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Community forestry in British Columbia: Policy progression and public participation ☆

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Abstract

It is 17 years since the British Columbia Ministry of Forests instituted the Jobs and Timber Accord of 1997, which established British Columbia's (BC) Community Forest Pilot Program and formally introduced Community Forest Agreements into the provincial forest policy framework. For this special issue we present the results of a census of all active members of the BC Community Forest Association, evaluating the program using the method demonstrated by Maryudi et al. (2012) where evaluation is guided by the original aims of the policy; in this case the Community Forestry Initiative of BC. We sought Community Forest Organisations' views on the strengths and limitations of the initiative, whether they were equipped to achieve the aims expected of the policy, and the degree to which the policy aims were their priorities. We found that community forests in BC assess themselves as having been broadly successful in terms of policy aims of public participation and environmental stewardship of forests, but that the policy has not enabled economic diversification. Corroborating other studies we report that community forests found that encouraging participation requires sustained effort, that diversifying from conventional forestry is desired but not usually achievable and that motivations for involvement in community forests are diverse.

Introduction

Globally there has been a move away from top-down management of government owned forests towards various models of community control (Agrawal et al. 2008). This move has had differing levels of success which have been analysed in a variety of ways (see Conroy 2002, Sikor 2006). Indeed, globally the challenges of community forestry have been two-fold: the development of community forest tenures that are adapted to existing management frameworks; and the introduction and implementation of those models. The experience in British Columbia reflects this: certainly, there had been periodic calls to allow a more formalized role of communities in forest management. However, it was not until 1998, when the Provincial Legislature passed Bill 34: *Forest Statutes Amendment Act* (Legislative Assembly of the Province of British Columbia 1998), that both of these challenges were formally introduced to British Columbia. A new form of forest tenure – the Community Forest Agreement – was introduced, and subsequently policy commitments were made to enhance and expand the program. The development of this new tenure, the pilot projects that followed, and the anticipated refinement of the structure of the tenure and its general applicability are collectively referred to as the Community Forestry Initiative (CFI).

A review of community forestry definitions reveals that benefits to communities and local participation in the management of forested lands are common principles. By these criteria, Brendler and Carey (1998) define community forestry as "... managing forests with the express intent of benefiting neighbouring communities" (p. 21), similar to that proposed by Duinker et al. (1994) in the Canadian context as "a tree dominated ecosystem managed for multiple community values and benefits by the community" (p. 712). Three principles commonly associated with community forestry are that (1) local residents have access to forested lands; (2) opportunities for the participation of local residents in management decisions relating to forested lands exist; and (3) an effort is made by communities to protect and maintain the forest they have the responsibility of managing (Brendler and Carey 1998). In the broader context of forest management, the corollary is that community values will carry significant weight in the development of management objectives, and that communities'

involvement in the process of arriving at those objectives will be achieved. In the development of the BC CFI, the Ministry of Forests¹ (MoF) clarified their interpretation of community forestry, offering some explanation of what constituted desirable outcomes from community forestry in BC:

“... community forestry can be loosely defined as community involvement in local forest lands for community benefits. It is a means of maintaining forest-related community lifestyles and values, while providing jobs and revenue that contribute to community stability.” (1997)

Beyond these definitions community forests in BC have been charged with many additional responsibilities, amongst them conflict mitigation over valuable environmental resources and homelands, community empowerment, the implementation of ecologically-based forestry, and the restoration of community links with the environment (Bullock et al. 2009; Berkes 2010).

Community forests are expected to provide for many different and competing needs, including those of government, industry, community and First Nations stakeholders (Bullock et al. 2009). This wide range of expectations has been criticized as unrealistic and undeliverable (Bradshaw 2003). Given these expectations, what has been the experience and what have the outcomes been, now more than a decade and a half later? This paper begins with explaining the background of community forest tenure in BC. This is followed by the development of criteria

¹ The BC Ministry of Forests has been known under various names since the 1940s, including the current title Ministry of Forests, Lands and Natural Resource Operations and its previous name Ministry of Forests and Range. In order to minimise confusion, Ministry of Forests (MoF) is used throughout the text of the article in reference to the evolving section of the BC government responsible for forests.

to assess community involvement and benefits and challenges in forest management and an assessment of the outcomes according to the method used by Maryudi et al. (2012).

