A Preliminary Review of British Columbia's Community Forest Pilot Project

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

Ben Bradshaw Department of Geography University of Guelph Guelph, ON N1G 2W1 Canada

> Amid recent crises in British Columbia's forest sector, forest-dependent communities have increasingly called for greater involvement in forest planning as they realize that traditional forest management does not effectively address their interests. In response, the provincial government introduced the Community Forest Pilot Project (CFPP) and offered forest tenures to ten communities in 1999 and 2000. Despite high hopes, the initial progress of the original pilots through to March, 2004, with the exception of a few isolated success stories, has been less than impressive. While some explanation for this can be found within the attributes and circumstances of individual pilots, surveying of key informants from each pilot suggests that there are also aspects of the CFPP as designed and implemented that appear to have made it difficult for some community forests to achieve their aims.

Introduction

The debate in British Columbia's Legislative Assembly on the afternoon of December 1, 1998 had a sadly familiar ring. It centred on mill closures and job losses in forestry, the province's dominant economic sector, and what the government of the day had to do in order to prevent further decline. Then Forests Minister, the Honourable David Zirnhelt, expressed what all British Columbians have long known: "We do recognize the importance of the forest industry to the economy of British Columbia...as goes forestry, so go some of the communities in British Columbia" (British Columbia, 1998).

Indeed, the province's forest industry, which is dominated by high volume timber extraction and clear-cut logging, has provided significant wealth to many British Columbians, employment and stability for many communities, and sizable revenues for the provincial treasury (Marchak et al., 1999; Hayter, 2000). However, its mass export-oriented production has made it, and forestdependent communities, vulnerable to commodity market fluctuations, resulting in recurring boom and bust cycles (Robson, 1996; Hayter, 2000; Stiven, 2000). Additionally, environmental groups have long argued, and others have increasingly agreed, that the province's forest resource base is nearing exhaustion, which has added to the uncertainty felt by forest-dependent communities (Clapp, 1998; Markey et al., 2000).¹ To many observers, the sector had reached a state of crisis by the late 1990s (e.g. Beckley, 1998; Marchak et al., 1999).

Undoubtedly related to these circumstances, forest-dependent communities in British Columbia have increasingly called for greater involvement in provincial forest planning as they have come to realize that traditional models of forest management do not effectively address their 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). These typically single-industry towns are, therefore, demanding a greater say over the use of 'their' local forests. Community forestry is increasingly seen as one of several ways by which this desire can be met (Duinker et al., 1991, 1994; Beckley, 1998; Inglis, 1999; Gunter, 2000). Hence, the post-1998 emergence of British Columbia's Community Forest Pilot Project (CFPP) reflects not only the industry's 'crisis state', but also demands from forest-dependent communities to control their fate.

The aims of the CFPP, and the community forest tenures that were developed to facilitate it, reflect this dual rationale. In addition to empowering communities through the allocation of forest land and managerial autonomy to the local scale, the CFPP seeks 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, 1997a: 1). Expectations of the project are high as it represents a significant break from past state-directed forest management. Given these expectations and general interest in the project throughout British Columbia and, arguably, Canada, a preliminary review of the CFPP including the status of the ten original pilots is warranted. This is especially so in light of the modest progress of many of the community forests. Offers to seven of the community forest pilots were granted in mid-1999, followed by three more in late 2000. As of March 2004, which represents the final point at which research was completed for this preliminary review, just seven of the original ten pilots had received provincial clearance to commence harvesting of forest resources and, of those, just four had done so.

Why was this so? And what, if any, elements of the CFPP appear to have contributed to this less than satisfactory state of affairs? This paper addresses these questions. More exactly, it traces the development of the CFPP, documents the early relative progress of ten pilots, and identifies, based on key-informant surveying, aspects of the project as designed and implemented that appear to have stymied progress. Before this is done, however, the global phenomenon of community forestry is described in order to contextualize the recent British Columbian experience. While the CFPP certainly represents a novel and even courageous initiative in a sector that has long been dominated by industrial interests, from our preliminary review it is not clear that the provincial architects and implementers of the initiative sufficiently considered and made accommodations for a number of fundamental barriers facing the community forests. Continued failure to do so may diminish public enthusiasm for the pilot project and even hinder its overall success.

