade. Rowntree et al. (2000: 5) assert that globalization and interdependence are characterized by the "tension and interplay of geographic diversity against these converging and homogenizing forces." They feel that diversity and globalization should be examined as an "inseparable and synergistic pair that are often in conflict, yet also complimentary."

The debate over globalization reflects a global-local dialectic "where local events constitute global structures, which then impinge on local events in an iterative continuum" (Taylor et al., 1995:3 in Taylor and Conti 1997; see Featherstone et al. 1995). While in some cases local autonomy is being enhanced through devolution and decentralization, international agreements create a sense that with globalization, there has been a transfer of power to the international level and a loss of local autonomy. Swyngedouw (1997) refers to this interplay between local and global processes as

[10] Dicken (1998) feels that this notion of a globalized world economy, in which national forces are no longer significant, is a mirage. Rather, he feels that "we still inhabit an international...world economy in which national forces remain highly significant" (3-4).

"glocalization"[11], where local and global processes operate a various scales and shape one another.

Consistent with this view is Gidden's (2000: 31) claim that globalization "not only pulls upwards, but also pushes downward, creating new pressures for local autonomy." The shift towards greater involvement of communities in managing natural resources indicates devolution of responsibility from the state (i.e. provincial and national levels) to the local; through community forestry communities are becoming more involved in the management of the forest resource[12]. There is a simultaneous shift from the state (i.e. provincial and national levels) to the international level through agreements such as the disputed softwood lumber agreement, North American Free Trade Agreement and the World Trade Organization, and through the search for global forest markets. This shift also involves the influence of non-state actors, such as international environmental non-governmental organizations.

Swyngedouw (1997: 140) claims that "perpetually shifting geographical scale levels are the result, the product of processes, of sociospatial change." Swydeneow (1997) recognizes the importance of global and local scales, but suggests that there are important players at every scale (e.g. governments at local, provincial, national and international levels) and that no situation exists on a single scale but involves, and is affected by, all scales. In the British Columbian context, the CFPs represent a local

[11] According to the Oxford Dictionary of New Worlds (1991:134), the term 'glocal' and the noun 'glocalization' are formed by telescoping global and local to make a blend. According to the dictionary, this idea has been 'modelled on Japanese dochakuka (deriving from dochaku "living on one's own land), originally the agricultural principle of adapting one's farming techniques to local conditions (Gorton 2000 in Featherstone *et al.* 1995)

model, yet are affected by, and may affect, situations at many different scales such as local community support, provincial forest policy, national policies on softwood lumber and international environmental demands. While the CFPs represent local communities working with the provincial government to develop initiatives in response to local demands and global changes, the provincial government remains an important player as it still retains the right to regulate the forests.

Cohen (2001: 85) supports this idea that states (e.g. British Columbia's provincial government) remain important players and suggests that "in a globalized world, states will tend to manage the persons and activities in their territories to maximize their attractiveness to global economic, technological, and social concerns and interests, rather than the reverse." Moreover Cohen (2001: 94) suggests that "states are increasingly limiting their responsiveness to interests that act globally and share a commitment to an increasingly globalized world".

Featherstone et al. (1995: 33) argue that there is a tendency to assume a polarity between the global and the local, that the local always stands in opposition to the global. Moreover, globalizing trends are seen to be in tension with local assertions of identity and culture. In other words, globalization is seen as the opposite of localization. By contrast, Featherstone et al. (1995) see globalization as involving the reconstruction of 'home' 'community' and 'locality', and the 'local' as an aspect of the 'global'. Globalization involves the creation and incorporation of locality.

[12] Many communities have been more active in local restructuring and diversification within the forest sector (e.g. value-added initiatives, eco-certification, and tourism). One example in British Columbia, are four forest-based communities that have partnered with Simon Fraser University in order to develop local CED strategies in order to strengthen local economic capacity (SFU CEDC Forest Communities Project, 1997).

This line of thinking reflects the changing nature of the structure-agency debate and provides a useful framework for understanding British Columbia's CFPP in a global forest industry context. Indeed, there is a well-developed body of literature, the political economy of forestry in British Columbia, which highlights specific constraints facing all provincial forest initiatives that operate within a global forest industry. In British Columbia, the forest resource has provided considerable wealth (Power 1996 in Gunter 2000), however, many forest-dependent communities have also experienced considerable instability, as jobs come and go with growth and contraction in the forest industry. Most recently, the long-term survival of such communities is being called into question.

While some suggest that the "root of the problem is planted firmly at home" (Gunter 2000: 3-4), others take note of the "more restless, interconnected, and economically enlarged world system" in which British Columbia's forest sector exists (Hayter and Barnes 2001: 89). In the context of British Columbia, there are a number of factors that give rise to community and industry instability, some of which originate at home and some beyond. These include the provincial forest management system, the sector's export-orientation and narrow market base, its resource dependency, the quality and quantity of the resource base, international trade relations, and various competing demands. All of these can be expected to influence and constrain community forests just as they do current forest-dependent communities. These factors are further explored here.

It is widely argued that the problems of the British Columbia forest sector originate with the management system first developed by the provincial government. By the 1940s, it was recognized that the forest industry needed more timber to expand and

processing facilities needed larger supplies of raw material given the primary goal of continually expanding rates of extraction and timber export. In the 1940s, the provincial government became more involved in forest management, through the adoption of tenure and the sustained yield management system[13] that supported large-scale, export-oriented commodity production (Hayter 2000a).

The principle of sustained yield management justified the allocation of tenure to larger corporations through long-term renewable leases (Marchak et al. 1999). After 1945, large forest companies emerged in British Columbia and the rate of corporate concentration within the forest sector was rapid; in 1940, the largest 58 companies controlled 52 percent of timberland, but by 1974, the top eight controlled 82 percent (Sheppard et al. 2000: 58-59)[14]. At the end of 1996, 65.3 percent of British Columbia's total AAC of timber was controlled by 15 companies (Pierce 2000).

British Columbia's "forest industries have long been based on high levels of exports" (Hayter 2000a: 72). Given that the large-scale, export-oriented production of the forest sector is dependent on the extraction of staple products, many have viewed British Columbia's forest sector as 'ensnared in a staples trap' (Watkins 1963; see Innis 1933). Not only is British Columbia's economy dependent on forest resource exports, but these exports serve a very narrow market. In the 1950s and 1960s, the expansion of the province's forest sector was based on accessing American markets. The United States remained the dominant market in the 1980s and 1990s, but Japan and other Pacific Rim markets increased in importance for the province's exports and in 1996, they

[13] The sustained yield management system is defined as the perpetual yield of wood of commercially usable quality from regional areas in yearly or periodic quantities of equal or increasing volume (British Columbia 1995: section 9.1.3).

were three times more important than Europe (Hayter 2000a). Hayter (2000a: 74) asserts that given the recent decline in Asian markets, "BC producers clearly need exports more than the US or Europe need BC's imports, a dependency directly reflecting BC's role as periphery to the world's cores." Hayter (2000a:73) considers export trade as the 'lifeblood' of the provincial forest economy, and that dependence on the markets of major industrial powers is "extreme and signifies a highly open economy susceptible to price fluctuations in markets over which BC producers have little control and to competition from alternative supply areas..." Thus global forces influence resource peripheries, and producers in British Columbia are exposed and vulnerable not only to fluctuations in supply and demand but also to trade policies in other powerful countries (Hayter 2000a).

Given its dependence on resource extraction and narrow focus on export markets, the forest sector in British Columbia is prone to periods of mass expansion and collapse, known as the cyclical pattern of 'boom and bust'. In 2001, Canadian companies exported more than $11 billion of softwood lumber, 53 percent of which came from British Columbia (Statistics Canada, 2002:2). The main export market for Canadian lumber is the United States and the value of lumber exports totaled $11.6 billion, 82 percent of which went to the United States (Statistics Canada 2002:3). The high level of export dependence means staple regions have little market power and are prone to crisis (i.e. volatile commodity markets and cheaper sources of wood) and

[14] Hayter (2000a: 72) notes that the largest ten firms accounted for just over half of the allocated timber rights in 1995, which is the same as in 1975.

periods of 'boom and bust'[15]. Competition from other countries, where timber production cycles are shorter and labour costs are lower, creates a condition whereby British Columbia's forest companies continue to be 'price takers', not 'price makers'. Downturns in the industry result in job losses and damage to investor confidence and the results of the 'boom and bust' nature of the forest industry is that forest dependent communities must always hope and wait for the next boom (Markey and Pierce 1999).

British Columbia's economy is largely based on the extraction of resources. Despite the fact that forests are a renewable resource, Clapp (1998:137) finds that in most cases they are not sustainable as "extraction of timber...can not be restricted to the rate of natural increase in an intact ecosystem". Management of the forest resource can be characterized by the 'resource cycle'[16] as timber production costs increases over time as renewable forest resource stocks are depleted. Resource exploitation begins with the removal of the highest quality resources first, leaving higher cost, lower quality resources for later (Clapp 1998). Moreover, resource exploitation pushes resource towns into a cost-price squeeze as the best-quality, most accessible timber is harvested first and extraction costs rise as industry must access more remote areas and/or turn to cheaper resources elsewhere, which puts pressure on prices. These rising costs are not usually recouped by raising prices because of rival firms seeking timber supplies (Clapp 1998).

[15] This volatility in the forest sector is evident with the booms in the late 1970s and 1980s. In 1979, the forest-product industries generated profits of $500 million; in 1987-1989, profits for the forest industry were more than $3 billion. The 'busts' separated the 'booms' in the early 1980s and again during both the beginning and the end of the 1990s. In 1981, the forest-product industries lost approximately $500 million and between 1979 and 1982 approximately 21341 jobs were lost. Further, unemployment rates rose from 6.4 percent in 1979 to 19.2 percent in 1982 (Grass 1987 in Hayter 2000a: 67). Between 1981 and 1984, the industry lost $1.1 billion. In 1994 and 1995, losses of $1.3 billion were reported and by 1998 further losses of $1.1 billion were reported (Price Waterhouse 1998 in Hayter 2000a: 67).

[16] The three phases of the resource cycle are 1) exploration, discovery, and initial production and the initial boom; 2) profitable operation and expansion (large-scale exploitation); 3) depletion (ultimate collapse) (Clapp 1998:138).

Hence, the forest industry is not only prone to cyclical patterns of 'boom and bust' owing to markets, but also due to the faltering resource base.

The potential of the 'falldown effect' also contributes to a faltering resource base. The 'falldown effect' occurs as timber volumes available to industry are reduced due to overharvesting. Old-growth forests are replaced by second-growth stands that may comprise smaller trees and less wood volume that signals the beginning of resource exhaustion (Marchak et al. 1999). The social impact of the cost-price squeeze is usually felt prior to the decline in production volume as falldown is often preceded by a decline in timber related jobs (Marchak 1995 as cited in Clapp 1998). Of course, the larger social impact is felt once resource exhaustion occurs. Given reduced inventory, it is likely that larger licensees will move away in order to find more accessible and cheaper sources of timber. Hayter (2000b: 20) notes that resource towns "rarely anticipate closures and local responses are typically reactive". The CFPP may offer a chance to diversify forest management and reduce a community's vulnerability to a major employer leaving. That being said, Hayter (2000b: 20) cautions that "as capital intensity increases, so do the imbalances in power and scale between extractive enterprise and community, and abilities to diversify may be declining..."

Along with dependence on large-scale resource extraction, a restricted focus on export markets and a faltering resource base, variable international trade relations have contributed to the vulnerability of British Columbia's forest sector and forest dependent communities as is evident with the current softwood lumber trade dispute with the United States. Given that the provincial forest sector accounts for approximately half the softwood lumber exported to the American market, the dispute is of particular interest to British Columbia (see Appendix E).

Poor trade relations with the United States have contributed to uncertainty and instability in the forest sector and forest-dependent communities. These relations may also impinge on the ability of CFPs to find profitable export markets. Currently, some of the CFPs are tied to larger processing facilities. Those CFPs that sell their logs to the local lumber mills may be directly affected by mill closures as they may incur higher transport costs to mills located further away. Those forest lumber companies that have reduced production in response to punitive export duties may also indirectly affect the CFPs. The CFPs are required to sell their logs in order to generate revenue yet must also compete with the potential glut of timber on the open market[17] that is a result of punitive export duties.

Forces within and beyond the province also challenge the provincial control of the forest resource and contribute to the uncertainty and vulnerability of the forest sector. With more competing interests in British Columbia such as demands from industry, unions, international and national environmental movements, community groups, Aboriginal groups, and protectionist demands from the United States, British Columbia's forest economy has become increasingly complicated (Hayter 2000a). In British Columbia, the provincial control of the resource is being challenged and governments have re-regulated the forest economy to meet many demands. In particular, Hayter and Barnes (2001: 41) contend that the global politics of environmentalism have contributed to a more "differentiated and unruly resource map of Canada." In British Columbia,

[17] In 2002, as a response to the current softwood trade dispute, the United States outlined some of the preconditions for lifting the threat of duties on Canadian imports. One demand is that two-thirds of British Columbia's timber be sold on the open market in Canada. This is in contrast to the current system where governments determine stumpage rates. Another proposed change is the withdrawal of regulations requiring companies to process pre-set volumes of timber cut on Crown land at mills in the region it is cut. This is referred to as the 'social contract' because it is seen to provide job stability and thus community stability (The Vancouver Sun, January 15, 2003).

environmental legislation has become an increasingly important influence on the forest industry and "environmental values are an explicit theme of both the rhetoric and the practice of the reregulation" of the forest sector (Hayter 2000a: 329). Hayter (2000a: 328-329) notes, however, that some environmental interests may threaten local decision-making; indeed "the approaches and beliefs of global environmental actors may not coincide with local interests, even local environmentalism." For example, European consumers have threatened to launch boycotts because of environmental objections to forest practices in British Columbia (Hayter 2000a). Environmental initiatives such as the establishment of the Great Bear Rainforest, the eco-certification movement, and aboriginal land claims (e.g. Delgamuukw), have put provincial control of the forest resource in question (Hayter 2000a). Resulting from this pressure are several initiatives that reflect part of the re-regulation of the forest sector in the province. Some of these are the Commission on Resources and Environment (CORE) (1992), Protected Areas Strategy (PAS) (1992), Forest Renewal British Columbia (1994), and the Forest Practices Code (1994). The CFPs are also be part of this re-regulation of the forest sector. Community forestry not only adds to these internal and external demands but also must itself contend with demands of resource and land (re-)distribution.

Factors such as the provincial forest management system, commodity export-orientation and a narrow market base, resource dependency and a faltering resource base, trade relations with the United States, and various demands that challenge provincial control of the forest land base, contribute to the instability and vulnerability of British Columbia's forest industry and forest dependent communities. The CFPs must contend with these same factors as they exist within the global forest industry. While

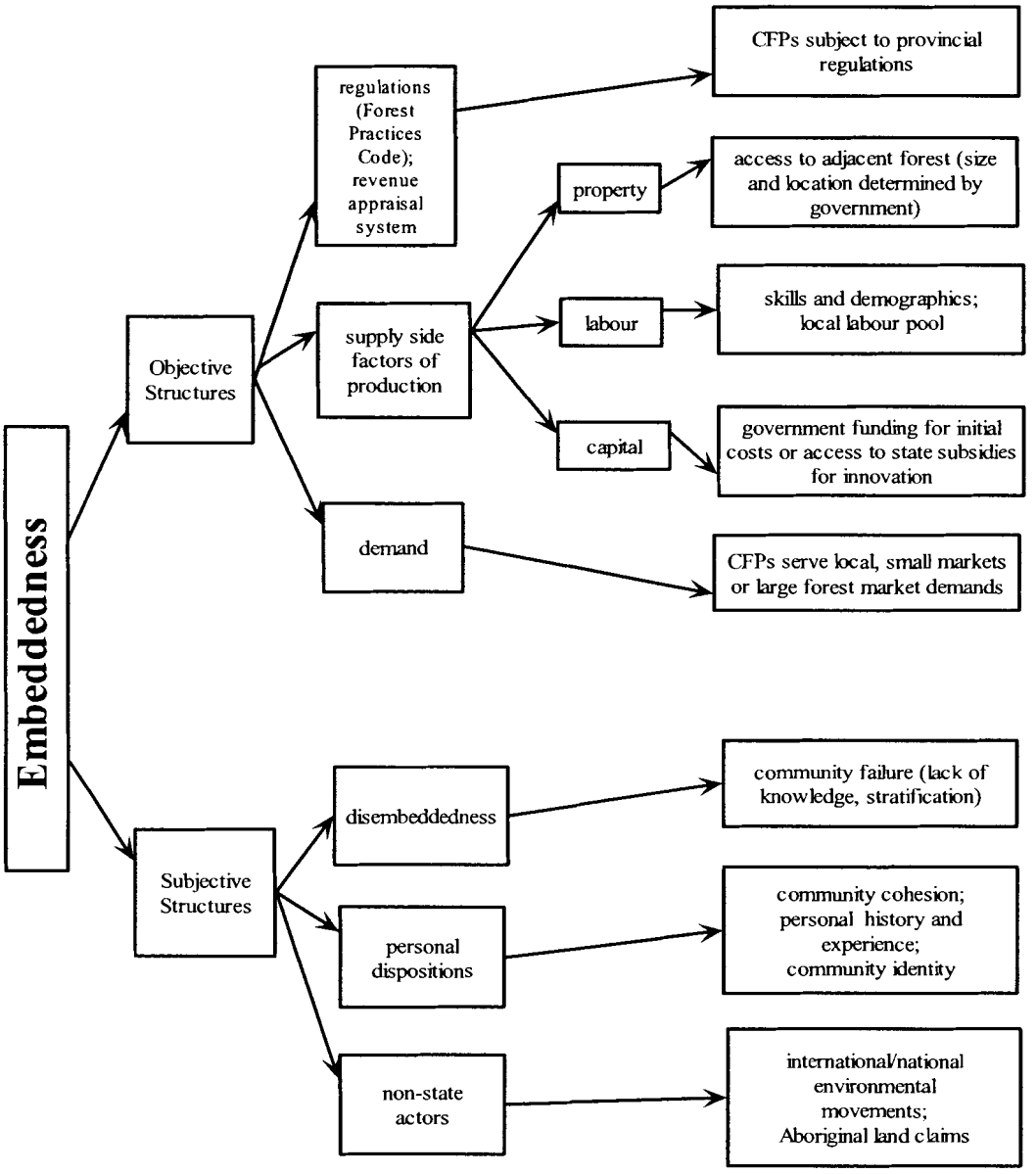
these factors may constrain and threaten the implementation and functioning of the CFPs, some of the CFPs may also be in a better position to respond to them.