This study presents results that are representative of the 38 active Community Forest organisations (CFOs) in British Columbia (BC) who are members of the BC Community Forest Association (BCCFA). Although the census results presented here reflect the experience of the members of the BC Community Forest Association, the characteristics and circumstances of the eight BC CFOs which are not members of the BCCFA may differ. However, this research does lend credence to other studies of CFOs in BC (i.e., Ambus & Hoberg 2011; Bullock et al. 2009), by supporting their findings and suggesting some common themes that may challenge similar organisations involved in community based natural resource management elsewhere, including lack of economic security, differing values and objectives in contrast to conventional forestry (where cutting and selling logs is the only source of income from the forest), and difficulty in diversifying away from this conventional forestry model. It also confirms that the motivations for pursuing community forestry are diverse and varied, making it difficult to identify common performance measures or indicators of success. Nevertheless, our results do indicate that CFOs are responsive to local needs and interests, an important consideration in BC where public consultation by other forest rights holders can be lacking (BC Forest Practices Board 2013).

1. The Development and Formalization of Community Forestry in British Columbia

This section reviews the background conditions that prompted the development and formalization of community forestry in BC, and the characteristics of the BC community forestry tenure.

1.1. Background Conditions

1.1.1. The Development of Community Forest Policy in BC

The majority of land in BC (95%) is managed by the Provincial government, and forestry is administered within the BC Ministry of Forests under a system of forestry licenses that allow access to forested land, collectively called forest tenure. The forest tenure system defines the rights and obligations associated with managing provincially owned timber, including the obligation to prepare forest management plans, pay timber fees (also known as ‘stumpage’ or taxes) when timber is harvested, to meet provincial forestry regulations governing forestry practices, and to manage non-timber forest products.

The BC forest tenures system is notable for its size and complexity, with some tenures rooted in the development of the forest industry in the Province dating back to the 19th century. The system was based on the promotion of regional development through the granting of access to Crown (i.e., public) timber and encouraging private capital to develop a manufacturing sector and associated economic benefits including improved timber values, timber fees, and employment. Absent in this system was any formal local community control of forests. The idea of community-controlled forests has been suggested by a number of communities and individuals, including provincially-led inquiries into how forests should be managed in the Province, and the Royal Commissions on Forest Resources of 1945 and 1956 (Sloan 1945; 1956). The issue was raised again in another 1976 Royal Commission on Forest Resources, which recognized the significant increase in demand for small-scale forestry in BC. Two factors that contributed to this demand were “anxieties over new, large scale forms of industrial logging operations; and a reaction against the centralization and consolidation of control over resource rights and forestry operations” (Pearse 1976, p. 190). To address these concerns, Commissioner Pearse suggested that the practice of small-scale forestry and timber management could enhance the productivity of fragmented public and private lands. Pearse concluded that small-scale forestry may be more efficient in some areas than commercial-scale forestry in the utilization of forested lands, meeting community needs, and providing for stable employment.

However, Pearse also recognized that economies of scale could be a factor that would make it difficult for small forestry operations to compete in the timber market.

In addition to these formal calls, there were also local initiatives that drew on two pioneering community forests established in the province during the late 1940s: the North Cowichan Forest Reserve (created on municipal lands) and the Mission Municipal Forest Reserve (initially established on municipal lands and augmented by the award of a tree farm license) (Allan and Frank 1994). In 1974, the Slocan Valley Community Forest Management Project proposed that communities should have control over local forest resources; the concept was opposed by the BC Forest Service, and rejected in 1976 by the provincial government (Wilson 1998). In 1993, the city of Revelstoke obtained a community forest, managed by the Revelstoke Community Forest Corporation under an existing form of tenure, a Tree Farm License (Revelstoke Community Forest Corporation 2014). In some cases, the forest industry sought out community involvement; in 1997, MacMillan Bloedel entered into a joint forest management venture with the Nuu-chah-nulth First Nations of Clayoquot Sound (Hoberg and Morawski 1997).