The Phenomenon of Community Forestry: Characterizations and Manifestations

For many of its proponents, British Columbia's CFPP is supposed to facilitate a form of forestry that is distinct from conventional, so-called 'industrial-style' forestry. Based on a review of the literature that characterizes community forestry, however, this need not be so. Indeed, for some scholars (e.g. Hausler, 1993), community forestry is simply *small-scale industrial forestry*, or community forestry for primarily economic gain. Under this model, the intensity and form of harvesting is not necessarily different from those of large-scale industrial forestry; rather, the fundamental difference, beyond the scale of operation, is that the community owns and manages the resource base to their needs and ends rather than those of a private, usually non-local, firm. For other scholars (e.g. Hammond, 1991; M'Gonigle and Parfitt, 1994; Nadeau et al, 1999; Reed, 1999), community forestry is necessarily *ecological forestry*, which implies a commitment to ecologically sustainable harvesting methods and, ultimately, to achieving a reversal of the perceived current trend of deforestation. Finally, other scholars (e.g. Eckholm et al., 1984; Foley and Barnard, 1984; Cernea, 1993; Sharma, 1993) researching primarily in a developing world context, commonly conceive of community forestry as *social forestry*, which implies a commitment to improving social conditions among the rural poor through the wise use of forest resources such as fuelwood and building supplies.

Of course, the key characteristic of community forestry that transcends these differences in form or style is community control, if not ownership, of the forest resource base. While for some community forests, this is a given, for many others, including the initial pilots under BC's CFPP, community forestry is a process through which individuals who are dependent on forest resources seek to secure more power and gain greater autonomy over their lives (Brendler and Carey, 1998; Burda, 1999; Carlsson, 1999; Duinker and Pulkki, 1998; Haley, 1997; Inglis, 1999).

Reflecting both of these situations, community forestry is practiced all over the world. For example, in Mexico, eighty percent of forest lands are communally owned as 'ejido' or 'communidades indigenas', and many of these generate significant wealth and employment based on small sawmills and value-added shops (Taylor, 2000). 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 sole 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 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 et al., 2004). 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 et al, 2004).

Community forestry has had a presence in Canada as well, albeit a modest one (see Duinker et al., 1994). In British Columbia, more specifically, several commissions (Sloan, 1945; Pearse, 1976; and Peel, 1991) have recommended the idea of community forests. Notwithstanding limited action to such an end, some community forests have developed, typically based on unusual circumstances. For example, as a result of unpaid taxes, the municipality of North Cowichan acquired 4,800 hectares of land in the 1920s. In 1946, the community successfully petitioned for a change in the Municipal Act to allow it to put the land in a forest reserve. Based on conventional, industrial-style harvesting methods, the community forest has long generated profits which are fed back to the community for their use (Hayter, 2000). Another example of community forestry in British Columbia is the Mission Municipal Forest 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 41,200m³. The goals of the community forest are to be a self-funding department, to optimize revenue over a

five-year cut control cycle rather than one-year periods, and to manage for multiple forest resource values such as recreation, green-spaces, forest education, visual aesthetics and biodiversity. Notwithstanding this less conventional model of management, the Mission forest has produced considerable net revenues, which have been used to support a number of community initiatives (Allan and Frank, 1994). Finally, the Revelstoke Community Forest Corporation (RCFC) was formed in April 1993 to manage and operate Tree Farm Licence (TFL) 56 which was purchased from Westar Timber Ltd. Along with three local forest industry partners, the corporation is owned by the City of Revelstoke, which holds 100% of the shares in the corporation while the industry partners purchased timber removal rights to a portion of the licence's Annual Allowable Cut (AAC).

In contrast to these examples, the CFPP represents a deliberate initiative of the provincial government to create an alternative form of forest tenure and, ideally, management. Its emergence and progress is described in the next section.