McCay and Jentoft (1998) stress the importance of taking an approach that recognizes the embeddedness[18] of resource extraction practices. Community forestry is embedded in global structures, yet Taylor (2000: 4) recognizes that "institutional change is a process, peopled by groups of social agents who respond to external restructuring from local contexts of organization and community." People (and communities) shape structure, but structure also determines what people (and communities) do. While communities (and the CFPs) can play an important role in creating a favourable environment for local development, communities (and the CFPs) are nevertheless embedded within a global forest industry. Bryant (1989) claims that the limits of local efforts must be acknowledged and the macro-economic system can limit the efforts of individual communities (and the CFPs). That being said, individual communities can chart their own course of development within the system.

Gorton (2000) uses the structure-agency divide as a framework to identify 'objective' structures (i.e. factors that a community can not influence) and 'subjective' structures (i.e. factors that a community can influence) that may affect small business performance. This framework may also be used to identify both the 'objective' and 'subjective' structures within which the CFPs are embedded (see Figure 3.2).

[18] In an article on common pool resources, McCay and Jentoft (1998) asset that in order to understand how communities and user-groups respond to environmental change, one must take into account how markets, states and other external and internal factors affect their capacities. Hence the term 'embeddedness', (as defined by Granovetter and Swedberg 1992 in McCay and Jentoft 1998), refers to the idea that economic action is socially situated; that analyses of "economic behaviours should focus on the social dimensions of those behaviours", and that all "economies are in some way embedded in other and larger structures" (24).

Figure 3.2: The 'Embeddedness' of British Columbia's CFPP



Adapted from Gorton's (2000) study of small business performance, this flowchart parallels the structure-agency divide and identifies the objective and subjective structures within which the CFPP is embedded.

Gorton (2000: 277) recognizes that "the formation and performance of [community forests] is inevitably embedded within the founder's social world, not just in terms of objective structures but also subjective configurations..." The 'objective' structures refer to 'supply side factors of production' such as property (i.e. access to forestland adjacent to the community), labour (i.e. skills and experience of the local labour pool), and capital (i.e. start up funds for a CFP).

Also included in 'objective' structures is the demand for markets that the CFPs can both serve and access. Regulations such as the Forest Practices Code, revenue appraisal system, forest tenure system and proposed forest policy changes might also be included under 'objective structures'. Bryant (1989) adds to this list of 'objective' structures by identifying 'macro-environmental conditions' such as access to core markets, technological changes in communication, and the type of enabling environment, or whether the state provides subsidies for innovation, as potential enablers that stem from the broader environment.

Gorton's (2000) 'subjective structures', where agency is played out, represent the enablers that are specific to a community. These include 'personal dispositions' such as community cohesion and community identity. This may also include 'community failure' such as the lack of knowledge, disorganization, stratification and conflicts of interest, or inter-ethnic rivalry (McCay and Jentoft 1998). McCay and Jentoft (1998) refer to this as the process of 'disembeddedness' where local communities lose critical points of control over both economic matters and governance, and argue that 'community failure' may be due to shortcomings at the community level. 'Disembeddedness' can also be a result and a cause of central government initiatives, where the "fragile institutions of international relations, the more robust institutions of global commerce" may contribute

to failure (McCay and Jentoft 1998: 27). Bryant (1989) adds to this list by noting that personal characteristics of a community such as the ability to plan and take risks, and the availability of business opportunities, contribute to the role that communities can play in creating a favourable environment for business opportunities.

In summary, the structure-agency framework tells us that communities may not just be 'reactive decision-takers' as they can minimize and /or respond to external factors. The CFPs function and are embedded within broader social, economic and political systems that lie beyond their control; however, communities can also be 'pro-active entrepreneurs' as these systems may create potential opportunities for individual community forests. The literature on globalization (and localization) raises questions that are important for the CFPs. Given their small size and limited authority, are the CFPs able to engage in the management of the forest resource? Is the 'local' the appropriate scale to manage the forests? Can small local actors, not withstanding their 'agency' compete within the global forest industry, especially in the current economic trends characterized by volatile commodity markets and trade policies in other powerful countries?

The globalization (and localization) literature recognizes that the 'local' is an aspect of the 'global' and that they mutually shape one another. Moreover, while globalization does often homogenize and centralize, it also allows communities to establish themselves. However, when one considers the global forest industry within which the CFPs are embedded, one must also question the degree of 'agency' that they have. Given that the global forest industry is oriented to the production of timber for export, are the CFPs practical if they move from primary dependence on productivist functions (e.g. timber harvesting) to incorporate a more diverse set of values (Gill and

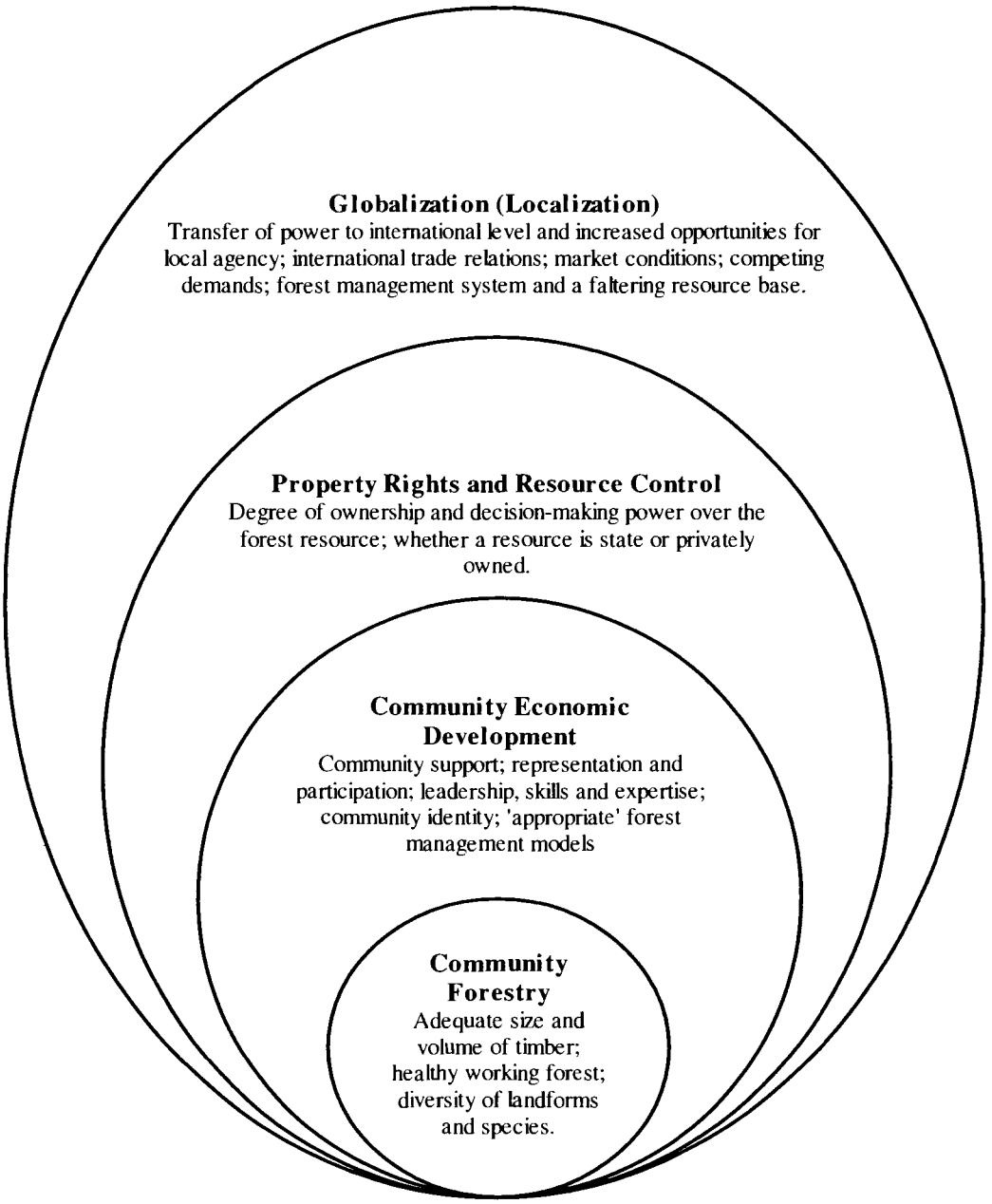
Reed 1999), and a broader range of rural economic and environmental objectives (e.g. tourism, recreation, managing for botanical and other nontimber forest products)? These relevant questions contribute to the conceptual model of the constraints and enablers to the implementation and functioning of British Columbia's CFPP.

3.4 Chapter Summary

Chapter Three draws on insights from a number of relevant bodies of scholarship to build a conceptual model that identifies the key factors affecting the viability of community forestry. This multi-scalar approach begins by identifying primarily those community factors that are directly relevant to the viability of community forestry and then expands to include factors from the larger scales that influence and constrain community forests. Figure 3.3 summarizes the many constraints and enablers at each scale.

Along with an adequate forest land base both in quality and quantity, the community forestry and CED literature identifies community-level factors, such as the degree of community support, representation and participation, appropriate leadership with skills and expertise, a sense of community identity and appropriate forest management models that 'fit' with each community's needs and desires. The literature concerning property rights and resource control identifies factors that are of primary importance to the management of the forest resource by a community, such as the degree of clarity over who has ownership of and decision-making power over the forest resource. Whether a resource is state or privately owned also has implications for the way that it is allocated. The globalization literature recognizes simultaneous shifts in power from the state to the international level, as well as increased opportunities for

Figure 3.3: Conceptual Model: Identifying the Factors Affecting the Viability of Community Forestry



local agency, where communities are more active in local restructuring and diversification within the forest sector. Moreover, the literature recognizes that community forests are embedded within the global forest industry. They are influenced and constrained by international trade relations, market conditions and various competing demands. In the case of British Columbia, factors such as the provincial forest management system, the sector's export-orientation and narrow market base, its resource dependency and a faltering resource base can influence and constrain community forests just as they do current forest-dependent communities. In the subsequent two chapters, this conceptualization is 'tested' and refined based on the initial observed experiences of the ten CFPs.

CHAPTER 4: THE EXPERIENCE OF THE BURNS LAKE COMMUNITY FOREST PILOT: A REFINED CONCEPTUAL MODEL

In 1998, British Columbia's government passed legislation to implement and test community forest agreements, granting pilot sites to seven communities in 1999, and another three by 2000. By 2002, just three of the CFPs had progressed to the stage of harvesting and selling logs, five had made no progress beyond their initial selection as pilot sites, and the other two had reached stages between these two extremes. In other words, the progress of each community forest has significantly varied.

Chapter Four seeks to identify the reasons for this variation through the 'testing' of the conceptual model established in Chapter Three, in order to determine the key constraints and enablers to the implementation and functioning of British Columbia's CFPP. That framework, which was developed based upon relevant scholarship, identifies many constraining and enabling factors. The British Columbia field research reviewed in this chapter provides strong evidence in support of many of these factors; however, it identified other enabling and constraining factors that need to be incorporated into a refined conceptual model. Evidence from the intensive analysis of the Burns Lake CFP is drawn upon to refine the conceptual model such that it perfectly conforms to this one case.

The Village of Burns Lake is located in central British Columbia, within the 1.56 million-hectare Lakes Forest District. It has a population of approximately 8 000, one

third of which is First Nations from the Wet'suwet'en, Carrier Sekani and Lake Babine Nations. The forest industry is the largest employer in the Burns Lake area employing directly and indirectly 65 percent of the population (Northern BC Community Forest Pilot Project, 2002).

The Burns Lake Community Forest Steering Committee, a volunteer organization, was formed in 1997. After an extensive consultation process with local First Nations, other community stakeholders and the general public, the steering committee submitted its community forest proposal to the British Columbia MOF in 1998. Of the first seven community forest pilots, Burns Lake was the first to sign a formal agreement with the Ministry on July 7, 2000.

The Burns Lake community forest is 23 000 hectares, comprised of 19 862 hectares of Crown land, some of which is managed as part of the Small Business Forest Enterprise Program, and 24 hectares of municipally-owned land, all of which surrounds the Burns Lake community. The area lies in the traditional territory of the Wet'suwet'an First Nation. A portion of the community forest falls under the Lakes Land and Resource Management Plan (LRMP), which designates 43 percent of the land for integrated resource management, 29 percent for special resource management, 25 percent for agriculture/settlement, and three percent for enhanced timber development. Most of the land base, however, is not allocated to any specific tenure (Northern BC Community Forest Pilot Project 2002). Much of the volume comes from the 60 000m^3 target set by the Ministry of Forests for Jobs and Timber Accord initiatives within the Lakes District (British Columbia, Ministry of Forests 1998b: 22).

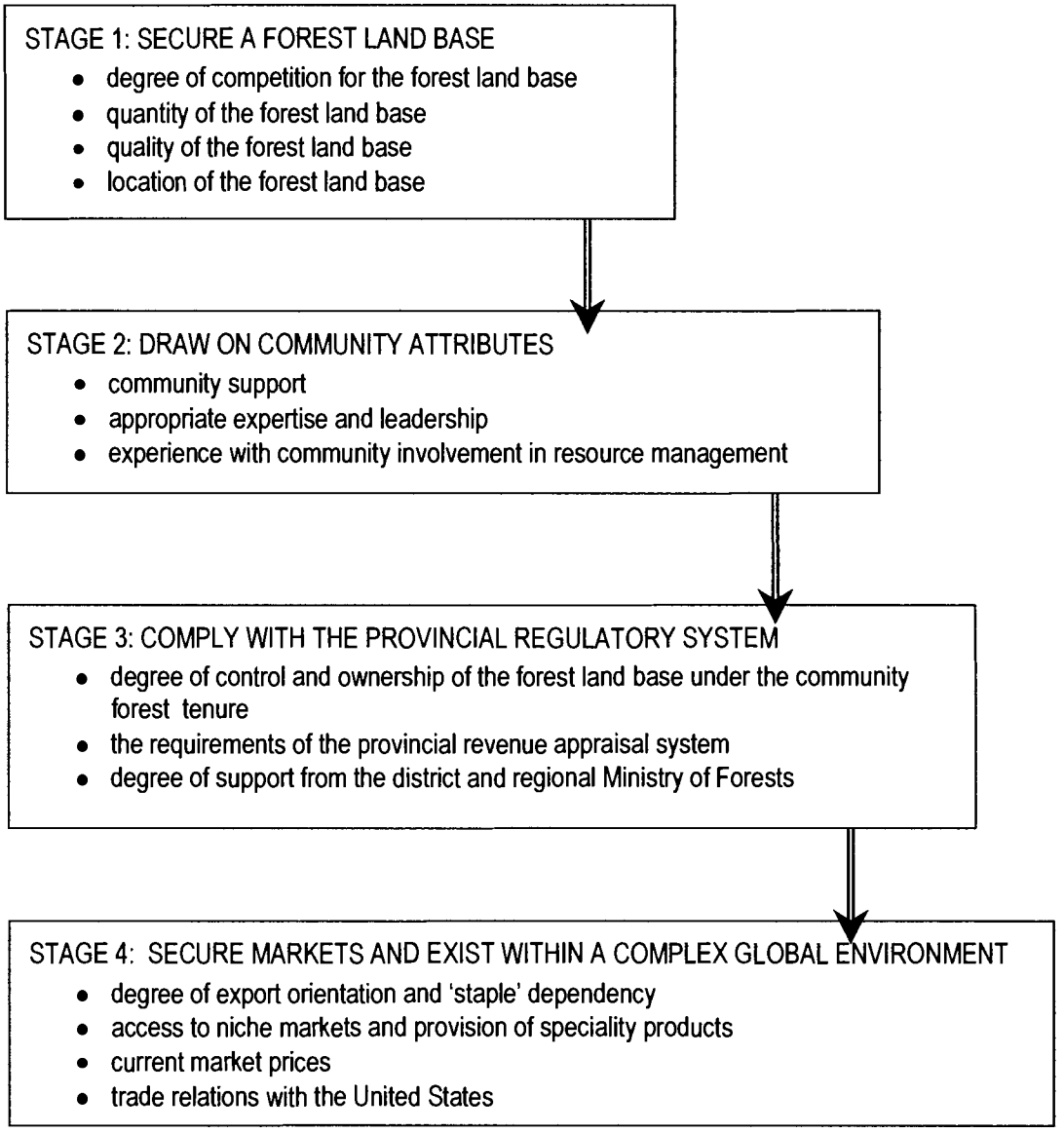
For the Burns Lake CFP, key objectives put forth in their proposal are to generate a source of revenue and employment for the community, test innovative forest

practices such as labour-intensive harvesting, develop trail systems, work with local educational institutions for training opportunities, encourage stakeholder co-operation in the community forest, and encourage First Nations to develop and market traditional botanicals (Village of Burns Lake Community Forest Pilot Agreement Proposal 1998: 33).