In the 1980s and 1990s, there was an increasing perception that BC's forests were not being managed in an ecologically sustainable way. During this period, forestry operations and methods in BC had come under increasing pressure from a variety of actors, including environmentalists and international consumer markets (Tanz and Howard 1991; Bernstein and Cashore 2000; Ambus and Hoberg 2011). Environmentalists' arguments and campaigns had captured the attention of politicians and resource managers, and had resulted in a political climate in which leaders were prepared to consider conservation ideals, and whether or not the current system was adequately meeting community needs.

1.1.2. Initiation of the Pilot Program

By the 1990s two factors had converged to make room for community forestry in the Province's forest tenure system. First, a change in government occurred, and a more socially oriented party assumed power that promised to address environmental and social issues in forestry as

part of a broader election platform; the second factor was a change in the Province's economic conditions. After enjoying a brief period of prosperity in the mid-part of the 1990s, during which newly elected government introduced far-reaching environmental regulations, the latter half of the 1990s saw declining profitability and employment within the timber industry, drawing attention to the social objectives around forestry. In response, the government initiated the Jobs and Timber Accord (JTA), which sought to create 21,000 new direct jobs in the timber industry by 2001 (Haley and Luckert 1998). The development of new jobs was to create stability in the forest sector, timber dependent communities, and to some extent, the Province as a whole. The JTA, which required voluntary commitments from industry, was ultimately unsuccessful; however the BC government had committed to community forests in the JTA in 1997. The JTA led to the development of a five year pilot community forest program for which seven community forest pilot projects were announced in the summer of 1999. These pilot projects were to assist in the refinement of the community forest tenure, and provide feedback about the benefits and challenges of the tenure.² The pilot projects were completed in 2004 and most were replaced with 5 year probationary Community Forest Agreements (CFAs). The completion of this pilot phase then permitted the MoF to directly award CFAs. In 2009 the first long-term (25 year) CFAs were awarded and 5-year provisional agreements were phased out entirely. Coinciding with the development of the CFAs was a broader set of changes in the existing forest policy framework in BC. In 2003, under the Forest Revitalization Act, the Provincial government reallocated 20% of commercial timber harvesting rights to a number of different policy initiatives, including the expansion of the timber sales program, timber harvesting rights for Aboriginal communities, and additional harvesting opportunities for community forests. This last change prompted a new wave of applications; as of October 2013, there were 57 community organizations involved at some stage of planning or operating a Community Forest Agreement.

² This new form of tenure did not affect the three existing community forests in BC.

1.1.3. Characteristics of the BC Community Forest Tenure.

Community Forest Agreements are area-based agreements that give the agreement holder exclusive rights to harvest timber within that area (which is consistent with all other forest tenures in the Province). As such, community forests are still subject to provincial regulations: the Province still determines how much can be harvested sustainably (an upper limit), and the agreement holder pays timber fees for harvested timber. CFA holders are responsible for completing management plans, maintaining an inventory and reforestation; they are able to manage for water, recreation, wildlife and viewscapes. One feature that distinguishes CFAs from commercial forestry tenures is that the agreement holder has non-exclusive rights to harvest, manage and charge for botanical and other non-timber forest products (Gunter and Mulkey 2012).

British Columbia's *Forest Act* stipulates that a Community Forest Agreement can be held by a partnership, corporation, society, cooperative, municipality, or a First Nation. The community forest application process requires that a community develop a vision that reflects residents' preferences for forest management (Mulkey 2012; BC Ministry of Forests Lands and Natural Resource Operations 2014). The application must include a mission statement and guiding principles which provide the objectives and goals set for the community forest's management plan; subsequent annual reports must be submitted under the Community Forest Agreement.