The Emergence and Progress of British Columbia's CFPP

Given the importance of the forest resource to British Columbia generally and some communities in particular, and the growing dissatisfaction with its management with respect to job security and ecological integrity, support for community forestry in British Columbia emerged from both forest-dependent communities (e.g. Beckley, 1998) and industry critics (e.g. Hammond, 1991; M'Gonigle and Parfitt, 1994; Nadeau et al., 1999; Reed, 1999). In response, the provincial government initiated a process to develop some type of community forest tenure, the first step of which saw the establishment, in 1997, of a multi-stakeholder Community Forest Advisory Committee (CFAC). This committee was given the tasks of developing tenure models, recommending and applying selection criteria to identify pilot community forests, and evaluating project outcomes (British Columbia, Ministry of Forests, 1997b). The CFAC sought to create a community forest tenure that would allow for innovative forest practices, and extend holders' rights of access 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 (British Columbia Community Forestry Forum, 2002).

In July 1998, legislation was passed to permit Community Forest Agreements. With this enabling legislation in place, the province initiated the Community Forest Pilot Project (CFPP) under which forest-dependant communities were invited to submit proposals to secure five-year probationary forest tenures, thereafter renewable for a period of 25-99 years. By January 1999, twentyseven proposals had been submitted. The CFAC evaluated the proposals based on criteria such as location, wood supply, and the quality of business and preliminary forest management plans (British Columbia, Ministry of Forests, 2000). From the twentyseven proposals received, agreements were offered to seven pilots in June/July, 1999, and a further three in October, 2000, representing a variety of regions from the coast to the interior, and legal entities from Native bands and cooperatives to municipalities and corporations (see Table 1). The original ten pilots also vary with respect to their aims and nature. While all have a commercial agenda (i.e. they see community forestry as an opportunity to create employment and some revenue for the community), only some, such as the Burns Lake Community Forest Corporation, practice conventional industrial-style forestry. Others, such as the Harrop-Proctor Community Cooperative, are less interested in processing large quantities of timber and instead are choosing to focus on watershed protection and non-timber forest products. Still others, such as the Bamfield-Huu-ay-aht Community Forest Society are focusing on education, recreational opportunities, and the development of community cohesion.

Before any of these goals can be achieved, each of the pilots is obliged to negotiate with the province to secure a Community Forest Agreement (i.e. have it issued, not just offered) and gain approval for its forest management plans. This secondary task has proven more difficult for some pilots than others. As of March 2004, just seven of the ten original pilots had secured all provincial approvals, and of these, just four had begun to harvest timber; three had failed to even arrive at an agreement with the province (see Table 1). In order to explain these circumstances, especially with respect to the design and implementation of the CFPP, surveying of key informants² from each of the ten pilots was completed, the results of which are drawn upon in the next section.

Table 1The characteristics and progress of the CFPP's ten original Community Forests as of March 2004 (British Columbia, Ministry of Forests, 2004)

Name (and Location)	Agreement Signed	Management Plan Approved	Size (ha)	AAC (m ³)	Harvest years/ annual rate (m ³)
Agreements offered June/July 1999					
Bamfield/Huu-ay-aht Community Forestry Society (Vancouver Island)	Sep. 2001	Apr. 2003	418	1,000	
Burns Lake Community Forest Ltd. (Northern Interior)	Jul. 2000	Sep. 2000	23,325	54,026	3/56,546
North Island Woodlot Association (Vancouver Island)					
Esketemec First Nation (Northern Interior)	Feb. 2001	Aug. 2001	25,000	17,000	2/20,690
District of Fort St. James (Northern Interior)	Mar. 2001	Oct. 2001	3,582	8,290	
Harrop-Proctor Watershed Protection Co-op (Southern Interior)	Jul. 2000	Feb. 2001	10,860	2,603	3/1,457
Islands Community Stability Initiative (Queen Charlotte Is.)					
	Agreemer	its offered October	r 2000		
Likely Community Forest Corp.	Mar. 2003	Mar. 2003	14,000	12,231	1/6306
Village of McBride	Aug. 2002	Feb. 2003	60,860	50,000	
Nuxalk First Nation (North Coast)					

Note: '---' indicates that no progress was made on this stage

Great Expectations—Poor Preparations?