With respect to the key factors that appeared to constrain or enable the progress of the Burns Lake CFP, the conduct of the field research suggests an alternative model for their conceptualization then was originally developed in Chapter Three. As originally conceived, the model presents these many factors according to their scale of origin. Figure 4.1 proposes an alternative model based on recognizing a series of successive stages that the Burns Lake CFP must undertake in order to achieve 'success'. While each stage contributes to success, the order of the stages is important. Furthermore, the more enabling factors within each stage that are present, the more likely the Burns Lake CFP will progress to the next stage.

While the stages largely conform to the scales identified in Chapter Three's conceptual model, the stage-metaphor more accurately captures the necessary temporal progression of the Burns Lake CFP. The first stage, *secure a forest land base,* and the second stage, *draw on community attributes*, represent factors that are internal to the community. The third stage, *comply with the provincial regulatory system,* involves factors beyond the community's control. The fourth stage, *secure markets and exist within a complex global environment*, pertains to factors beyond the local and regional scales. These four stages provide a useful model for understanding the many factors that the Burns Lake CFP must contend with.

Figure 4.1: A Refined Conceptual Model of Constraints and Enablers to the Implementation and Functioning of British Columbia's CFPP



4.1 Stage One: Secure a Forest Land Base

As recognized in the literature (e.g. M'Gonigle *et al.* 1994; Burda *et al.* 1997; Gunter 2000), a vital first stage for all community forests, and for British Columbia's CFPs, is to secure a forest land base. In the case of the Burns Lake CFP, the *lack of competition for the forest land base* allowed the CFP to secure an area adjacent to the community. While the MOF held the forest land base, the area had not been harvested for several reasons. It was a politically contentious area as it surrounds several large lakes that are used for recreation, there were visual quality constraints given its proximity to the community, and it is in the traditional territory of the Burns Lake Band. Given the potential for conflict, the MOF may have felt that the community was better suited to manage this area.

According to the literature (e.g. Gunter 2000) the forest land base for a community forest must have adequate merchantable timber (i.e. *sufficient quantity*) in order to support a successful timber business, yet also be small enough so that users can develop knowledge of its external boundaries. While the Burns Lake CFP is one of the largest active pilots, respondents wanted a larger forest land base and AAC, as they felt the small size constrained their capacity to generate revenue for the community, become competitive, and achieve economies of scale. They consider the smaller clear cuts (there are currently 50 small cuts in the Burns Lake CFP) as relatively more expensive than the larger cuts of conventional harvesting, and that increasing the AAC would allow for more flexible marketing opportunities. Indeed, when compared to a larger industrial tenure, the initial AAC of approximately 23 000m^3 is relatively small as it accounts for .04 percent of the provincial AAC of 65 million cubic meters. Given the

provincial average of about one forest industry job per 1000 cubic meters (Hayter 2000a), the AAC of the Burns Lake CFP equates to just over 18 jobs relative to a community population of 5600 people. The limited size of the AAC has not constrained the Burns Lake CFP, at least to date, as it has been able to employ some people and generate revenue through harvesting and selling logs to the local mills. In other words, this evidence suggests that the quantity of the forest land base is a factor that can be overcome.

The *quality* of the Burns Lake CFP's timber profile is well suited to enhanced management. The Burns Lake CFP is situated in the 'subboreal spruce zone' and while it supports several tree species of varying age classes, with pine and spruce dominating, it is in the drier, interior with a less varied ecosystem. Nevertheless, the Burns Lake CFP's forest land base has adequate reserves of mature timber in order to generate revenue.

A key limitation of the quality of Burns Lake CFP's forest land base has been its severe forest health concerns. Circumstances beyond the control of the Burns Lake CFP have prevented them from meeting one of their originally proposed objectives of labour intensive forestry. One of the objectives was to horse-log 25 percent of the volume in order to reduce stumpage payments and employ more people through labour intensive harvesting. Currently, the west central portion of the province is experiencing a Mountain pine beetle epidemic, which has infested more than 72 million m^3 of Lodgepole pine. The epidemic covers an area of more than eight million hectares, has spread over more than 17 percent of the provincial working forest and has consumed enough timber to keep every sawmill in British Columbia operating for one year (Northern Forest Products Association, 2001). Under provincial regulations, the Burns Lake CFP must

manage for severe forest health concerns and harvest the infested trees despite their objectives of labour intensive harvesting (British Columbia. Ministry of Forests. 2001a).

Respondents felt this severe forest health concern was both an enabler and a constraint for the Burns Lake CFP. The forest approval process of the Burns Lake CFP (i.e. the approval of forest development plans, site plans and cutting permits by the MOF) was passed quickly, harvesting regulations were stream-lined for infested areas, and the AAC of the Burns Lake CFP increased from 23 677m^3 to 54 026m^3 in order to accommodate this sanitation harvest. The obligation to manage for forest health, however, has prevented the Burns Lake CFP from adhering to their original objectives of labour intensive harvesting. Increasing the AAC has not generated more jobs from the Burns Lake CFP as they are required to 'quickly' harvest the infested trees.

While the quality of the forest land base was suitable for the Burns Lake CFP to manage and harvest timber, the current Mountain pine beetle epidemic has prevented the CFP from adhering to their original objectives of labour intensive forestry. It has also made the operation vulnerable to lower prices for infested wood. The obligation to manage for severe forest health concerns may mean that they must harvest their entire forest land base, which may shorten the 'life span' of the Burns Lake CFP. This evidence suggests that the quality of the forest land base is indeed an important factor in influencing success.

The literature (Gunter 2000; Vodden 1999) does not suggest that *location* of a community forest is a key variable to the success of the CFP, however, many respondents felt that the proximity of the Burns Lake CFP to the community was important in enhancing awareness of the CFP in particular. Respondents also felt that the general awareness of the importance of forestry to the community was enhanced

because recreational activities and training opportunities for the high school and college are located closer to the community. The community forest tenure is area-based and is thus a physical and identifiable part of the community.

Table 4.1: Summary of Stage One Factors

Factor	Explanation
Degree of competition for the forest land base	The lack of competition from the MOF and other stakeholders contributed to the Burns Lake CFP's ability to secure a forest land base.
Quantity of the forest land base	To date, the limited quantity of the forest land base has not prevented the success of the Burns Lake CFP; however, this could be a constraint in the future.
Quality of the forest land base	The quality of the forest land base is a limiting factor to the long-term health of a community forest. The obligation to manage for severe forest health concerns may shorten the 'life span' of the Burns Lake CFP.
Location of the forest land base	Proximity to the West Fraser Timber mill enables the Burns Lake CFP to sell its lower cost infested logs; however, it may be restricted to the harvest and sale of only timber, given its remote location.

While this proximity makes the CFPs unique as it can create more awareness, interest and enthusiasm, this has arguably not been a key factor in the Burns Lake CFP's success. Rather, its proximity to one of West Fraser Timber's mills[19] has enabled the CFP to sell its logs and generate some revenue. This mill is considered one of the lowest-cost sawmills in North America, and has been able to generate profit despite paying $25 million in softwood lumber duties to the United States (West Fraser Timber

[19] The West Fraser Timber Company is an integrated BC-based forest company with pulp, paper, newsprint, panel and lumber operations mostly in British Columbia, Alberta, and the southern United States (West Fraser Timber Co. Ltd., News Release October, 2002: 2). It has taken advantage of lower-cost beetle killed timber to turn in earnings of $23 million or 65 cents a share. West Fraser paid $19 million in duties during the quarter, the equivalent of 52 cents a share (The Vancouver Sun October 22, 2002).

Co. Ltd., News Release February, 2003: 2). Proximity to this particular mill has allowed the Burns Lake CFP to sell its lower-cost infested logs and to generate revenue. However, its distance from urban areas and large markets (it is located in the geographic centre of British Columbia, 226 kilometres west of Prince George) may limit the products that it can manage and market. The Burns Lake CFP's remote location may not allow for alternatives to harvesting timber such as non-timber forest products and higher value-added forest products.

4.2 Stage Two: Draw on Community Attributes

Given an adequate forest land base, a community's strengths will largely influence the success of a community forest initiative and British Columbia's CFPs in particular. For example, the literature recognizes that *community support* (e.g. Cernea 1993; Khan 1996 in Skutsch 2000; Klooster 2000; Lindsay 1999; Mehta and Kellert 1998; Wily 1999; Skutsch 2000) is an essential factor. The experience of the Burns Lake CFP largely supports this view.

Community support for the Burns Lake CFP was facilitated by the community's general sense of dependence on the forest industry and a belief that through the Burns Lake CFP, the community could gain greater control of the local forest resource. Respondents felt that the more dependent a community is on a resource, the more they will support community management of Crown lands. This sense of dependence is reflected in the following comments from a local forester:

> ...just because it affects so many of us, we understand what happens when there are control issues, when corporations decide what they want to do and then an entire community is affected regardless if we have any feet in the forest industry...the city-slickers down in Victoria don't understand what it is like to be so dependent on the forest resource.

Respondents also felt that the Burns Lake CFP process was unique because the community was able to unite behind a common vision, that of generating jobs and revenue for the community.

The level of support for the Burns Lake CFP was reflected in the amount of volunteerism. The steering committee devoted two years of volunteer work, and approximately $100 000 worth of volunteer time went into the Burns Lake CFP proposal to generate public support and input. One respondent felt that the tremendous effort put into the proposal created a greater sense of ownership of the process:

> ...we had to go through an incredible process to get to where we are now, which has strengthened us. The other CFPs have been more or less given to the communities and they haven't had to go through the process that we have, there isn't as much ownership of the community forest by other communities.

Interestingly, some respondents felt that community support was only important in the initial stages of the CFP and that, as it progressed, this became less important. They felt that the primary goal of the CFP was to be a self-sufficient business and as long as jobs were generated, community support and cohesion (i.e. lack of stakeholder conflict) were not as important. As one respondent suggested: "community forestry tends to be idealized; realistically people are more concerned that it not cost them money. This isn't a feel-good thing."

Indeed, initial community support and the lack of stakeholder conflict was a key factor in developing the proposal and in gaining the confidence of the MOF in order to secure the land base. However, once the Burns Lake CFP was established (i.e. the community gained pilot status, the community forest agreement was established, and the community forest tenure was awarded), community support became less important.

Rather, it was the level of forestry and business expertise, and capable leadership that contributed to its ongoing success.

The literature (e.g. Aspen Institute 1996; Litke and Day 1998; Markey and Roseland 1999; Markey and Vodden 1999; McGuire 1994; Matakala and Duinker 1991 in Gunter 2000) recognizes that *appropriate expertise and leadership are* also essential for successful community forestry. The experience of the Burns Lake CFP supports this view. In particular, members of the steering committee and the board had extensive formal and informal forestry experience and business expertise. Members included the former forest district manager, two forestry consultants, the 'woods manager' from Babine Forest Products, the hereditary chief for the Office of the Wet'suwet'an, a representative for the Burns Lake Band, a representative of the village, and a business consultant. Their experience and expertise enabled them to obtain start up funds with which to pay a manager through the use of a bank loan. While this meant that the Burns Lake CFP initially went into debt, it also ensured continued interest and management through the lengthy community forest approval process, and thereby avoided problems of 'volunteer burnout'. Moreover, securing start up funds indicated to the MOF that the Burns Lake community forest proponents had a high level of interest and a willingness to take risks.

The experience and expertise of the board was also useful in controlling potential conflicts. A previous conflict between the Burns Lake Band and the Village of Burns Lake over water rights initially threatened the Burns Lake CFP process. One board member was able to secure the Band's support, which respondents felt was essential in gaining the community forest tenure.

The *leadership* of the elected manager has also been vital for the ongoing success of the CFP. The manager is respected by all board members, he has previous business experience, and while he has no formal forestry training, he has informal forestry expertise and has been capable of making decisions that have resulted in the ongoing success of the Burns Lake CFP.

Interestingly, the literature (e.g. Gunter 2000; Vodden 1999) also suggests that such boards be representative of the community. In the case of the Burns Lake CFP, this was not so, and it appears that it need not be so for the success of the community forest. It was more important that the board be 'effective' rather than 'representative'. The intensive investigation revealed that *previous experience with community involvement in resource management* contributed to the level of expertise and was a key factor for the Burns Lake CFP's success. In 1974, the Village of Burns Lake applied for its own Tree Farm Licence but a change in the provincial government (the New Democratic Party was replaced by the Social Credit Party) resulted in its cancellation. No compensation was paid to the Village despite the fact that $20 000 had been spent on the project at the government's invitation. After recounting this experience, one respondent stated: "over our dead bodies are we going to forfeit this community forest." The community gained some experience through applying for the Tree Farm Licence, and there was a precedent set for the community to be more involved in the management of the forest resource.

Further, prior to the Burns Lake CFP, the Burn Lake District's LRMP had been completed, which represented a significant accomplishment for many of the respondents. Engaging in this process allowed the community to bring together multiple and often competing stakeholders in order to hear one another's concerns and interests,

and to gain greater awareness of the local resources and the landscape of the Burns Lake District. The LRMP process sensitized the community to the necessity of consensus-based decision-making; "you just can't make a decision and expect it to happen." Further, given the complexity of the LRMP process (e.g. designating special management areas), the Burns Lake CFP was seen as a less complicated one. This previous experience with stakeholder conflict resolution through the LRMP has also contributed to its level of expertise and experience.

Interestingly, some respondents felt that the LRMP process was a damaging community process as it had been "pushed through" without full community consultation. The LRMP was completed without the support of the affected First Nations, and one respondent stated that it was "an awful, awful process that excluded the First Nations' concerns and issues." Initially this experience threatened the Burns Lake CFP process as both the Burns Lake Band and the Office of the Wet'suwet'an did not want to be involved. The Burns Lake CFP process required support of the affected First Nations, which the LRMP did not. The fact that a precedence was set for community involvement and input through the application of a TFL, and resolving some stakeholder conflict through the LRMP, was vital for the success of the Burns Lake CFP. Prior to engaging in the CFP process, the community had previous knowledge of the stakeholders and how to resolve conflicts that could have seriously threatened the Burns Lake CFP. Through the Burns Lake CFP, there was a sense that previously conflicting stakeholders could unite behind a common vision, that of generating jobs and revenue for the community. A representative of the Burns Lake band commented that "in every step of the community forestry process, the First Nations are consulted; it is an incredible model for community consultation." This sense of convergent interests also meant that

previous conflicts between various First Nations and between the Village and the Burns Lake Band were set aside in order to unite behind the goal of promoting jobs and revenue for the community.

Unlike the LRMP process, the Burns Lake CFP's board agreed to operate through a consensus decision-making process, as this was a requirement for the First Nations' support and involvement. The two affected First Nations also required that they hold the only two 'nonrenewable' seats on the board in order to ensure that their concerns were represented. While First Nations' involvement was vital for the CFP to become established and win the support of the MOF, concensus decision-making is a unique feature of the Burns Lake CFP and may not be an overall requirement for British Columbia's CFPs.

Table 4.2: Summary of Stage Two Factors

Factor	Explanation
Community Support	An initial enabler for the Burns Lake CFP was its ability to draw on community support, which contributed to gaining the confidence and support of the MOF.
Appropriate expertise and leadership	The high level of forestry expertise and business experience of the Burns Lake CFP's board members was vital to gain the support of the MOF. It is also the capable leadership of the elected manager that is essential for its ongoing success.
Experience with community involvement in resource management	Engaging in the process of conflict resolution prior to the community forest process was initially important for the success of the Burns Lake CFP.