2. Assessing the Outcomes of the Community Forest Initiative

Globally, community forest organizations (CFOs) are diverse institutions that reflect the heterogeneity of the communities that they represent and environment in which they are situated (Agrawal 2008). In Canada these diverse arrangements include the objectives they hold and the weights assigned to those objectives; organizations differ in the extent to which they have made ecological sustainability a core part of their operations (Teitelbaum et al. 2006). Some CFOs exist primarily for stewardship of watersheds and forests habitats, while others

exist for the creation of economic opportunities for their community (Reed and McIlveen 2006). Community forests have been used as an approach to resolve conflict (Bullock & Hanna 2008). Although some CFOs have been successful examples of collaboration, some have increased tensions between traditionally divided groups through attempts to come to agreements about a resource that the communities previously had no access to or responsibility for, or in managing groups who become excluded in decision-making structures (Reed & McIlveen 2006).

Process matters too: questions of control and governance have been raised. The ethos of community forestry has traditionally rested on an assumption that local people are best placed to manage local lands and that economic stability is intimately related to ecological sustainability (Duffield et al. 1998). The assumption that localized decision-making is inevitably sustainable and inclusive has been questioned (Ostrom et al. 1999; Bradshaw 2003). As Bradshaw (2003) demonstrates in his case study of a community supported toxic waste facility (with a poor safety record) in the neighbouring province of Alberta (Bradshaw 2003), devolving decisions to local people does not remove the tensions between economics and environmental protection (McCarthy 2006; Markey et al. 2008). Community management is not a conservation panacea (Kitamura and Clapp 2013), and the conditions within which communities are managing are important (Ostrom et al. 1999); Bradshaw (2003) cautions against timidity in scrutinizing the performance of CFOs.

Lastly, additional concerns have been raised as to whether those CFOs with community consensus around objectives and appropriate processes and governance structure have the capacity within current land ownership rules, financial constraints and governance regimes to make those intentions reality (Pinkerton et al. 2008, Ambus & Hoberg 2011). Reed & McIlveen (2006) have also raised a question as to whether there is an inherent tension between the industrial model of forestry and a wider ability to meet the needs of local people.

BC's community forests provide a rich case study to address these questions, as it provides a uniform policy background (holding the forest management framework in place) but allows for a diversity of community types and local circumstances and choice of governance structures (again within a common framework).

1.2. Methods

Using the method demonstrated by Maryudi et al. (2012), we took the original objectives of the CFI (BC Ministry of Forests Lands and Natural Resource Operations 2014) and asked CFOs to assess the extent which they achieved them and what challenges they faced. Therefore, in order to assess the outcomes, we extracted and distilled the CFI into the following main areas for assessment and discussion:

1. Economic benefits, diversification and innovation
2. Environmental stewardship, and management of the forest for multiple values
3. Social benefits, including community involvement and participation,

In order to assess the success of BC's CFI, a telephone survey of the 38 'active' CFOs in the BC Community Forest Association was conducted (those organisations with a tenure agreement and a management plan that had been approved by the BC government). The organisations were asked a series of questions about the three objectives (Table 1), to understand the extent to which they were able to fulfil the objectives of the CFI, as well as provided with the opportunity for open-ended comment. We also explored a fourth policy objective that informed the subsequent initiation of the last wave of community forest applications, the promotion of communication and involvement between Aboriginal and non-Aboriginal communities.

Objective	Indicators
Economic benefits, diversification and innovation	Number of staff, financial surplus at the end of the year access to external capital, diversity of income. Desire and ability to innovate and diversify, open ended comment.
Environmental stewardship & management multiple values	Importance of environmental stewardship, trade-offs between environment and business, open ended comment.
Community involvement and participation	Numbers of people participating on board, advisory committee, as shareholders/members, at consultation and social events. Representativeness of the board, open ended comment.

Table 1: Policy objectives and applicable survey indicators

The research was carried out in collaboration with the BCCFA, who provided contact telephone numbers of the CFOs accessed through their membership database. The survey was designed according to the Total Design Method (Dillman 1978; Dillman et al. 2002). The data was triangulated with the information from a BCCFA 2011 in-house survey; where necessary, transcripts of the telephone interviews were sent to respondents to ensure that details could be reviewed. A summary of the initial results was also presented to the BCCFA before data analysis was completed so that any mistakes or inconsistencies were found and resolved.

1.3. Results and Discussion

All the CFOs we approached responded, giving us a census of the active members of the BCCFA. Each survey took between 40 minutes and one hour; the respondents were elected board members or staff employed by the board.