British Columbia's CFPP reflects a new direction in public forest management in the province and Canada more generally. While there are models of local community involvement in forest management within Canada, British Columbia's community forests represent a comprehensive network of community-managed forests on public land that is unique in the Canadian context. Moreover, the project is politically popular as it responds to increasing demands for the democratization of forest management. Unfortunately, the limited initial progress of the ten original pilots may have deflected some of this political capital. The pilots have certainly taken longer to reach the point of harvesting and marketing wood products than anticipated. This is due to a variety of reasons, some of which lie with the individual communities themselves (see McIlveen and Bradshaw, under review). For example, some agreements were offered to communities with significant infighting among members over issues such as the legitimacy of community leadership or the ownership of regional lands, and this has sometimes precluded cooperative and progressive action. In other cases, changes in community leadership have led to the community forest having lower priority. Still others were simply unprepared to take on the management of the community forest, especially given insufficient experience and expertise, coupled with the endemic problem of 'volunteer burnout'. These internal factors have severely constrained and delayed some of the community forests.

Other reasons for the slow progress of many of the community forests rest beyond the communities themselves, such as with the provincial government and its administration of the CFPP. These include insufficient support for start up costs, the limited transfer of property rights, inconsistent support from officers of the Ministry of Forests, and an onerous revenue appraisal system. Each of these is further explored below.

Support for Start-Up Costs

Many of the pilots found it difficult to move through the approval process and commence harvesting because of high startup costs. For example, one would-be community forest found that the costs of hiring a registered professional forester, carrying out surveys, and generating an initial feasibility study were simply too burdensome. As largely voluntary initiatives, many of the pilots have no cash reserves. Further, given the limited (five-year) time horizons of the initial community forest agreements, the pilots have no collateral against which to borrow. Without seed funds, many of the pilots have simply not been able to fulfil their proposed plans. Interestingly, one Native-owned community forest pilot initially struggled with finding funds to begin the community forest process, but eventually secured loans through the Department of Indian Affairs and from the Band Council. With these funds, the pilot was able to gain approvals and commence harvesting, which has thereby enabled them to repay their loans. This successful example suggests that seed money from the Province in the form of repayable loans would have been appropriate and feasible.

Transfer of Property Rights

The spirit of community forestry is that communities are to gain control of, and responsibility for, whole forests and not just timber. Unfortunately, British Columbia's new community forest tenure does not automatically provide the communities with access rights to non-timber forest products. Furthermore, given that the province still retains the ultimate right to regulate the use of its forest resources even within community forests, most evidently with regards to establishing annual cut allowances, there is understandable frustration among the pilots over their limited property rights. For example, one pilot has been obliged to take control and responsibility for their community forest yet is not allowed to regulate recreational uses of the land or non-timber forest products in order to generate revenue. The effect of this limitation has been the inadvertent promotion of community forestry as nothing more than small-scale industrial forestry. As one manager put it, "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 bias has enabled this pilot to generate some revenue through harvesting and selling logs, it has also prevented the managers from implementing many of their original objectives such as horse logging and trail-building. This novel form of forest tenure has resulted in some confusion over the degree of community control of the forest land base. At a minimum, the rules surrounding property rights need to be clarified. More so, if the CFPP truly aims to test the feasibility of community forestry, it should transfer ownership of all forest products and uses to the community.