4.3 Stage Three: Comply with the Provincial Regulatory System

A necessary third stage on the road to 'success' for the CFPs, as confirmed through the intensive investigation of the Burns Lake CFP, is to comply with the provincial regulatory system. The literature (e.g. Schlager and Ostrom 1993; Rose 1994; Lindsay 1999; Wily 1999) argues that clear title is essential for communities to successfully manage the forests in a sustainable way. Clear title implies that the rights to a resource are clearly described, legally secure and permanent, so that there is certainty that the rights cannot be taken away or changed. The experience of the Burns Lake CFP supports this view.

The community forest agreement states that "the new tenure will enable communities to manage local forests for timber and non-timber forest products" and that "tenure holders may explore opportunities for managing other resources such as recreation, education and cultural heritage" (British Columbia. Ministry of Forests. 1997c.). However, while the community forest agreement identifies the botanical and other non-timber products that a community forest agreement holder may harvest, manage or charge fees for, there is no provision of rights that go beyond timber products.

The Burns Lake CFP does not have the right to regulate recreational uses on the land and make use of other non-timber forest products that might help generate revenue for the community forest. The Burns Lake CFP is constrained by the fact that it can not generate revenue by issuing permits for multiple uses in order to regulate the use of the forest land, yet are required to take control and responsibility for it. This is reflected in a comment by one respondent, "forestry is only one component of what the community

forests should do; they should include tourism and non-timber forest products, yet there is a commercial-timber bias of the project that it is strictly for timber values." While this 'commercial-timber bias' has enabled the Burns Lake CFP to generate some revenue through harvesting and selling logs to the local mills, it has also prevented them from implementing many of their objectives. Respondents felt that "the MOF treats the community forest as a traditional industrial tenure," and thus felt constrained in pursuing not only their innovative harvesting objective, but also their objective of marketing non-timber products such as traditional botanicals. This suggests some confusion over the *degree of control of the forest land base under the community forest tenure.*

Through the community forest tenure, communities are given more control of, and responsibility for, the adjacent forest, yet their access rights to other resources have not been secured as the province still retains the right to regulate the use of the forest resource. The literature on property rights and resource control recognizes that when rights are not secure, confusion may arise over the identity of right owners, and that secure access (i.e. who has access and who can limit access to resources) results in better community management of the resource. The Burns Lake CFP's experience confirms this in so much as there is frustration over their limited rights. The CFPs are supposed to have jurisdiction to manage the forests, yet appear to be restricted to the management of just the timber resource. This is not consistent with their objectives to extend their jurisdiction over the forest to other resources such as recreational activities and traditional botanicals.

The Burns Lake CFP has been enabled by the provincial regulatory system that facilitates the production of timber, yet they have not pursued many of their original objectives because of this 'commercial timber bias'. Moreover, despite the community

forest tenure that promotes the development of other forest resources, the Burns Lake CFP is still constrained by the province's right to regulate the forest. This suggests some confusion over whom has access to the resource and who can limit that access. There are regulatory constraints to the provisions for rights (and restrictions) that go beyond timber and botanical products to other 'products'.

As part of the provincial regulatory system, the CFPs must operate under the *provincial revenue appraisal system*, which is the system that determines royalty payments to the crown for the use of timber. Under this system, the Burns Lake CFP is required to generate a certain level of royalties to the Crown (Bill 34: 43.3 d). While the Burns Lake CFP is subject to woodlot regulations, it is bound by the same revenue appraisal system that is applied to larger forest licenses. Respondents felt that their costs of labour intensive forestry such as horse logging, small clear cuts and partial cutting, were greater than the cost of conventional harvesting such as larger clear cuts. Respondents also felt that the costs of lower impact forest management, such as building narrower roads, the use of skid trails and intensive stream assessment, were not accounted for in the stumpage that they are required to pay. One comment reflects this concern:

> ...the stumpage system doesn't reflect the type of harvesting that most of the population wants – selective harvesting, alternative harvesting systems with the least impact on the forest. The community forests are forced to clear cut which is against the proposal...it is the economics that determine the management plan and not the other way around, we need more flexibility.

The revenue appraisal system that is applied to larger forest licenses is geared toward conventional harvesting of larger clear cuts and does not reflect the operating costs of smaller-scale forestry. Given that it is inflexibly designed for production-based

harvesting, it does not facilitate the Burns Lake CFP's original objectives of labour intensive forestry and lower impact forest management, which would have enabled a unique product identity. While the Burns Lake CFP has been successful in generating some profit, generating more profit within niche markets and testing innovative forestry management appears to be constrained by the need to supply royalties based on high volume harvesting. This provincially imposed constraint on innovation simply compounds the problem posed by the severe forest health concerns in their region and their obligation to the MOF to manage for forest health. While securing the community forest tenure and gaining the confidence of the MOF was relatively easy for the Burns Lake CFP, operating within the revenue appraisal system is difficult.

The Burns Lake CFP felt that the provincial revenue appraisal system did not reflect their extra cost of being accountable to the public. Respondents felt that their costs were greater than those of industrial forestry firms because they were accountable not just to the district and regional MOF, but also to the local community and even the larger 'environmental community'. Moreover, they felt that they had been given a difficult land base to manage because of its proximity to the village and to major lakes in the area that are used for recreation. One comment reflects these concerns: "our costs are three to four times higher because the community forest has to deal with more aspects of the community; visual constraints give us lots more problems and just dealing more with the public is a challenge." Some of the respondents also felt that there was increased pressure on them to be a successful example for the other CFPs. Indeed, there may be added pressure for the Burns Lake CFP to be successful, as they must contend with more aspects of the community and those beyond their community. However, the Burns Lake CFP has been successful in gaining the support of the

community, key stakeholders and the district and regional MOF, and has shown its ability to manage a more contentious area.

Gaining the support and confidence of the MOF is vital for the success of the CFPs. Many respondents for the Burns Lake CFP felt *supported by the district (i.e. local) MOF personal*, yet felt unsupported by the regional MOF. They saw individuals within the district MOF as making a difference to their success, but that the regional MOF did not understand their concerns. Indeed, the district MOF may have been more supportive because it could better reflect the values of the community, whereas the regional MOF could not.

A further indicator of support for the Burns Lake CFP was that through a partnership agreement, the district MOF recently gave the Burns Lake CFP the right to manage the forest service recreation sites in the Nadina Forest District for one year. This greatly expands the jurisdictional boundaries of the Burns Lake CFP. The Burns Lake CFP's control has been extended beyond the boundaries of the community forest, and expanded their range of management (e.g. recreational values). The Burns Lake CFP sees this as a way to indirectly generate some revenue for the community as it may promote tourism and allow the Burns Lake CFP to "show its influence". Further, this indicates that, perhaps with co-operation with the MOF, the Burns Lake CFP can secure credit and revenue in order to broaden their management jurisdiction.

It is worth noting that British Columbia's government is proposing changes to the tenure system, largely in response to the current softwood lumber trade dispute with the United States. While it may take several years for forest policy changes to be implemented, one of the proposed changes is the withdrawal of regulations requiring companies to process pre-set volumes of timber at mills in the region from which it was

cut. Interestingly, in the early 1940s, under the Fordist model, the government pursued the idea that if forest-dependent communities, timber operations and company mills were rooted in the same place; everyone would benefit. While this policy is currently under threat, it was implemented in order to sustain communities while maintaining the forest industry. Because large forest companies must not only pay revenue to the province but are required to establish mills, some argue that this has facilitated community development and stability through employment (Hayter 2000a; Brown forthcoming). Moreover, this obligation suggests a relationship between corporate control of forestry and rural community development.

Respondents saw themselves as a forest-dependent community that relied on large forest companies for employment. However, through the allocation of some control of the adjacent forest, the Burns Lake CFP represents a more diverse management of the forest resource. This diverse management could reduce the community's vulnerability to the potential withdrawal of major employers (e.g. large licensees), as industry turns elsewhere in order to access cheaper sources of wood (Clapp 1998), and when global markets no longer need local forest resources (Hayter *et al.* 1994). Given the CFP's small size and low AAC, it can not replace the jobs produced from larger forest companies; however, it does represent a significant trend in diversifying the management and control of forestry operations. Land tenure arrangements may not be directly related to the functioning of the Burns Lake CFP, but relationships between diverse tenure and rural development and wellbeing may apply.

Another possible policy change would see a portion of British Columbia's timber be sold under a market-based pricing system. This system may result in a greater diversification of the forest industry where more 'players', other than the major license

holders, have access to the forest resource. More 'players' within the forest industry may increase competition for the timber resource and make it increasingly difficult for smaller 'players' to compete. Alternatively, diversification could result in more potential market opportunities (e.g. selling their timber through log sort yards), and in more buyers for the Burns Lake CFP's timber. For example, one respondent felt that "log sort yards and log export licenses are the way to go; for small operators like us there is currently no one else to export to except the majors, which limits us."

Table 4.3: Summary of Stage Three Factors

Factor	Explanation
Degree of control and ownership of the forest land base under the community forest tenure	While greater responsibility is allocated to the community through the community forest tenure, the CFPs may be restricted to manage for timber and not for other non-timber resources.
The requirements of the provincial revenue appraisal system	The provincial revenue appraisal system limits innovation as it is geared toward larger scale production-based harvesting and may not facilitate objectives of labour intensive forestry and lower impact forest management.
Degree of support from the district and regional Ministry of Forests	Gaining the support and confidence of the district and regional MOF personal is vital for the success of the Burns Lake CFP.

Respondents expressed concern that the overall current forest business climate within British Columbia may not favour community forestry initiatives. They commented:

> ...the concept of community forestry is not under threat, but the government will hinder negotiations for values other than timber. In BC, I don't believe the government has an adequate legislative and regulatory framework in place to encourage community forestry, without it community forestry is more of a dream rather than a trend. ...I think the community forest will be around in ten years, but we will be struggling, we

> had to go through an incredible process to get to where we were and this has strengthened us.

These comments reflect a sense of hopefulness but also concern over the provincial government's response to the community's control of the forest resource, despite recent policy discussions that suggest reallocation of tenure through the 'take back' of approximately 20 percent of tenured forest land from private hands.

4.4 Stage Four: Secure Markets and Exist within a Complex Global Environment

CFPs that have secured a forest land base, drawn on the strengths of their community, and complied with the provincial regulatory system, will not necessarily be successful unless they can secure adequate markets and exist within a complex global environment. Given that British Columbia's forest economy is primarily based on *large-scale, export-oriented production* that is dependent on the extraction of *staple resources*, many have argued that it is ensnared in a 'staples trap' (Watkins 1963; see Innis 1933). Not only is the provincial economy dependent on forest resource exports, but these exports serve a very narrow market.

The Burns Lake CFP must operate within this provincial forest economy. Given this large-scale orientation of the forest industry, respondents for the Burns Lake CFP felt that their small size and low AAC constrained them in generating sufficient revenue and in competing within the forest industry. As a result, some respondents felt that *accessing niche markets and providing speciality products* had the potential to secure greater revenue. Respondents considered harvesting and marketing traditional botanicals, some diversification into higher value-added forest products, pursuing non-

forest products activities (i.e. tourism), and working with local educational institutions for training opportunities as potential future opportunities. However, while there has been some collaboration with the local high school and college, no further steps have been taken to access and serve these suggested niche markets. There are several factors that have led to this.

As previously noted, the Burns Lake CFP is located relatively far from large urban markets, which adds to the challenge of supporting and accessing markets for speciality products. While the Burns Lake CFP has been offered a chance to manage for multiple resource values, flexible management procedures may be more difficult to carry out in this area given its unique resource constraints.

Further, as previously noted, the Burns Lake CFP is situated in the drier interior with a less varied ecosystem. This implies a significant challenge to the development of products other than timber because of limited non-forest resources. Moreover, given the severe Mountain pine beetle epidemic, the AAC has been dramatically increased and the Burns Lake CFP has thus been forced to harvest more volume than they had originally intended. The provincial government is constrained in its efforts to ease the epidemic while it is negotiating to end the softwood trade dispute. Despite the fact that the provincial government has streamlined harvesting regulations and increased the AAC in order to facilitate harvesting, many of the sawmills that would normally be available to process the infested logs have been closed due to softwood lumber duties and *current market prices.* For the interior region of British Columbia, the influx of infested wood has resulted in an over supply of logs and this has lowered prices. Hence, the Burns Lake CFP must operate within the provincial forest economy and contend with the lower market prices for infested wood.

While the Burns Lake CFP has a guaranteed buyer for its wood through one of West Fraser Timber's mills, it is still obliged to harvest more than current market demand given its forest health issues. Despite generating some revenue through the sale of its timber to this local mill, the Burns Lake CFP is constrained by its unique resources and the current market system that requires them to harvest timber despite low wood prices and a glut in the market.

Not only must the Burns Lake CFP operate in a provincial economy that is dependent on producing competitively priced exports (in the absence of niche markets), they must also operate in a complex global environment. The globalization literature (Taylor *et al.*, 1995a: 3 in Taylor and Conti 1997; Featherstone *et al.*, 1995; Swyngedouw 1997; Gidden 2000) recognizes the external conditions that affect communities, and contends that global and local forces shape one another. While there has been a transfer of power to the international level, local autonomy is also enhanced. Moreover, it suggests that through globalization, local groups and communities are able to establish themselves and that, with more power allocated to the community level, they can do things differently.

Indeed, these external conditions introduce opportunities for local action but also impose limitations. As part of the re-regulation of the forest sector in British Columbia, the CFPs represent devolution of power and responsibility from the provincial to the local level, and a more diverse management of the forest resource. While the CFPs are embedded in global structures, and represent "social agents who respond to external restructuring from local contexts of organization and community" (Taylor 2000: 4; Taylor 2003), the global forest industry in particular may not recognize this. While power has been devolved from the provincial to the local level through the CFPs, the global

environment may not accommodate the local in the context of the forest industry and may make these forest dependent communities more vulnerable.

For example, current market prices for the forest resource operate independently of provincial or federal policies and actions; the prices of forest products are based on international supply and demand. Given the province's resource dependency and narrow focus on export markets, the provincial forest sector is vulnerable to cyclical patterns of 'boom and bust', which governments are unable to mitigate. Market linkages for diversifying value-added and non-timber forest products suggest that existing global markets are not hospitable to potentially local sustainability initiatives. Indeed, respondents expressed interest in accessing 'green' markets by pursing the eco-certification process; however they also felt that the costs to implement the standards were too onerous and that there was little market value for eco-certified products. One comment reflects the concern that the current economic system and the global environment does not facilitate niche opportunities:

> It is pressures from the fibre market, where there is always a cheaper source of fibre elsewhere, that threatens to destroy community forestry initiatives. So we have to be very realistic about the market constraints, but also continue with experiments [like the CFPs], be clear on the market reality and yet somehow give local communities power.

Aspects of the provincial regulatory system, the current market system and the complex global environment do not promote novel community forestry initiatives such as accessing niche markets and providing speciality products. In order for novel community forestry initiatives to succeed, the Burns Lake CFP must not only be able to forecast potential markets and niche opportunities several years ahead, but also must be the sole producer of a novel product.

Despite having progressed to the point of generating revenue through the sale of logs to the local mill and exhibiting many of the steps required for successful community forestry, the Burns Lake CFP has not yet been able to secure the promises of globalization. Not only is the Burns Lake CFP unable to access niche markets and provide speciality products, it is restricted to the sale of logs with little added value. It is also affected by fluctuating global prices for forest products, competition for cheaper sources of wood found elsewhere, and trade relations with the United States as the Softwood lumber trade dispute has resulted in punitive duties being imposed on forest companies. More time is required to determine if the Burns Lake CFP will survive. However, to date, the provincial regulatory system, markets, and the global environment have constrained the Burns Lake CFP in adhering to its original objectives and to the value-added identity that it sought to carve out.

Table 4.4: Summary of Stage Four Factors

Factor	Explanation
Degree of export orientation and 'staple' dependency	The Burns Lake CFP may maintain some successes at the local or regional scales given its size and AAC. However, it may be constrained in reaching economies of scale given the large-scale orientation of the forest industry.
Access to unique markets and provision of speciality products	The Burns Lake CFP has access to timber and a guaranteed buyer for its wood, however, to date, it is restricted to the sale of logs with no value-added initiatives.
Current market prices	Burns Lake CFP has generated some revenue by selling logs to the local processing mill, but are 'price-takers' as they must contend with lower market prices and an oversupply of wood.
Trade relations with the United States	The Burns Lake CFP is tied to larger forest companies that are currently affected by the Softwood lumber trade dispute.

4.5 Chapter Summary

The intensive investigation of the Burns Lake CFP was used to refine the conceptual model, which aims to identify the key constraints and enablers to the implementation and functioning of the CFPs. The evidence supports many of the factors identified in the original model, but also recognizes other enabling and constraining factors. To date, the Burns Lake CFP has been successful. It has secured a forest land base and timber supply due to the lack of competition for the area. Previous experience with community involvement in resource management contributed to community support for the CFP. The community's support and the level of expertise allowed them to gain the confidence and support of the MOF, which was a requirement for securing the community forest tenure. Subsequently, it has been the capable leadership that has been vital to its ongoing success. Appropriate expertise has enabled the Burns Lake CFP to comply with aspects of the provincial regulatory system and to generate some employment and profit. Through the CFP process, the community's awareness of the forest industry and the forest itself has increased. These factors are largely internal to the community, and demonstrate the remarkable potential of the CFPs.