1.1.4. Economic benefits, diversification and innovation

The hope for the development of community forests is that strategies linking timber management and non-timber forest products (NTFP), outdoor recreation, and value-added products will provide diversified income streams and employment beyond direct economic benefits from harvesting timber. We found that most revenues were derived from timber

harvesting, and that just over half of CFOs are struggling to remain economically viable. The direct employment benefits were small; we found that 15 CFOs employed no permanent staff, and the remaining CFOs employed a mean of 3.5 people; in total we found that all 38 CFOs employed 78 permanent staff.

All but one of the 38 organisations were keen to diversify their operations, saw themselves as different from conventional forestry, and wanted to explore innovative options to diversify revenue streams from their tenures. The desire of these organisations to diversify was primarily to reduce economic and environmental risk; the development of sawmills was identified as a means to enable them to sell some of their timber directly to customers rather than to log markets, as they hoped to obtain better prices for the volume of timber sold and create more local jobs; at the same time this increased capital requirements and financial risk. The possibilities and hopes for carbon offsetting and using timber as fuel (biofuels) were frequently mentioned, as were the possibilities of creating economically viable approaches to keep trees standing, such as the promotion of outdoor recreation opportunities (including the development of supporting infrastructure). Beyond these hopes the reality was that only two organizations had developed value-added manufacturing, and only eight organizations had more than one source of revenue from their tenure; the remaining thirty relied solely on harvesting trees to be sold on the log market. Despite these limitations the traditional approach of harvesting timber to sell to log markets has yielded direct benefits to communities; however, these are not expressly the financial returns but the fact that the benefits are received and distributed locally. The majority of organisations reported struggling to break even, but when they did profit, revenues are contributed to civic projects:

“...we want to be able to say 'yes, we're logging, but look at where the money is going.' A lot of money has gone to projects locally, creating goodwill throughout the town.” (CFO 26)

Community forests' struggle to make an economic return reflects in part the challenging conditions that the forest sector in BC has faced for the past several years. Major economic scale effects and benefits appear to be in the processing of timber, not in the management and harvest of timber. Timber harvested under the CFA tenure was to be charged the same tax rate as that harvested under commercial tenures. These rates were subsequently lowered as community forest tenure holders successfully argued that their small scale increased the cost of operations and that they could not be viable at the higher rates. This is not surprising – similar issues have been found in sustainable forest management certification where small scale operators and forest owners also face higher costs due to the requirements to prepare and develop forest management plans and provide data to demonstrate adherence to the broader range of environmental and social criteria and indicators of forest management (Rickenbach 2002; Auld et al. 2008).

While CFOs express the intention to diversify forest utilization and products, there are very few practical examples; diversification is an area that is often discussed but difficult to achieve in rural areas of BC (Bullock et al. 2009; Edenhoffer and Hayter 2013). The desire to do things differently exists, but there are limitations on the range of business models that are possible with BCs economic and policy environment. More generally, the policy and market environment has not been supportive of value generation in the woods rather than in the mill, as provincial policy has focused on maximizing timber harvests subject to satisfying environmental objectives while firms in the Province have been focused on commodity production and have relied on controlling costs and maintaining volume to remain competitive. More recently, consolidation within the industry has reduced the number of potential buyers, which further affects market opportunities. CFOs saw their inability to diversify as a result of the economic pressures created by these forces: "You have to get the volume of cut out to ensure the government will buy into it. They have to see that the community forest is making money." (CFO 18) and policy conditions which reduce local innovation: "We ended up with the worst bit of land because we don't pay so much stumpage [taxes]... they want taxes to go to

Victoria, rather than revenue being generated locally and then spent on what local people perceive to be priorities.” In addition to these confounding factors there is, on occasion, a mismatch between the CFI’s aim of providing economic benefits and CFO’s aims: for example: “We are not economically driven as an organisation, we try to create a balance between economics, traditional [First Nation] cultural values and the watershed - a trade-off between economics and the environment” (CFO 38).