Support from Personnel within the Ministry of Forests

For the pilots to progress, it appears vital that they gain the support and confidence of personnel within the Ministry of Forests. For example, the manager of one pilot felt that Ministry personnel considered their would-be community forest to be unfeasible due to a lack of available land, and thereby were uncooperative as the pilot sought its necessary approvals. Another manager felt that, initially, the district officers of the Ministry of Forests stalled the approval process as they felt threatened by job loss if too much timber volume was allocated to community forests. Contrasting these examples, in one case, a pilot was able to gain the support and cooperation of district personnel with the Ministry of Forests, notwithstanding a lack of forestry experience and business expertise, and was able to pursue an ecosystem-based forest management approach. Similarly, support from the district Ministry of Forests was essential for another pilot to resolve severe stakeholder conflicts that initially threatened its feasibility. While inconsistency of practice among bureaucrats may be inevitable, the overall degree of support offered to the pilots from Ministry personnel could have augmented through directives from above that made it clear that the architects of the CFPP wanted to see it succeed.

The Revenue Appraisal System

For those pilots that have secured all the necessary approvals and reached the point of harvesting and selling timber, British Columbia's forest revenue appraisal system has been onerous. This system, which determines royalty payments to the crown for the use of timber primarily via annual rental fees and stumpage rates (i.e. payments per unit volume of wood), has long been applied to large forest licensees who seek economies of scale through largescale production. While the stumpage rates levied against the community forests are lower than those of their corporate counterparts, most managers argued that the rates still fail to adequately account for their higher cost, labour intensive forestry methods (such as horse logging), small clear cuts and partial cutting. They also feel that the costs of lower impact forest management, such as those associated with building narrower roads or undertaking complete stream assessments, are not accounted for in the stumpage that they are required to pay. As one manager put it:

...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.

It is no wonder then that most of the pilots that have proceeded to the stage of harvesting have produced conventional timber through conventional methods of harvesting.

One pilot has bucked this trend. The managers of the Harrop-Proctor Community Cooperative sought to gain 'eco-certification' status with an environmental NGO, the Forest Stewardship Council, in order to access niche timber markets. Certification was achieved and the pilot subsequently secured a premium contract to produce broomsticks for the Canadian publisher of the Harry Potter series. The problem with this story is that the pilot had to fight with Ministry officials to secure a lower annual allowable cut. Lower cuts imply lower stumpage revenues, and this was deemed problematic by the province. If community forestry is supposed to look different than conventional forestry, then the revenue appraisal system may have to look different as well. Indeed, given the desire to promote self-sufficiency among forest-dependent communities and the 'pilot' status of the project, suspending royalty payments beyond annual rental fees for the initial five-year period may have been appropriate and feasible.

Conclusions

This paper has offered a preliminary review of a novel and important policy initiative in British Columbia—the Community Forest Pilot Project. In response to both a perceived 'state of crisis' in the forest sector in the late 1990s and increasing calls from forestdependent communities for more say over provincial forest management, the provincial government introduced a pilot project that offered community forestry tenures to ten communities in 1999 and 2000. In British Columbia and even beyond, expectations for the Community Forest Pilot Project have been high. Unfortunately, the progress and performance of many of the original ten initiatives as of March 2004 was less than impressive. Indeed, as of year four, only four of the original ten pilots had produced any marketable timber.

While some explanation for this situation can be found within the attributes and circumstances of individual pilots, surveying of key informants from each of the pilots suggests that there are also aspects of the policy initiative itself that appear to have made it difficult for the would-be community forests to successfully achieve their aims. For example, many pilots lacked sufficient start-up funds with which to complete even simple initial tasks such as forest surveying. Most, if not all, of the pilots have discovered that their rights to the forest are not as complete as originally expected, making it difficult to expand into non-timber forest resource development. Additionally, while some of the pilots have received considerable support and cooperation from Ministry of Forests personnel, others have found provincial government staff to be uncooperative and even hindering. Lastly, all of the pilots have complained that the conventional revenue appraisal system for forestry in British Columbia is too onerous and, indeed, even inappropriate for community forestry as it is based on, and hence encourages, high volume extraction of an undifferentiated commodity - timber.