While the provincial regulatory system has facilitated its industrial approach, which has resulted in employment and revenue for the Burns Lake CFP, it also constrains it. Despite the transfer of some power and responsibility to the community through the community forest tenure, the Burns Lake CFP is obliged to manage for severe forest health concerns and the revenue appraisal system may not recognize its particular costs of forest management such as labour intensive harvesting methods. The provincial regulatory system is further complicated by current market prices. Despite

the opportunity to generate revenue by selling logs to local mills, the Burns Lake CFP is subject to low log prices, especially for infested wood, and is indirectly affected by softwood lumber duties applied to local processing mills. Moreover, managing for products other than timber, accessing niche markets and providing speciality products may be difficult. Given the small size and low AAC, the Burns Lake CFP's efforts at being competitive may be undercut by cheaper and more abundant sources of timber from elsewhere. To what degree do the experiences of the other nine CFPs confirm the above analysis? This question is addressed in the next chapter.

CHAPTER 5: THE EXPERIENCE OF NINE COMMUNITY FOREST PILOTS: A REFINED CONCEPTUAL MODEL

The progress of the remaining nine CFPs has significantly varied since British Columbia's government passed legislation to implement and test community forest agreements in 1998. The key enablers and constraints of each of the nine CFPs are identified as a means of exploring their varied progress. Like the intensive investigation of the Burns Lake CFP, their progress is conceptualized according to a series of four stages that they must undertake in order to be successful. The investigation of the remaining nine CFPs confirms the refined model, as well as the importance of certain constraints and enablers. Chapter Five provides evidence from the analysis of the remaining nine CFPs in order to make final refinements to the model to ensure consistency with all the CFPs.

The nine CFPs have progressed at different rates and are grouped for this review according to this progress (Appendix F). As of 2002, the Likely Community Forest Corporation, Islands Community Stability Initiative (ICSI), North Island Woodlot Corporation (NIWC), Nuxalk First Nation, and Village of McBride and District[20] (the 'stalled' group) have all been chosen as pilot sites but have not negotiated community forest agreements with the MOF. The Bamfield/ Huu-ay-aht Community Forestry Society and the District of Fort St James Community Forest (the 'progressing slowly'

[20] Since the field research (2002), the Village of McBride and District has been offered a Community Forest Pilot Agreement (CFPA) on August 15, 2002.

group) have all been awarded community forest tenures, harvesting rates have been confirmed and forest licenses have been signed, but they have not begun harvesting timber. Like the Burns Lake CFP, the Harrop-Proctor Watershed Protection Cooperative (HPWPC) and the Esketemc First Nation (the 'well-progressed' group) have both been chosen as pilot sites, have been awarded community forest tenures, harvesting rates have been confirmed, forest licenses have been signed and harvesting has commenced.

5.1 Stage One: Secure a Forest Land Base

Securing a forest land base is a vital first stage for the CFPs, which has been difficult for those in the 'stalled' group, but has been achieved by the CFPs in the 'progressing slowly' and the 'well-progressed' groups. The Nuxalk First Nation and the ICSI have not secured a forest land base, while the NIWC and the Likely Community Forest Corporation initially found it difficult given a high degree of *competition*. The NIWC found it difficult because much of Vancouver Island is under private control with little Crown land adjacent to the community. In Likely, the major licensees initially refused to give up a portion of their license operating area. Eventually their AAC came from a licensee 'take-back' transfer, but they were required to share it with the neighbouring Esketemc First Nation Community Forest. Interestingly, in order to assist the Likely Community Forest Corporation, a major licensee eventually awarded them a block; in return, they will sell logs back to the licensee in order to recover their costs. While this ties them to a particular licensee, it allows them a guaranteed buyer for the timber. In the future, the NIWC and the Likely Community Forest Corporation may not be able to increase their size and volume given the competition for forest land. The Bamfield/Huu-ay-aht Community Forestry Society has secured a forest land base given

the limited competition. It is remotely located with potentially high transportation costs to processing mills. Culturally significant areas have also been identified such as ancient trails, sacred sites and fishing grounds, which may result in higher management costs. The HPWPC experienced little competition for the land as it is a difficult and expensive area to manage and there is no active licensee in the community forest. Conversely, the overlapping tenure claims of the Alkali Lake Ranch and the Springhouse Ranch for cattle grazing delayed the Esketemc First Nation Community Forest in securing a forest land base. However, with the assistance of the MOF, this conflict was resolved.

Many of the respondents considered the *quantity* of the forest land base as inadequate. For many, this meant that it would be difficult to "protect" the forests, to generate adequate revenue, to pursue higher value-added forestry initiatives, to be competitive in the forest industry and to achieve economies of scale. Interestingly, the HPWPC wants to increase their area in order to "protect" the land but has negotiated with the MOF to reduce its AAC in order to pursue an ecosystem-based forest management approach (i.e. protection and sustainable management of forest ecosystems). Despite concerns over the size of the forest land base, this has not threatened the success of these community forests.

The Village of McBride and District Community Forest felt that the *quality* of their forest land base was an enabler. Despite visual quality concerns, it covers nine biogeoclimatic variants with a variety of tree species and landforms, which will facilitate timber harvest, education, recreation, tourism, and non-timber forest product initiatives. Conversely, the Nuxalk First Nation CFP felt that the steep terrain in the area would be difficult to access and expensive to manage. The Esketemc First Nation Community Forest is affected by the Mountain pine beetle infestation. Despite severe forest health

concerns, respondents felt that they benefited from the provincial government's streamlining of harvesting regulations. This contrasts with the Burns Lake CFP experience. Despite a lack of severe forest health concerns, the HPWPC must manage a difficult land base that is both steep and unstable, and which has been used as a water supply shed for the surrounding communities. To date, however, the quality of the forest land base has not threatened the success of these community forests as they have begun the forest management process and generated some revenue through harvesting timber.

Table 5.1: Summary of Stage One Factors

Factor	Explanation
Degree of competition for the forest land base	For some CFPs, competing claims to the forest land base was an initial constraint. There was less competition in areas that were difficult to manage and/or no active licensees. In the future, competition may not allow the CFPs to increase their size and AAC.
Quantity of the forest land base	To date, the quantity of the forest land base has not constrained the CFPs. In the future, the quantity of the forest land base may constrain the CFPs from generating more revenue and in reaching economies of scale.
Quality of the forest land base	The quality of the forest land base varies and determines what model of forestry and the types of forestry products the CFPs will pursue.
Location of the forest land base	Some CFPs are better suited to community forestry than others given proximity to processing mills and urban centres. Location determines transportation costs and the types of forestry products the CFPs will pursue

The Likely Community Forest Corporation, the NIWC and Village of McBride and District Community Forest felt that their *location* was an enabler. Reasons given were proximity to forest centres and processing facilities, proximity to educational institutions,

and/or proximity to urban centres with well-developed infrastructures and diversified economies. Conversely, both the Bamfield/Huu-ay-aht Community Forestry Society and the Nuxalk First Nation CFP anticipated high transportation costs given their remote location and distance from forest centres and processing facilities.

While the HPWPC is located in an area that has experienced some processing mill closures, it is also close to the Canada-United States border, which may reduce their transportation costs and increase marketing opportunities. Respondents for the Esketemc First Nation Community Forest felt that being located close to many forest centres (e.g. Quesnel, Lillooet and Williams Lake) has enabled them to sell logs to many different mills with low transportation costs.

5.2 Stage Two: Draw on Community Attributes

Gaining *community support* is a vital second stage for successful community forestry. This has not been achieved by many of the CFPs in the 'stalled' group, but has been achieved by those in the 'progressing slowly' and the 'well-progressed' group. A lack of community support has threatened the success of the ICSI, the NIWC and the Nuxalk First Nation CFP. Divergent concerns from various stakeholders and the feeling that allocating volume to the CFP from the TSA was considered too great a risk, has meant that the ICSI has not been able to gain community support. The NIWC has been awarded pilot status and secured a forest land base, but has not progressed further due to a lack of the First Nation's support. Participation in the NIWC was seen as further alienating the land that has not yet been encumbered by a forest license, and which could jeopardize potential land claims. The Nuxalk First Nation, as well as the rest of the community, did not support the Nuxalk First Nation CFP. The manager reported a

growing disinterest and an unrealistic outlook on the amount of work that was required. Conflict between different bands in the area also threatens the CFP; unlike the previous band council, the newly elected band council is not interested in the Nuxalk First Nation CFP. Some CFPs are vulnerable to elected officials and band councils with changing priorities. Interestingly, for the Likely Community Forest Corporation, community support had waned due to its inactivity. However, with the closure of various MOF offices[21], there was renewed support for the CFP, as the MOF personnel saw the CFP as providing potential employment in their community.

The District of Fort St James feels that they have full community support, yet the First Nations community of Nak'azdli is not a proponent of the CFP. This may be due to unresolved land claim issues; however, unlike the Nuxalk First Nation, this has not constrained the District of Fort St James CFP. More work from volunteers may be required where there is no participation of local First Nations due to potential land claim issues. For this community forest, the high level of forestry expertise and business experience may have allowed it to progress despite this lack of First Nations' support.

For the HPWPC, community support, particularly from the 'environmental community', has been a vital factor for its success. Further, that there is no active licensee in the community forest land base and community members are not directly employed by the forest industry has contributed to a strong sense of common identity amongst the community members. Therefore, it is not constrained by conflict with

[21] Recently, there were three regional MOF offices closed in Nelson, Williams Lake and Smithers, but the district MOF offices in those communities were kept open. There have been several district MOF offices closed in Fort St. John, Grand Forks, Hagensborg, Hazelton, Horsefly, Houston, Invermere, Lillooet, McBride, Penticton and Salmon Arm. In all of these communities there is a small field presence maintained.

different stakeholders, and this has likely contributed to community cohesion. While there has been some division amongst First Nations regarding the HPWPC as it is located within traditional territory, this is not seen as a constraint as no First Nations live in the community. Not only did the Esketemc First Nation Community Forest have to contend with overlapping tenure claims, it also had to deal with conflict between neighbouring First Nations, who felt that they were not consulted regarding the community forest process.

For some CFPs, the lack of *appropriate expertise, experience and leadership* has resulted in delays, and for others it has severely threatened success. The lack of foresters and consultants involved in the Likely Community Forest Corporation meant an over reliance on volunteers with little practical experience in forestry and business expertise. However, this problem may be mitigated by the potential involvement of MOF personnel. The NIWC also felt that the lack of forestry expertise and a reliance on volunteer labour has resulted in 'volunteer burnout' and waning community support. For the Nuxalk First Nation CFP, the lack of leadership initially threatened the CFP. While they currently have one paid employee, she feels that the workload is too onerous for one person. For the ICSI, a lack of leadership and 'volunteer burnout' threatens the community forest. Furthermore, since being chosen as a pilot site, those in charge of the management have changed as the ICSI was seen as being incapable; they now are struggling to fill this gap in leadership.

The HPWPC has little forestry expertise and business experience, which has contributed to a degree of 'volunteer burnout'. Respondents felt that they had a tremendous 'learning curve', and had to be more realistic about the time constraints of the forest approval process. However, the tremendous community support for the

HPWPC may have helped overcome this initial constraint. The Esketemc First Nation Community Forest has relied on available forestry experience, business expertise and leadership from the community, and respondents felt that this has made the 'social aspect' and community support much less important to the success of the community forest.

The Village of McBride and District Community Forest considered their lack of *previous experience with community involvement in resource management* as only a "mild limitation" as "it isn't really about the community managing it, but professional experts that are." The CFP is seen as an economic diversification project that is dependent on professional input rather the community's ability to manage the forest resource. Conversely, the Likely community had previous experience with community involvement in resource management through the CORE, LRMP and LRUP. However, they saw this as a constraint because it meant that much of the land surrounding the community had been allocated to these higher level plans, which contributed to the initial problem of securing a forest land base for the CFP.

Both the Nuxalk First Nation CFP and ICSI had no previous experience with community involvement in resource management and respondents did not see this as a particularly relevant factor. However, for the Nuxalk First Nation CFP, where issues of historical infighting have surfaced thereby threatening the community forest, it is evident that the community was unprepared for a venture such as a community forest; in other words, they may have benefited from some previous experience. Indeed, traits such as unity, homogeneity, stability, and the capacity to engage in collective action should not be assumed; communities are not static but change over time and are often characterized by social fissures (McCay and Jentoft 1998). Moreover, "communities of

resource users are not aggregates of individual acts, but result from deliberate collective action or gain a sense of identity and shared purpose through patterned interactions over time" (McCay and Jentoft 1998: 23). This lack of unity may partially explain why the Nuxalk First Nation CFP has not been allocated a forest land base by the MOF as they have not demonstrated a cohesive community, but had been 'thrown into' this project without adequate preparation. While previous experience may not be essential for all CFPs, some degree of conflict resolution is indeed essential to prepare a community for a venture like a community forest.

As a result of their previous experience in community management of the resource (through the Interim Management Agreement and the Joint Forest Council with Huu-ay-aht, Weyerhaeuser and the MOF), those in the Bamfield/Huu-ay-aht community have learned to work together and have gained the trust of the local First Nations. Initially the Bamfield/Huu-ay-aht Community Forestry Society experienced 'volunteer burnout' due to little formal forestry experience and business expertise. However, they have since been able to secure revenue through the Community Enterprise Program and Aboriginal Services in order to hire two employees. Interestingly, while they have little formal forestry experience and business expertise, they feel this is not a constraint as they can 'learn as they go'. This, however, may have contributed to the initial delay of being awarded the community forest tenure. The lack of competition for the area has allowed them to secure a forest land base. Moreover, factors such as the level of community support for the CFP and good relations between the First Nations and the rest of the community and their previous experience have contributed to their current modest success.

Both the HPWPC and the Esketemc First Nation Community Forest did not consider previous experience with community involvement in resource management as relevant to their progress. In particular, the HPWPC considered the CORE and the Kootenay Boundary Land Use Plan as not involving the community but only key individuals and thus did not benefit from this experience.

Table 5.2: Summary of Stage Two Factors

Factor	Explanation
Community support	Community support is vital for initial success in securing a forest land base.
Degree of stakeholder conflict	Stakeholder conflicts occur where there are divergent interests among groups. Where communities demonstrated a cohesive community, they were more likely to secure a forest land base.
Appropriate expertise and leadership	Without appropriate expertise, experience and leadership, some CFPs were unprepared to manage the forest land base, yet some CFPs were able to overcome this given the community's support and lack of competing stakeholders.
Experience with community involvement in resource management	Previous experience with community involvement in resource management may not be vital for success. However, in some cases, communities need preparation prior to a community venture such as the CFPs in order to overcome conflicts and disunity.

The lack of experience with community involvement in resource management may not in itself be a key constraint to the success of a CFP. However, when this is combined with a lack of community support and a divisive community, it is evident that some communities have not had adequate preparation for a community forest. Indeed one respondent from a CFP in the 'well-progressed' group expressed concern that:

> Community forests may be trying to take on too much. The role of communities has been to take care of the people, now with community

> forests we are all expected to get along, and expected to care of the people, to take care of the forest and to take on the business of providing jobs.

This comment nicely reflects the sheer volume of factors with which a CFP must contend. It also shows that when communities have not undergone the painful process of conflict resolution prior to a community initiative such as a community forest, historical infighting can arise and threaten these projects.

5.3 Stage Three: Comply with the Provincial Regulatory System

As a vital third stage for successful community forestry, the CFPs must be able to comply with the provincial regulatory system. Different aspects of the regulatory system have affected all of the CFPs. The Esketemc First Nation Community Forest had to contend with confusion over the *degree of control of the forest land base under the community forest tenure*. As previously mentioned, overlapping tenure claims from local ranchers and conflict with neighbouring First Nations who felt excluded by the community forest process seriously threatened the CFP, and delayed the signing of the community forest agreement by two years. Eventually the forest land base was taken from the operating areas of three licensees.

The literature on property rights and resource control recognizes the need for clarity over control and ownership of resources. For the CFPs, this concern is played out in overlapping claims. The CFPs represent a bundle of resource values (e.g. timber, botanical products, recreational uses) and as indicated by the experience of the Esketemc First Nation Community Forest, conflict amongst stakeholders can threaten a CFP. While in this case, conflict arose over boundary disputes, issues of access to land also generated conflict; this particular CFP laid claim to an area that another group, the

ranchers, already had secured. The CFP did not have the right to exclude other stakeholders, yet given that the province retains the right to regulate the forest use, the MOF was able to step in and help settle the dispute.

Interestingly, in British Columbia, the treaty process has not established any set rules over access rights to forests and minerals, and therefore Aboriginal claims to the land may be both enabling and constraining factors to the CFPs. For example, the Burns Lake CFP has the support of all the concerned First Nation's groups. They feel that their participation in the CFP process is "without prejudice to the treaty process" and they see the CFP as protecting their interests as it has already established a resource and industrial base that has the potential to facilitate the treaty process. Conversely, other First Nation groups (e.g. the Kwakiutl-Laich-Kwil-Tach treaty society) have not participated in the NIWC, which has delayed signing of an agreement area. They regard the NIWC as a potential infringement upon their claims to areas and resources.

While most of the CFPs expressed concern with the *provincial revenue appraisal system*, only those in the 'most progressed' group have experienced this directly. However, those in the 'stalled' group anticipated onerous costs of the forest approval process that may not be recognized by the provincial revenue appraisal system. For example, the ICSI found that generating an initial feasibility study was too expensive, while the Nuxalk First Nation CFP felt that the costs of hiring a registered professional forester and carrying out surveys were burdensome. The Village of McBride and District Community Forest felt that being accountable to the public and electing board members were financial constraints. The Likely Community Forest Corporation considered higher level plans in the area as restrictive and costly. The Bamfield/Huu-ay-aht Community Forestry Society also felt that the costs of being accountable to the general public, the

local community, the MOF and the broader environmental community would not be recognized by the revenue appraisal system. Moreover, given their small size, they felt that it would be difficult to pursue an industrial forestry model. However, through innovation (e.g. research and education initiatives) and with the support of the 'environmental community' and 'environmental' markets, they may pursue non-timber activities such as recreation and non-timber forest products.

As previously noted, the HPWPC has chosen to adopt a radically different forest management approach, which meant that much of their initial energy was spent on "fighting" with the MOF to reduce their AAC from 10 000m^3 to 2 603 m^3. Despite some flexibility within forest regulations, the HPWPC considers the revenue appraisal system to be "rigid", as it does not account for their higher costs of partial cutting and trail systems. The Esketemc First Nation Community Forest initially struggled with obtaining revenue to begin the community forest process. They eventually received funds through the Department of Indian Affairs and from the Band, which they have been able to pay back. This accomplishment may be a result of their business expertise. However, they feel that because they are a First Nations community forest and are under the direction of a corporation headed by the Chief, Council and Band administrator, as well as the MOF, they have more regulations and costs to deal with than others. They are also concerned that it will be difficult to meet the requirements of the revenue appraisal system given the small size of their forest land base and low AAC. Despite these concerns, both CFPs have been able to continue to operate as they have harvested and generated some revenue through the sale of logs.

Many of the CFPs expressed concern that the MOF was not supportive. For example, the NIWC felt that the MOF considered their CFP to be unfeasible due to a

lack of available land. Interestingly, the Village of McBride and District Community Forest felt that initially the district MOF stalled the process as those in the Small Business Forest Program felt threatened by job loss if too much timber volume was allocated to the CFP. However it has since benefited from renewed community support due to the district MOF office closure. The Likely Community Forest Corporation initially felt unsupported by the regional MOF whom they saw as delaying the process by one year and felt that they had to "fight" with the regional MOF over restrictions placed on the CFP's land due to higher level plans. The Bamfield/Huu-ay-aht Community Forestry Society has secured the forest land base given the lack of competition for the area. Community support and previous experience with community involvement in resource management has allowed them to gain the support of the MOF and to generate some initial revenue, despite little forestry experience and business expertise.

Gaining the support and confidence of the MOF has been vital for those CFPs in the 'well-progressed' group. Despite a lack of forestry experience and business expertise, the HPWPC gained the support of the MOF. This contrasts somewhat with the experience of the Burns Lake CFP where expertise and experience helped them gain the support of the district MOF. Remarkably, the HPWPC was able to pursue an ecosystem-based forest management approach, which indicates that there is some flexibility within forest regulations to pursue alternative forestry management models. Interestingly, they felt unsupported by the regional MOF but supported by the district MOF. Support from the district MOF is not only due to the fact that there is little stakeholder conflict, but that there was little competition for the forest land base as it is a potentially contentious and sensitive management area and better suited to community management. The support of the district MOF was essential for the Esketemc First

Nation Community Forest to resolve severe stakeholder conflicts that initially threatened the CFP. Gaining the confidence and support of the MOF has been vital for its success and may be a result of their level of formal and informal forestry experience and business expertise.

Table 5.3: Summary of Stage Three Factors

Factor	Explanation
The degree of control and ownership of the forest land base under the community forest tenure	Clarity over who has control of the forest land base is vital for the success of the CFPs. The potential for conflict amongst stakeholders exists, as overlapping tenure claims can delay and/or threaten a CFP.
The requirements of the provincial revenue appraisal system	The requirements of the provincial revenue appraisal system may be too onerous for some CFPs. However, CFPs in the 'most progressed' group have been able to generate revenue through the sale of logs.
Degree of support from the district and regional Ministry of Forests	Gaining the support of the MOF personnel is vital for the success of the CFPs. In some cases, it was the district MOF that supported the CFPs, while the regional MOF did not.

5.4 Stage Four: Secure Markets and Exist within a Complex Global Environment

The evidence from this investigation indicates that before a CFP can *secure markets and exist within a complex global environment* they must be able to secure a forest land base, draw on the community's strengths and comply with aspects of the regulatory system. For example, the Nuxalk First Nation CFP has not been able to pursue a potential economic opportunity because of severe conflicts between community members. Their situation is further complicated by the Band's refusal to engage in negotiations with the provincial government, as they consider the proposed forest land

base as part of their traditional territory. Resolving these conflicts is necessary before a community can be expected to engage in a community venture, and these unresolved conflicts have meant that it can not secure access to a particular niche market despite being approached by an Aboriginal group in the United States to buy their logs. Given their inability to secure a forest land base, the lack of community support and unresolved territorial issues, they have been unable to negotiate this potential economic opportunity.

Both the Bamfield/Huu-ay-aht Community Forestry and the HPWPC are not pursuing an industrial forestry model as they must contend with a small forest land base and sensitive management areas, and feel they have the support of the 'environmental community' in order to pursue alternatives. The HPWPC feels confident that they can access niche markets such as small scale, 'green' markets as well as academic markets. Not only do they want to use a variety of harvesting systems that respect biodiversity values, their business plan includes expanding a small, local sawmill that will provide customized material to value-added operations and to produce 'eco-certified' wood. They plan to pursue the use of botanical forest products, craft tree licenses and tourism in order to generate revenue.

While the HPWPC feels confident that they can manage for a more diverse set of values, they are still subject to current market prices for their timber and *trade relations with the United States*. The HPWPC directly experienced the effects of the Softwood lumber trade dispute. As a result of the countervailing duty imposed on Canadian softwood lumber, it was penalized with a 30 percent duty when their milled wood was sold to a company in the United States. This was a major set back that cut into profits.

The Esketemc First Nation Community Forest is pursuing an industrial forestry model but may also be constrained by current market prices that promote large-scale timber harvest. Therefore, along with timber harvest, they want to provide speciality forest products such as different-sized dimensional lumber and railroad ties. While the Esketemc First Nation Community Forest is interested in the eco-certification process, the costs and regulations of the process are considered to be too onerous. While it has been able to sell logs to local mills, given their small forest land base and low AAC it may be difficult to generate sufficient revenue and to compete with larger forest companies.

Table 5.4: Summary of Stage Four Factors

Factor	Explanation
Degree of export orientation and 'staple' dependency	Given the large-scale orientation of the forest industry, many of the CFPs must be innovative in order to achieve successes at the local and regional scale.
Access to niche markets and provision of speciality products	Given special circumstances some of the CFPs may be able to access niche markets and/or provide speciality products.
Current market prices	Some CFPs have generated revenue by selling timber; however, they remain 'price-takers' as they must contend with lower market prices and the current oversupply of wood.
Trade relations with the United States	Despite initial success, the HPWPS was directly affected by the Softwood lumber trade dispute and was penalized for selling its timber to a mill in the United States.

5.5 Chapter Summary

The progress of each community forest has significantly varied. Chapter Five has identified the reasons for this variation and in doing so has 'tested' the conceptual model

of the key constraints and enablers to the implementation and functioning of British Columbia's CFPP. The intensive investigation of the Burns Lake CFP supports many of these factors but also identifies other enabling and constraining factors. The investigation of the remaining nine CFPs confirms most prior refinements. To summarize, securing a forest land base was more difficult in areas with multiple and often competing stake holders. The degree of competition can be affected by the quantity, quality and location of the forest land base. The diverse forests of the ten CFPs may mean that some are better suited to community forestry and this largely determines what model of forest management will be pursued and may also affect how successful they are in reaching their objectives.

The ability to draw on community attributes further determines the success of the CFP's forest management. Where communities demonstrated a cohesive community and appropriate expertise and leadership, they were more likely to secure a forest land base. The evidence indicates that inadequate forestry expertise, business experience and leadership means that a community is unprepared to take on the management of the community forest where, for example, the costs of the forest approval process are considered to be too onerous. However, in some cases strong community support and capable leadership can mitigate the effects of little expertise and experience. This contrasts with the Burns Lake CFP experience where appropriate expertise was vital to gain the support of the MOF. Previous experience with community involvement in resource management was also vital for the success of the Burns Lake CFP. In some cases, this can help resolve stakeholder conflicts and thus gain the support of the MOF.

CFPs that have successfully secured a forest land base and drawn on community attributes must also be able to comply with the provincial regulatory system.

While power is allocated to communities through the community forest tenure, the potential for conflict amongst stakeholders exists, and overlapping tenure claims can delay and/or threaten a CFP. Moreover, the CFPs may be restricted to manage for timber and not for other forest products such as traditional botanicals and recreational use, as the community forest tenure does not provide for rights beyond timber products. Access rights other than timber have not been secured as the province still retains the right to regulate the use of the forest resource.

Therefore, the provincial regulatory system facilitates an industrial model of forestry and may limit innovation, as the CFPs are required to generate a certain level of royalties for the crown. The provincial regulatory system is geared toward larger scale production-based harvesting and may not facilitate objectives of labour intensive forestry, lower impact forest management and/or production of non-timber forest products. However, while the requirements of the provincial revenue appraisal system may be too onerous for some CFPs, others have successfully generated revenue and employment through the sale of timber.

Despite the provincial regulatory system that facilitates opportunities to generate revenue through selling logs to local mills, CFPs must also secure markets and exist within a complex global environment. In some cases, given special circumstances such as a diverse and healthy forest land base and appropriate expertise, some CFPs have been, or soon will be, able to access niche markets and provide speciality products. However, they are subject to low log prices, especially for infested wood and are indirectly affected by softwood lumber duties applied to the local mills to which they sell. While some of the CFPs have to date, been successful, their small size and low AAC

may make it difficult to be competitive as these efforts at small-scale forest management are undercut by cheaper and more abundant sources of timber from elsewhere.

CHAPTER 6: CONCLUSIONS

6.1 Summary

Increasing dissatisfaction with the 'industrial' model of commercial forestry in British Columbia and elsewhere has opened the door to alternative forms of forest tenure and practice. British Columbia's CFPP is one example. In 1998, provincial legislation was passed to implement and test CFPP agreements for five years. Under this program, the government has allocated land to ten communities, which have assumed responsibility for managing local forests. This dissertation has sought to determine if and how British Columbia's Community Forest Pilot Project, as a localized trend, might survive and prosper in an increasingly globalized forest sector. This question was addressed in two stages. First, a conceptual model of the key factors affecting the viability of community forestry was developed. The model draws upon multiple bodies of scholarship that reflect the multiple scales in which community forests exist. This scholarship included: the community forestry and community economic development literature, which largely focuses on internal community factors that can influence the success of any community venture; the amorphous literature on property rights and resource control, which draws attention to the ways in which subtle differences in ownership and decision-making power can greatly alter the viability of community forestry initiatives; and finally, the literature on globalization (and

localization), which recognizes the many supra-community factors and conditions that can constrain and enable communities.

Second, the model was 'tested' and refined based on the observed initial experiences of British Columbia's ten community forestry pilots. Intensive investigation of the Burns Lake CFP largely supported prior conceptualizations. This field research, however, also identified a number of additional enabling and constraining factors. Furthermore, it suggested an alternative model for organizing these many factors; one based on stages rather than scales. In order to survive and ultimately succeed, British Columbia's CFPs must first *secure a forest land base,* then *draw on community attributes*, then *comply with the regulatory system,* and finally, *secure markets and exist within a complex global environment.* Final minimal refinements to this model were made in order to reflect the diverse experiences of the remaining CFPs and account for their varied progress. In general, the investigations of the remaining nine CFPs confirmed the importance of prior identified key constraints and enablers to the implementation and functioning of British Columbia's CFPP. What conclusions, then, can be drawn about these key constraints and enablers? Additionally, what can be said about the likely success of British Columbia's ten initial CFPs?

Securing a forest land base is a necessary first stage for a CFP and those that have not been able to secure a forest land base have not progressed beyond being chosen as a pilot site. This first stage was more difficult in areas where there was competition for the land from multiple user groups such as ranchers, First Nations, larger forest licensees and the MOF's Small Business Forest Program. Competition occurs where there are divergent interests and the feeling that a benefit to one group will entail a loss to another. Securing a forest land base is facilitated by a lack of competition for an

area, which occurs when an area is considered difficult to manage and/or politically contentious.

While some of the CFPs have generated revenue despite their small size and low AAC, their size limits their capacity to generate more revenue, to achieve economies of scale, and to become self-sufficient within the global forest industry. However, as some of the objectives and actual experiences indicate, the potential constraints over the quantity of the forest land base may be mitigated by innovation on the part of the community. For example, several CFPs expressed a desire to produce eco-certified products and that the 'environmental community' was a promising market. To date, however, none of the CFPs have accessed this market.

The quality and the location of the forest land base varies between the CFPs, as some must contend with steeper terrain, severe forest health concerns, and/or visual quality concerns and longer distances to mills and markets, which may affect their costs of forest management. However, a more diverse forest land base may compel communities to seek out alternative sources of revenue through education, recreation and non-timber forest products, as exemplified by some of the proposed objectives and actual experiences.

Securing a forest land base may be a function of political efficacy especially with respect to the relations with the district and regional MOF. Drawing on community attributes can influence the success of a CFP and also contribute to gaining the support of the MOF. While community support is initially important as it can contribute to the likelihood of securing a forest land base and gaining the support of the MOF, it may not be necessary for the ongoing success of a CFP. For example, community support may

be fickle as inactivity or delays in the community forest can result in waning community support and interest and even a lack of confidence in the process.

Appropriate forestry expertise, business experience and leadership is vital in order to gain the support of the MOF and for the ongoing success of a CFP. A lack of formal and/or informal forestry experience and business expertise makes securing initial revenue for a community forest difficult and contributes to 'volunteer burnout', which indicates that some communities may be unprepared to take on the management of a community forest. With appropriate experience and expertise, some of the CFPs were able to secure a bank loan, hire a manager and become productive.

While previous experience with community involvement in resource planning is not vital, it can allow a community to work through painful conflicts and gain forestry knowledge prior to engaging in the community forest process. Some of the CFPs that have not progressed beyond being chosen as a pilot site may have benefited from conflict resolution prior to being 'thrown into' the CFP process.

CFPs that have secured a forest land base and drawn on community attributes must also be able to comply with the provincial regulatory system. Those CFPs that exhibited a cohesive community and/or demonstrated appropriate experience, expertise and leadership were more likely to gain the support of the MOF, which is vital in order to comply with the regulatory system. Once awarded the community forest tenure, communities are given more control of, and responsibility for, the adjacent forest. Ironically, given the aims of community forestry, this system tends to facilitate an industrial approach to forestry as it limits the management of products other than timber and inhibits alternative harvesting. Despite the community forest tenure, the CFPs have limited rights, as access rights do not extend beyond the timber resource to non-timber

forest products. While the community forest agreement prescribes the botanical and other non-timber products that a community forest agreement holder may harvest, manage or charge fees for, the CFPs are still constrained by the lack of rights that go beyond timber products. Those CFPs that have been successful at harvesting and selling logs to the local mills also experience the limits of the provincial revenue appraisal system. This system is applied to large forest licenses and is geared toward larger-scale production. While there is some reduced stumpage rates for smaller CFPs, in general, it does not reflect the operating costs of smaller-scale forestry, nor does it account for the small size and low AAC of the CFPs. This indicates that those CFPs that have progressed further and are best equipped to contend with the requirements of the first two stages are currently experiencing the constraints of the regulatory system. Moreover, it raises concerns over whether the CFPs, given their small size and limited authority, can manage their resources on this scale and compete within the global forest industry. This task is made doubly hard by potential problems such as waning community interest and support, diminishing timber resources, unforeseen severe forest health concerns and volatile markets.

That being said, through innovation, product development and increased specialization, some of the CFPs may continue to be successful given the right circumstances. Indeed, some of the CFPs are interested in accessing niche markets and providing specialty products (e.g. eco-certified wood products) that may mitigate the constraints of the provincial revenue appraisal system and current market prices. While some CFPs may be better suited to niche markets, given their location and the quality of their forest land base, none of the CFPs have, to date, taken steps to implement these

initiatives. In general, they are constrained by the costs of its implementation and limited market demand for specialty products.