While certain communities evidently worked through some of these difficulties and achieved success largely on their own, they, and certainly the other pilots that failed to move beyond the initial offer of a community forest license, will require more active government support in order to fulfill the spirit and objectives of community forestry. If the British Columbian provincial government genuinely wants to open the door to alternative forms of forestry in the province it needs to stand behind and support, in tangible ways, the stated objectives of the Community Forest Pilot Project to increase community involvement in forestry, to encourage innovative forest management models, and to provide jobs and revenue that contribute to long-term community stability. Such overt support from above, be it in the form of stumpage accommodations or short term interest-free loans, should not be viewed as antithetical to the spirit of community forestry (Bradshaw 2003); rather, it should be accepted as a necessary crutch to ensure that this spirit is achieved.

Notes

1. This is a point of considerable debate. Industry critics such as M'Gonigle (1997) and Marchak et al. (1999) contend that the resource has been mismanaged, especially with respect to the establishment of the annual allowable cut (AAC), which they argue is regularly set above ecologically sustainable levels. However, Hayter (2000) notes that in the 1990s, not all of the AAC was consumed for market and cost reasons.

2. Face-to-face interviewing of key-informants was completed in the case of the Burns Lake Community Forest Corporation. From this, a standardized questionnaire was developed, which was mailed out to the managers from each of the other nine pilots and completed via telephone over the subsequent month.

References

Allan, K. and Frank, D. (1994). Community forest in British Columbia: models that work. *The Forestry Chronicle*, 70(6), 721-24.

Beckley, T. (1998). Moving toward consensus-based forest management: a comparison of industrial, co-managed, community and small private forests in Canada. *The Forestry Chronicle*, 74(5), 736-744.

Booth, A. (1998). Putting forestry into First Nations' resource management. *The Forestry Chronicle*, 74(3), 347-352.

Bradshaw, B. (2003) Questioning the credibility and capacity of community-based resource management. *The Canadian Geographer* 47(2), 137-150

Brendler, T. and Carey, H. (1998). Community forestry, defined. *Journal of Forestry*, 96(3), 21-23.

British Columbia. (1998). Official Report of Debates of the Legislative Assembly (Hansard), Volume 12, Number 16, p.10829, December 1.

British Columbia, Ministry of Forests. (1997a). Jobs and Timber Accord Pilots New Community Forests Tenure. British Columbia: Ministry of Forests Website: *http://www.for.gov.bc.ca/pscripts/pab/ newsrel/mofnews.asp?refnum=1997%3A093* 9 Dec. 2001.

——. (1997b). Project History. British Columbia: Ministry of Forests Website: *http://www.for.gov.bc.ca/hth/community/history.htm* 9 Dec. 2001.

——. (2000). Status of Community Forest Pilot Agreements. British Columbia: Ministry of Forests Website: *http://www.for. gov.bc.ca/hth/community/documents/CFPA* 1 Sept. 2000.

——. (2004). Community Forests. British Columbia: Ministry of Forests Website: *http://www.for.gov.bc.ca/hth/community/index.htm* 20 July 2005.

British Columbia Community Forestry Forum. (2002). Facilitating discussion and information sharing about community forestry. University of Victoria. March 14-16, 2002, Victoria British Columbia

Brown, B., Leal-Marino, D., McIlveen, K., and Tan, A. (2004). Contract Forest Laborers in Canada, the US and Mexico: Land Tenure, Labor, Trade and Community Forestry in the NAFTA region. The Jefferson Center for Education and Research.

Burda, C. (1999). Community Forestry. Discussion paper, University of Victoria.

Carlsson, L. (1999). Still going strong, community forests in Sweden. *Forestry*, 72(1), 11-26.

Cernea, M. (1993). Strategy options for participatory reforestation: focus on the social actors. *Regional Development Dialogue*, 14(1), 3-33.

Clapp, R.A. (1998). The resource cycle in forestry and fishing. *The Canadian Geographer*, 2(2), 129-144.

Duinker, P.N., Matakala, P. and Zhang, D. (1991). Community forestry and its implications for northern Ontario. *The Forestry Chronicle*, 67(2), 131-135.