This research has identified the different stages that are necessary for the CFPs to be successful. Their experiences indicate that, despite being able to progress through many of the initial stages deemed necessary for community forestry, the CFPs are constrained by latter stages. Ultimately, the question remains as to whether communities, through the CFPs, can and will succeed in the management of the forest resource. Of the four stages required for successful community forestry, the evidence suggests that some of the CFPs are better equipped to contend with stage one, stage two and some steps of stage three; however, it is at the fourth stage that the CFPs become particularly vulnerable as they must contend with factors that are largely beyond their control. Issues such as forest health, stakeholder conflict, forestry and business knowledge, the regulatory system, volatile economic markets and trade sanctions represent significant hurdles. The CFPs are embedded within the global forest economy and are affected by external forces such as fluctuating prices for forest products and trade policies with more powerful countries. Further, given the current political climate and global tendencies of the forest industry, there is a need to entrench community control, and the value of communities through community initiatives like the British Columbia's CFPP. However, the notion of community-driven goods and the idea of sustaining forest dependent communities through this initiative may be constrained by the market-driven environment of the global forest industry.

That being said, the CFPs also have some agency to pursue their local interests despite their limited economies of scale. The CFPs are not static but may take creative advantage of, and adapt to, external conditions. They may maintain successes at the

local or regional scale and can respond creatively to the political economy of forestry in British Columbia. Through innovation, product development and increased specialization, the CFPs may continue to be successful on a larger scale.

6.2 Contributions and Further Research Questions

This research offers both scholarly and practical contributions. As previously noted, much of the literature on community forestry focuses on the internal pre-conditions that potentially constrain or enable the success of community forestry, such as community support, availability of a forest land base, and the need for a healthy forest. While these are important conditions, this research has sought to identify and include factors beyond the community scale that may influence the 'success' of community forestry. By combining various bodies of literature that have largely been kept separate, this research has sought to produce a broader understanding of community forestry. This research follows the work of Taylor (2000; 2003), who draws attention to fact that community forest initiatives are influenced, and can be constrained by, factors beyond the community, and that the viability of community forest initiatives is not solely a function of community characteristics. This research has sought to conceptualize the constraints and enablers to the implementation and functioning of British Columbia's CFPP at scales above that of a community and its forest alone.

In terms of its practical applications, this research provides governments, communities and stakeholder groups with a better understanding of how British Columbia's CFPP can be successful given various external conditions. Forest dependent communities and forest-use stakeholders can benefit by learning of the strengths, weaknesses, and strategic implications associated with the use of these

community forestry models. Critical knowledge should better enable communities to participate in a more informed and meaningful way in the management of their community forests.

This research also raises additional questions for further research. Given their small scale, are the CFPs able to successfully manage the forest resource? That is, is the 'local' the appropriate scale to manage the forests? The community forestry and CED literature continues to advocate for local management of resources. This research indicates that in some cases the CFPs are socially appropriate as they empower communities to make decisions and choices, and take responsibility for the adjacent forest resource. The research also indicates that, to date, in some cases the CFPs are economically appropriate as they allow a community to generate revenue and provide employment, and to learn to innovate. However, their may be limits to the capacity of local communities, as the 'local' may not be a practical scale to manage forest resources given the tremendous volume of interrelated factors with which CFPs must contend. Therefore, a final question for further research is how to make that which is appropriate become practically feasible. The experience of British Columbia's initial CFPs reveals some hints, but offers no single blueprint for success.

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APPENDIX A: SAMPLE INTERVIEWS WITH RESPONDENTS FROM THE BURNS LAKE CFP

Background to the CFPP - structure and objectives:

1. What is your role with the CFPP?
2. Were communities approached to apply for a CFPP licence?
3. Why did the community want a CFPP?
4. Who was involved in the initial steering committee?
5. Who is involved in the CFPP board?
6. What is the general level of expertise in the CFPP?
7. What is the type or level of First Nation's involvement?
8. Is the CFPP on or adjacent to reserve land? Are there active negotiations with land claims in the Wet'suwet'en's area? Does being involved in the CFPP jeopardize any (potential) land claims?
9. Some of the other pilot projects are experiencing a bottle neck in the process with regards to neighbouring land disputes between various First Nations – has this been an issue for this CFPP?
10. How was the primary objective(s) of the CFPP determined? (e.g. education, more labour intensive harvesting...)

The Community:

11. How aware is the average person of the CFPP and do you think the CFPP has the potential to contribute to a better 'quality of life' within the community? If so, how?
12. Is community forestry now an essential component/trend of the forest industry?
13. Do you think that people want more control of the forests and forest industry? Is there a sense of stewardship amongst community members?
14. How many people have been employed through the CFPP? How do you measure employment?

Potential Limiting and Enabling Factors - Markets and Scale:

15. Are there any potential (or new) markets that the CFPP can access and thus take advantage of its smaller size? ('green', niche, value-added or First Nations markets)?
16. Does community forestry threaten industry or is it too small to worry about?
17. Do other sawmills in the area view the CFPP as competition?
18. As a 'small-scale' operator, can the CFPP market its wood through log sort yards or as a unit with other CFPPs or woodlot owners?

19. In your opinion, do larger forest companies do things any differently than CFPPs? For example, is there a difference between the CFPP and Babine Forest Products or Fraser Lake Saw Mill (in terms of its operations, milling capacity?)
20. In your opinion, what will be the effects of the SLA on CFPP? Is there any mechanism within CFPP to offset the effects of the 19.3 % tariff?
21. The CFPP fought to have an alternative revenue system, why wasn't this implemented? Will this change as a result of the stumpage system shifting to a market-based system in the rest of the province?
22. How will the CFPP handle the Mountain pine beetle infestation – What percent of the forest is made up of pine and spruce? Is the spruce beetle also a threat?
23. Do you think that there a desire for a larger land base? Can the community handle it? What would be the ultimate size?
24. Are community forests at risk – for example, with land claims issues and increasing competition for the land base?
25. What are the biggest hurdles so far and what are the potential hurdles?
26. What are the potential internal factors that may inhibit and promote CFPP? What are the potential external factors that may inhibit and promote CFPP?

Future of the CFPP

27. In your opinion, will the CFPPs be around in ten years?
28. What are the prospects for becoming certified / eco-certification (through FSC etc)?
29. In your opinion, what is the government's long term vision for community forestry? Is the NDP government's vision different from the current Liberal government?
30. Does the CFPP represent a trend in the forest industry of devolving management of resources to the community?

APPENDIX B: ETHICS APPROVAL

SIMON FRASER UNIVERSITY

INFORMED CONSENT BY SUBJECTS TO PARTICIPATE IN A RESEARCH STUDY

The University and those conducting this study subscribe to the ethical conduct of research and to the protection at all times of the interests, comfort, and safety of subjects. This form and the information it contains are given to you for your own protection and full understanding of the procedures. Your signature on this form will signify that you voluntarily agree to participate in this study which requires you to respond to a series of open-ended questions regarding your administration of, or participation in, the BC Community Forest Pilot Project.

I have been asked by Kirsten McIlveen of the Department of Geography of Simon Fraser University to participate in a research study. I understand that my responses will not be kept confidential, but my identity can be kept confidential if I so choose. Further, I understand that I may withdraw my participation in this study, including my responses, at any time.

I understand that my supervisor or employer may require me to obtain his or her permission prior to my participation in a study such as this.

I understand that I may register any complaint I might have about the project with the researcher named above or with Ben Bradshaw, Assistant Professor of Geography, Simon Fraser University, Burnaby, BC V5A 1S6; phone: (604) 291-4515; email: bbradsha@sfu.ca or with John Pierce, Dean of Arts, Simon Fraser University, Burnaby, BC V5A 1S6; phone: (604) 291-4415; email: pierce@sfu.ca.

I may obtain copies of the results of this study, upon its completion, by contacting: Ben Bradshaw, Department of Geography, Simon Fraser University, Burnaby, BC V5A 1S6; phone: (604) 291-4515; email: bbradsha@sfu.ca.

NAME (please type or print legibly): _____

ADDRESS: _____

_____

SIGNATURE: _____

DATE: _____ ONCE SIGNED, A COPY OF THIS CONSENT FORM AND A SUBJECT FEEDBACK FORM SHOULD BE PROVIDED TO THE SUBJECT.

SIMON FRASER UNIVERSITY

UNIVERSITY RESEARCH ETHICS REVIEW COMMITTEE
SUBJECT FEEDBACK FORM

Completion of this form is **OPTIONAL**, and is not a requirement of participation in the project. However, if you have served as a subject in a project and would care to comment on the procedures involved, you may complete the following form and send it to the Chair, University Research Ethics Review Committee. All information received will be treated in a strictly confidential manner.

Name of Principal Investigator: Ben Bradshaw

Name of Researcher: Kirsten McIlveen

Title of Project: Assessing the Capacity of Community-Based Resource Management following Devolution.

Department: Geography

Did you sign an Informed Consent Form before participating in the project? ____

Were there significant deviations from the originally stated procedures? _____

I wish to comment on my involvement in the above project which took place:

_____

(Date) (Place) (Time)

Comments: _____

_____

_____

_____

_____

_____

Completion of this section is optional

Your name: _____

Address: _____

Telephone: (w)_____ (h)_____

This form should be sent to the Chair, University Research Ethics Review Committee, c/o Office of the Vice-President, Research, Simon Fraser University, Burnaby, BC, V5A 1S6.

APPENDIX C: SUMMARY OF BURNS LAKE INTERVIEWS

Community Forestry: 'Making Business out of the Bush'

The following is a report on the interviews carried out in Burns Lake regarding community forestry in the Lakes District. The report is divided up into four sections: a short introduction to the Burns Lake Community Forest; the interviews and the participants; comments from participants that reflect the momentum and support for the community forest; and the concerns of operating a community forest in a limited forest industry. This summary reflects the researcher's idea of what is important in the interviews but does not include all of the information acquired.

The Burns Lake Community Forest

In December 1998, the Corporation of the Village of Burns Lake applied for a Community Forest Pilot Agreement from the Ministry of Forests. The proposal was the result of more than two years of unpaid work by the Burns Lake Community Forest Steering Committee. In July 1999, Burns Lake was one of seven community forest pilot sites announced by then Forests Minister David Zirnhelt. The Burns Lake community forest lies within the traditional territory of the Wet'suwet'en and consists of Crown land and municipally owned property. The land base has a variety of age classes, with pine and spruce stands.

Interviews

During the month of August 2001, the researcher set out to document the opinions and insights of citizens involved in the administration or participation in the Burns Lake Community Forest. This was accomplished in two ways, through observation (attending two meetings and two informal interviews), and through semi-formal, tape-recorded interviews with a cross section of community members who were involved in the community forest process. Four of the participants were contacted prior to arrival in the case study site, four participants were recommended by interviewees and two participants were the result of attending a Lakes District meeting concerning the Mountain pine beetle infestation.

The interviews consisted of a series of open-ended questions concerning different areas: composition of the community forestry board and level of their expertise; the size of the land base of the community forest and market concerns; the remaining community's perception of the community forest; and potential inhibiting factors of the community forest process. The time per interview varied according to the respondent. On average the interviews took 90 minutes. According to the ethics requirements, consent forms were signed for each interview. The information collected will be used to inform the broader question of whether or not community forestry will survive in an increasingly interconnected forest industry.

A profile of participants is as follows: Ken Geunther – manager of community forest, board member. Cliff Manning-president of the community forest, board member. Susan Schinbein – represented the Chamber of Commerce on the original steering committee, not currently on the board. Michael Riis-Christianson - secretary of the community forest. Miles Fuller – was in an advisory position for writing the proposal, and is currently involved in logging and road supervision in the community forest. John Illes – represents the Ministry of Forests, and is the community forester for the Lakes District. Scott Miller - represents the Burns Lake band and sits in a nonrenewable seat on the board. Andrew George – represents the Office of the Wet'suwet'en and sits in a nonrenewable seat on the board. David Ashurst – Burns Lake

community member, and owns and operates a forestry consulting company. Monika Ericson – RPF in the Lakes District, and Burns Lake community member.

The Conditions for Success

What struck the researcher most about the results of the interviews was the momentum behind the idea of the community forest. Many of the 'conditions' outlined in the community forestry and community economic development literature were apparent. Some of the conditions that were present were a dynamic leader, a core group of committed individuals, community enthusiasm for forestry in general and for community forestry in particular, ability to conduct sound business planning, a large enough area with an adequate stock of merchantable timber but small enough that users can develop accurate knowledge of external boundaries, collaboration and information sharing (Blakely 1989, Burda 1998, Roseland and Markey 1999, Vodden 1999, Gunter 2000).

Some of this momentum may be explained as the result of two steps initially taken in the local management of resources. In the mid-1970s the Village of Burns Lake applied for its first community forest. The Village applied to the province for a tree farm licence over much of the same land base as the current community forest; however, a change in the provincial government (New Democratic Party was replaced by the Social Credit Party), resulted in the cancellation of the Tree Farm Licence 50. No compensation was paid to the Village, despite the fact that $20,000 had been spent on the project at the government's invitation.

A second step contributing to the momentum behind the community forest is that the Lakes Land and Resource Management Plan (LRMP) had just been completed prior to the application of the community forest pilot agreement. The area of the community forest surrounds the community of Burns Lake and includes approximately 23, 325 hectares of Crown land within the Lakes Forest District. Much of this area had been marked for special management under the LRMP. The LRMP process resulted in the classification of the entire community forest area. Most of the community forest was designated for Integrated Resource Management (approximately 43%), and the rest being divided for Special Resource Management (approximately 29%), agriculture or settlement (approximately 25%), and for Enhanced Timber Development (3%).

While the LRMP is different from the community forest because it involved many more stake holder groups and is a management plan for the entire Lakes District, many respondents felt that the LRMP process was a catalyst for the community forest as it sensitized the community to consensus decision-making, and identifying many of the players in the community and their various concerns.

Another factor that contributes to the support of the community forest is that the community has a common vision and that, significantly, it allows for First Nations' support. Unlike the LRMP, which was not supported by the First Nations in the Lakes District, the community forest's mandate to keep revenue in the community is something that all groups can unite behind. Participants see it as being able to "keep jobs local and money local, this is what has brought the two groups together, the vision of keeping things local" (Andrew George). Along with uniting Native and Non-native groups behind a common vision, one participant reported that 12 First Nations (many of whom are represented by the Office of the Wet'suwet'en) had agreed to ignore their political differences in order to support the community forest. There was agreement that the community forest offered the First Nations a chance to protect the land and allow them to "have their hands in the management of their territory" (Andrew George).

The support of the First Nations was also a result of the community forestry board adopting a First Nations' decision-making process. Participants claimed that the consensus decision-making process is unique to the Burns Lake community forest. Both the Burns Lake Band and the Office of the Wet'suwet'en required this prior to their support of the community forest. One participant

felt that the First Nations were involved in every step of the community forest process, making it an "incredible model of community consultation." (Scott Miller)

A final factor contributing to community support for the community forest was that participants felt that it contributed to a better quality of life for local people. Comments such as "the money stays in the community...trail cutting, parks and 176 kilometres of trials are planned for the community forest...this is a real real real bonus for the community" (Miles Fuller) indicate community support. One participant felt that the community forest's location, surrounding the urban setting, makes activities such as hiking, camping and fishing easily accessible and safer. It also provides training for youth and some employment. One participant stated that community forestry "has the potential to create new and exciting economic, social, cultural, recreational, and educational opportunities for people – and to me, that means a better quality of life" (Michael Riis-Christianson). One participant felt that "community forestry is about resolving conflict issues in an equitable manner in a local community, thus it strengthens communities" (Miles Fuller).

Functioning in the Forest Industry

Despite the momentum evident from within the community, four areas of concern were identified that could affect the success of the community forest. In order of descending severity, the concerns expressed were the inflexible tenure system, the Liberal government's vision of community forestry, the responsibility of maintaining forest health, and the effects of the countervailing duty as a result of being tied to the larger processing facilities.

The concern identified by most of the participants was the difficulty of maintaining the original vision of the proposal. One participant stated that the most difficult hurdle is "the failure of the Ministry of Forests to recognize community forestry as a unique and different form of forest management." Despite the amendment to the Forest Act to include a community forest tenure, "the thinking of the bureaucracy, particularly in Victoria hasn't changed" (Michael Riis-Christianson). It is felt that the original objectives, of innovative, alternative harvesting methods, are constrained by an inflexible revenue appraisal system[22] which does not reflect the costs of alternative management such as low impact and partial cutting, harvesting non timber products, and managing for non timber values such as campgrounds and ski trails, and the administrative costs of being accountable to the public. The original goal, of utilizing less technology in harvesting, was seen as being constrained by an appraisal system that was designed for production based harvesting.