Duinker, P.N., Matakala, P., Chege, F. and Bouthillier, L. (1994). Community forests in Canada: an overview. *The Forestry Chronicle*, 70(6), 711-719.

Duinker, P.N. and Pulkki, R.E. (1998). Community forestry, Italian style: the Magnifica Communita di Fiemme. *The Forestry Chronicle*, 74(3), 385-392.

Eckholm, E., Foley, G., Barnard, G. and Timberlake, L. (1984). *Fuelwood: The Energy Crisis That Won't Go Away*. London: International Institute for Environment and Development.

Foley, G. and Barnard, G. (1984). Assessing the Demands for Wood, Earthscan Report 15.

Gunter, J. (2000). Creating the conditions for sustainable community forestry in BC: a case study of the Kaslo and District Community Forest. Masters Thesis. Burnaby, B.C.: Simon Fraser University. Haley, D. (1997). Community forestry in BC: opportunities and constraints. In P. Mitchell-Banks (Principal Researcher) and D. Haley (Project Leader), *Community Forestry in BC: Opportunities and Constraints*. Burnaby: Science Council of BC.

Hammond, H. (1991). Seeing the Forest Among the Trees: The Case for Wholistic Forest Use. Vancouver: Polestar Press Ltd.

Hausler, S. (1993). Community forestry—a critical assessment: the case of Nepal. *The Ecologist*, 23(3), 84-90.

Hayter, R. (2000). Flexible Crossroads: Restructuring of British Columbia's Forest Economy. Vancouver, British Columbia: UBC Press.

Inglis, A.S. (1999). Implications of devolution for participatory forestry in Scotland. *Unasylva*, 199(50), 45-50.

Marchak, M.P., Aycock, S.L. and Herbert, D.M. (1999). *Falldown: Forest Policy in British Columbia*. Vancouver, BC: David Suzuki Foundation and Ecotrust Canada.

Markey, S., Pierce, J.T. and Vodden, K. (2000). Resources, People and the Environment: A Regional Analysis of the Evolution of Resource Policy in Canada. *Canadian Journal of Regional Science*, Autumn, 427-454.

McIlveen, K. and Bradshaw, B. (under review) Community Forestry in British Columbia, Canada: The Role of Local Community Support and Participation, *Local Environment*.

M'Gonigle, M. (1994). Reinventing British Columbia: Towards a New Political Economy in the Forest. In T. Barnes and R. Hayter (eds). *Troubles in the Rainforest: British Columbia's Forest Economy in Transition*. Canadian Western Georgraphical Series No. 33. Victoria: Western Geographical Press.

M'Gonigle, M. and Parfitt, B. (1994). *Forestopia: A Practical Guide* to *The New Forest Economy*. Madeira Park, BC: Harbour Publishing.

Nadeau, S., Shindler, B. and Kakoyannis, C. (1999). Community forestry. *The Forestry Chronicle*, 75(5),747-754.

Pearse, P. (1976). Report of the Royal Commission on Forest Resources—Timber Rights and Forest Policy in British Columbia. Victoria. Peel, A.L. (1991). Forest Resources Commission—The Future of Our Forests. Victoria.

Reed, M. (1999). Jobs talk: retreating form the social sustainability of forestry communities. *The Forestry Chronicle*, 75(5),755-763.

Robson, R. (1996). Government policy impact on the evolution of forest-dependent communities in Canada since 1880. *Unasylva*, 47(186), 53-59.

Sharma, R. (1993). The socioeconomic evaluation of social forestry policy in India. *Ambio*, 22(4).

Sloan, G. (1945). Public Inquiries Act—Report of the Commissioner Relating to the Forest Resources of British Columbia. Victoria.

Stiven, R. (2000). A study of social involvement in forestry in British Columbia and Quebec. A Millennium Award Study supported by the Millennium Forest for Scotland Trust, the Millennium Commission and the Forestry Commission.

Taylor, P.L. (2000). Producing more with less? Organizational problems of community forestry in Durango, Mexico in an era of trade liberalization. *Rural Sociology*, 65(2), 253-274.