The second area of concern was that the recently elected Liberal government did not have the political will to support community forestry. Rather, participants felt that the government would try "to fix a broken thing that the NDP did" (Scott Miller) as they would view community forestry as a problem. They expressed concern that the new government would move even further away from the original intent of the community forest of integrated resource management of many values and not just managing for timber harvesting. Moreover, one participant felt that "if the provincial government is serious about promoting community forestry in BC, it must recognize the unique nature of the community forest management system and establish regulations that reflect the additional costs and benefits of it" (Michael Riis-Christianson).

The third concern expressed was over forest health due to the Mountain pine beetle epidemic and the resultant threat of fire. The infestation poses a problem for the community forest, obliging management to cut more wood than the market demands. These concerns were exacerbated by the fact that the federal government had refused to declare the epidemic an emergency.

[22] The appraisal system refers to the process of determining the cost of harvesting, the value from the timber and the resulting profit – some of which goes to the province).

The fourth area of concern was the uncertainty created by the termination of the Soft Wood Lumber Agreement and the effects of the 19.3% countervailing duty imposed by the United States. Lacking its own processing facility, the community forest sells its raw logs to the saw mills and is thus indirectly affected by international markets and the protectionist policies of the US. Given this tie to the larger mills, there is no mechanism within community forestry to offset the effects of the countervailing duty. Despite these concerns, one participant felt that given the efficiency of the saw mills in the area, that Burns Lake and the community forest would be able to survive the countervailing duties and the flooded log market.

The Future of the Community Forest

When asked if community forestry represented a trend in the forest sector and if community forests would likely be around in ten years, the response was varied. Two of the responses were hopeful, however most of the participants were wary of the future of community forestry. Various quotes reflect this: "...I believe that unless the province changes its current attitudes, policies and legislation, most community forest tenures in BC will fail and either revert to the Crown, or become community forests in name only" (Michael Riis-Christianson). Another quote echoes this sentiment, "economically, the trend is globalization and whenever a corporation achieves economies of scale, they make it impossible for the community forests and woodlot owners....we can't compete on a global scale because they can sell products cheaper. This makes it difficult for any smaller group to compete in any market let alone on an international one" (Ken Geunther). One participant felt that despite the support for community forestry, local people did not want more control of the forest sector and stated that "the LRMP, the CORE and the PAS were all huge processes that the NDP put us through, and there is only a certain percent of a community that has the energy and will to get involved. These three processes wore out that percent of people that were willing to participate" (Scott Miller). Finally, "without the legislative and regulatory framework, community forestry is more of a dream rather than a trend" (Michael Riis-Christianson).

Despite the tremendous barrier to the future of the community forest, there was some cautious optimism expressed. Participants expressed interest in eco-certification, through the Forest Stewardship Council, the possibility of selling wood to First Nation's markets in the US, and trying to get processing facilities in order to be able to access 'green' and value-added markets.

Follow-up letter to respondents for the Burns Lake CFP

Kirsten McIlveen
Department of Geography
Simon Fraser University
8888 University Drive
Burnaby, BC V5A 1S6

604 254-9500
kjmcilve@sfu.ca

October 8, 2001

Dear

I am writing to thank you for the time that you took to answer my questions regarding the community forest. I appreciate your insights and input. I am enclosing a summary of the interviews that were conducted in August. I have tried my best to accurately reproduce the sentiments and words that you expressed in the interviews regarding the community forest.

The interviews represent a part of my research and the results will contribute to the broader research question of how community forestry will survive in an increasingly globalized and interconnected forest industry. I plan to conduct more interviews (over the phone) with the other (nine) community forestry pilot projects.

You are probably aware that there is a great deal of interest in community forestry and much literature and theory has been written on this subject. My job is to try to shape the theoretical understanding through the use of real life experience expressed in the interviews. I feel that the interviews reflect experience that can test the theory and my hope is that with the help you have given me that I may be able to sharpen the theoretical focus.

I would appreciate any feedback that you may have. If you have further questions or additional comments or if there is clarification that you would like, please contact me by phone (604) 254-9500, or email by kjmcilve@sfu.ca.

Thanks,

Sincerely,

Kirsten McIlveen

APPENDIX D: LETTER SENT TO THE REMAINING NINE CFPS

Kirsten McIlveen
Department of Geography
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8888 University Drive
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kjmcilve@sfu.ca

Dear January 28, 2002

I am a graduate student at Simon Fraser University, researching the Community Forest Pilot Project in British Columbia.

I have worked in forestry for many years and have also lived for several years in the Burns Lake area. It is a community that I have ties of friendship with and feel a certain sense of belonging to. Given these relations, in August, I commenced my research with 'in person' interviews in the Burns Lake area which aimed to assess the progress of their community forest especially in light of a series of difficult events that originated beyond their community.

As a follow up to that research, I have prepared a survey questionnaire, which I would appreciate your response to, as a representative of your community forest. My goal is to get input from each of the nine other community forest pilot projects.

It is my hope that these interviews will contribute to my broader research question of how community forestry will survive in an increasingly global and interconnected forest industry. More specifically, I would like to find out how your community forest is progressing and whether there are any events or issues that arise beyond the confines of your community which are influencing the success of your community forest.

There is a great deal of interest in community forestry. I appreciate that you have likely been approached by others conducting 'research' and may be growing tired of these requests. My hope is that you will take the time to respond to my questions.

My plan is to compile all the results into one summary document, which I will distribute, back to each of the participating CFPs. It is my belief that this summary of experiences will be useful in future planning and even lobbying.

In terms of the completion of the survey questionnaire, I would ask that you read it and be prepared to respond to it via a phone interview, which we can arrange. Your participation in this research is greatly appreciated, as it will contribute to a fuller understanding of the factors that affect the success of your community forestry initiatives.

Sincerely,
Kirsten McIlveen

Sample close-ended survey for nine CFPs

PROGRESS AND MEMBERSHIP OF YOUR COMMUNITY FOREST

1(a). Is the size of the land base of your community forest 33,500 hectares (as specified in the Ministry of Forests guidelines?)

_____ Yes _____No

1(b). If not, please specify the size of the land base _____

2(a). Is the Annual Allowable Cut (AAC) for your community forest 8,290m^3 (as specified in the Ministry of Forests guidelines?)

_____Yes _____No

2(b). If not, please specify the size of the AAC _____

3(a). At what stage of development is your community forest?

Please select all that apply and indicate the approximate date.

(Month/Year)

_____ Your community forest proposal was chosen as a pilot site

_____ You have negotiated a community forest agreement with the MOF

_____ Your community forest was awarded the community forest tenure

_____ Harvesting rates (AAC) have been confirmed with the MOF

_____ Forest Licence Signed

_____ Forest Development Plan Approved

_____Site Plans have been approved

_____A cutting permit has been approved

_____Harvesting has begun

_____Logs have been sold. If so, to where?

_____Planting (silvaculture requirements addressed)

_____Other_____

_____Not Applicable

3(b). Is this where you expected to be in the community forest process by the Winter of 2002?

_____Yes _____No

3(c). If no, why not?_____

_____

4(a). What were the main objectives of your community forest as outlined in your proposal?

Please select all that apply

_____Partnership with educational institutions; _____Research; _____Optimize employment per cubic meter; _____Harvest of timber; _____Test innovative harvest methods; _____Botanical production; _____Diversify forest use; _____Value-added manufacturing; _____Community economic gain;
_____Other_____;

_____Not sure.

4(b). To date, have you been able to adhere to these original objectives?

_____Yes _____No

4(c). If no, what factors contributed to this inability to adhere to these original objectives?

Please select all that apply

_____Inadequate start-up funds; _____Volunteer burnout; _____ Restrictive provincial regulations;

_____Severe forest health concerns; _____Original objective impractical; _____Your objective has changed; _____Conflict with stake holders; _____Conflict with higher level plans;
_____Other_____;

_____Not sure.

5. How many people sit on your community forest board?

_____1-5; ____5-10; ____10-15; ____15-20; ____>20

6. Who is involved in the governing of your community forest?

Please select all that apply

_____Municipality; _____Regional District; _____Elected official (e.g. mayor);
_____Woodlot owners

_____Ranchers or farmers; _____Trapper or guide; _____First Nations;
_____ MOF;_____Professional forester; _____Forest industry;
_____Environmental community; _____Recreationalists;
_____Tourism industry; _____Interested citizen;
_____Other_____;
_____Not sure.

7. Do you have any paid employees on your community forest board?

_____Yes _____No If yes, how many?_____

FACTORS THAT MAY ENABLE OR LIMIT THE SUCCESS OF YOUR COMMUNITY FOREST

1. Do you consider your community to be a 'forest-dependent' community?

_____Yes ____No

2(a). How would you rate the enthusiasm in your community for community forest?

_____Low ____Medium _____High _____Uncertain

2(b). Has the level of community enthusiasm changed since the community forest was originally proposed?

_____Yes, it has increased _____Yes, it has decreased ____It has remained the same
____Uncertain

2(c). How important is community enthusiasm for the success of your community forest?

_____Unimportant _____Somewhat Important _____Very Important _____Uncertain

3(a). Has your community had any previous experience with community management of the forest resource?

_____Yes ____No

3(b). If yes, what previous experience has your community had?

Please select all that apply

_____Commission on Resource and Environment (CORE);
_____Land Resource Management Plan (LRMP);
_____Land Resource Use Plan (LRUP); _____Tree Farm Licence (TFL);
_____Protected Areas Strategy (PAS); ____Joint Venture;
____Other_____;
____Not sure.

3(c). How important is previous experience with community management of resources to the success of your community forest?

____Unimportant ____Somewhat important ____Very important ____Uncertain

4(a). How would you rate the level of expertise of those involved in your community forest?

___Low ___Medium _____High ____Uncertain

4(b). What is the level of forestry expertise involved in your community forest?

Please select all that apply

____Registered professional forester; ____Certified surveyor;
____People with sound business planning experience;
____People with knowledge and skills related to forestry;
____Other_____;
____Not sure.

4(c). Do you think that forestry expertise is important to the success of your community forest?

____Unimportant _____Somewhat important _____Very important ____Uncertain

5(a). Is the size of your community forest landbase sufficient to meet the management objectives as outlined in your proposal?

_____Yes ____No

5(b). If not, what size would be sufficient to meet your management objectives?

Please select one answer

____Reduce the size of the current landbase; ____Double the size of the current landbase;
_____Triple the size of the current landbase;_____Other_____;
____Not sure.

6(a). Is your AAC sufficient to meet the management objectives as outlined in your proposal?

____Yes ____No

6(b). If not, what AAC would be sufficient to meet your management objectives?

Please select one answer

____Reduce the current AAC; ____Double the current AAC;
____Triple the current AAC; ____Other_____;
____Not sure.

7. To date, which of the following factors have enabled or limited the success of your community forest?

Enabled / Limited

_____ / _____ MOF bureaucracy of the forest approval process
_____ / _____ Transfer of authority from MOF to community
_____ / _____ Relations with neighbours (including First Nations)
_____ / _____ Lack of financial support for start-up costs
_____ / _____ Conflict between different stakeholders
_____ / _____ Revenue appraisal system
_____ / _____ Tenure system
_____ / _____ Severe forest health concerns
_____ / _____ Countervailing duty/tariff
_____ / _____ Dumping penalty
_____ / _____ International trade agreements (e.g. NAFTA, WTO)
_____ / _____ Extra administrative costs of being accountable to the public
_____ / _____ Other _____
_____ / _____ Not sure

8. Have members of the community experienced any benefits from the community forest?
    ____Improved employment opportunities (e.g. work closer to home)
    ____More employment opportunities
    ____Community cohesion
    ____More recreational facilities
    ____More educational opportunities
    ____Greater awareness of the surrounding forest
    ____Other_____
    ____No benefits so far
    ____Not sure

FUTURE PLANS FOR YOUR COMMUNITY FOREST

1. In the future, where will you sell your logs?

   Please select all that apply

   ____The mill that gives you the best price; ____The mill that is most accessible; ____Log-sort yard; ____A local mill; ____Other; ____Not applicable

2. In the future, will the community forest pursue eco-certification?

   ____Yes ____No

3. Is your community forest interested in operating a processing facility?

   ____Yes ____No

4. In the future, what type of products and or services are feasible for your community forest to produce?

   Please select all that apply

   ____Dimensional lumber; ____Non-timber forest products; ____Furniture;
   ____Recreational activities; Eco-tourism;
   ____Other_____; ____Not sure.

5. In the future, what markets can you pursue?

   Please select all that apply

   ____First Nations markets; ____Green markets; ____Other community forests;

   ____Other_____; ____Not sure.

6. How do you rate the current provincial government's interest in the CFPPs?

   ____More supportive than the previous NDP government; ____Less supportive than the previous NDP government; ____The same; ____Other
   _____; _____Not sure.

7. Do you think that community forestry represents a trend in the forest industry?

   ____Yes ____No

8. Have you been able to overcome any of the perceived 'limiting' factors to your community forestry initiative?

   ____Yes ____No

   Please explain_____

APPENDIX E: THE SOFTWOOD LUMBER TRADE DISPUTE

The basis of this current trade dispute centres on the contentious argument that Canada subsidizes softwood lumber exports and is thereby dumping product in the American market. Despite the Free Trade Agreement (1989), and the North American Free Trade Agreement (1994), the United States has restricted the entry of British Columbia's softwood lumber exports and gained leverage over the province's forest policy (Hayter 2000a)

According to Hayter (1992), the American countervail action against Canadian softwood lumber imports actually began in 1982 when the United States Coalition for Fair Canadian Lumber Imports (CFCLI) petitioned the International Trade Commission (ITC) to establish tariffs on Canadian lumber imports. In 1983, the United States Department of Commerce ruled in favour of Canadian interests. In 1986 the CFCLI repetitioned their case to request punitive tariffs on Canadian lumber imports for up to five years. This was resolved by a memorandum of understanding (MOU), which imposed an export tax on Canada's lumber exports to the United States and allowed for higher stumpage payments to provincial governments instead of the export tax. The MOU was then grandfathered into the Free Trade Agreement and was implemented in 1989. In 1996, the MOU was revised and replaced by the Softwood Lumber Agreement that was characterized by export quotas and a system of penalties for exceeding the quota (Hayter 2000a). This agreement ended in May of 2001.

With the end of this agreement, the dispute over whether the Canadian forest industry is unfairly subsidized surfaced once again. As of 2002, a 19.3 per cent interim countervailing duty was imposed on Canadian softwood lumber exports to the United States and a further 'anti-dumping' duty of 12.6 per cent was added as a result of the trade dispute. British Columbia's forest sector provided approximately 123 600 direct and indirect jobs in 1996, nearly eight percent of the province's total employment (Statistics Canada 2002:2). Due to these punitive export duties, it is estimated that 15 000 jobs in British Columbia have recently been lost, and a further 30 000 jobs are threatened. Coastal loggers and sawmill workers have been most affected by the tariffs, as 21 mills (equal to 73 per cent of the production base), have shut down and 12 500 employees have been laid off (Statistics Canada 2002).

APPENDIX F: SUMMARY TABLE: REFINED CONCEPTUAL MODEL OF CONSTRAINTS AND ENABLERS OF THE 10 CFPS

Level of Development	Stalled					Progressing Slowly			Well-Progressed	
Community Forest Pilots [1] CFPP Issue Date [2] CFPP Offer Date	Likely Community Forest Corp. Oct24 2000[2]	Islands Community Stability Initiative Jul6 1999[2]	NIWC Jul5 1999[2]	Nuxalk First Nation Oct24 2000[2]	Village of McBride and District Aug15 2002[1]	Bamfield Huu-ay-aht Sep20 2001[1]	District of Fort St James Mar7 2001[1]	HPWPC Jul27 2000[1]	Esketemc First Nation Feb16 2001[1]	Burns Lake Community Forest Society Jul7 2000[1]
Stage 1										
degree of competition for the forest land base	+	-	-	-	+	+	+	+	+	+
quantity of the forest land base	+	-	-	-	+	+	+	+	+	+
quality of the forest land base	NA	NA	NA	-	+	-	+	+	+	-
location of the forest land base	+	-	+	-	+	-	+	-	+	+
Stage 2										
community support	+	-	-	-	+	+	-	+	+	+
appropriate expertise and leadership	-	-	-	-	+	+	+	-	+	+
experience with community involvement in resource management	+	-	-	-	-	+	+	+	+	+
Stage 3										
degree of control and ownership of the forest land base under the community forest tenure	-	-	-	-	NA	NA	NA	+	+	+
requirements of the provincial revenue appraisal system	-	-	NA	-	NA	NA	NA	+	+	+
degree of support from the district and regional MOF	-	-	-	-	+	+	+	+	+	+
Stage 4										
degree of export orientation and 'staple' dependency	NA	NA	NA	NA	NA	NA	NA	+	+	+
access to niche markets and provision of specialty products	NA	NA	NA	-	NA	-	-	+	-	-
current market prices	NA	NA	NA	NA	NA	NA	NA	+	+	+
trade relations with the United States	NA	NA	NA	NA	NA	NA	NA	-	+	+

\+ Significant factor / CFPP was able to successfully deal with this issue
\- Significant factor / CFPP viewed this issue as a barrier to success
NA Not applicable / CFPP has not yet reached this stage