1.1.5. Environmental stewardship and management of the forest for multiple values

The complexity of balancing environmental and social objectives and the question of whether economic benefits would overwhelm other values had been raised as a challenge. Yet we found that stewardship is on the top of the agenda for two-thirds of the organisations, with some of them having been established explicitly to pursue an environmental agenda that balances these objectives. The remaining third that are not *primarily* concerned with an environmental agenda are keen to balance an ecological management approach with economic demands and see stewardship as a core priority. Overall, community forest organisations in BC are often very conscious of environmental concerns, as those who live next to and use the forest have a voice in its management. However, our survey reflected a heterogeneity in the environmental outlook of the organisations to an extent; the comments below reflect the diversity of approaches to stewardship, and attempts to balance environmental values with other values. However, it is worth noting that there was only one organization which did not view environmental stewardship as a core priority.

“Primarily our forest is about environmental stewardship and a step towards First Nation control of the land.” (CFO 37)

“We are interested in establishing a diverse income to avoid logging”. (CFO 6)

“We try to get machine operators to realize that it's their forest and neighbourhood, to emphasize local responsibility, so no one can blame someone from outside.” (CFO 2)

These statements reflect vested and long-term interests that can enhance forest management, as they support sustainable resource use, and where the economic benefits are in support rather than to the detriment of environmental values. Indeed, Mallik and Rahman (1994) argue that “[s]ince the benefits and blames for land management under [community forestry] go directly to the community, the onus is on the community for sustainable ecosystem management” (p. 734).

1.1.6. Community Involvement and Participation

CFOs in BC are usually founded through an existing decision-making structure, which will hold the majority of the shares (and therefore the financial and decision-making responsibility). This is not always the case though as some non-governmental organizations (NGOs) such as local civic organizations, residents associations, watershed management groups, local environmental groups or small businesses may organize and develop a new structure in response to a local desire to increase decision-making over resources or retain a greater proportion of the benefits of forestry locally. Some municipalities and First Nations involve other stakeholders and, while still giving a formal voice to other groups, retain decision-making power by holding a majority of the shares. There is little uniformity among CFOs in terms of their membership structures (Table 2) and each CFO has evolved autonomously to meet the needs of its particular community.

Organization	Frequency
Municipality/ies	16
First Nation/s	6
Municipality/ies and First Nation/s collaborations	6
Municipalities, NGOs, businesses and individual collaborations	6
NGO/s	2
First Nation/s and NGOs collaborations	1
Municipality/ies, First Nation/s and NGO/s collaborations	1
Total	38

Table 2: Entities holding the shares or membership of the CFO

Each entity or collaborative group usually establishes a legally recognized structure for the formal administration of the tenure (Table 3).

Legal structures	Frequency
Corporation	22
Society	6
Co-operative	3
Limited Partnership	3
Municipality	3
Total	37
Missing	1
Total	38

Table 3: Legally recognized structures used to administer the CFO

Over three-quarters of the CFOs reported that their organization was representative of the wider community. Of those that did not characterize themselves as being representative, some indicated that their boards had specialized expertise or implied that the CFO was dominated by people who were involved in the forest industry. Overall CFOs were conscious of the need to represent the broader community and were committed to ensuring this was done as honestly as possible. They were also aware of community characteristics that demanded careful handling, such as schisms of opinion or culture. Two-thirds reported spending a significant amount of time encouraging community involvement and consultation; three-quarters felt that their community was supportive of their work.

We found no uniformity in governance structures beyond that imposed through the more formal rules (eg. requirements for boards of directors). The majority of CFOs had between five and nine board members. While the majority of boards are made up of local volunteers with some forestry experience or interest who are elected, some boards of directors also involve the elected officials or staff of municipalities or First Nations. We did find that there is formal democratic endorsement regularly by interested members of the local community; 27% of CFOs

also seek to broaden the board's knowledge by administering an additional advisory board; of those that had an advisory board, most had a membership of between six and twelve people. Beyond the voluntary boards, CFOs are obliged by the conditions of their tenure to be active in consulting with local people. Estimates of the approximate annual number of people participating in consultation varied between six and 200 people, with a mode of 50 people and a median of 35; for the great majority of CFOs, continuous dialogue with community members was a feature of their daily operations, particularly in the organizations that directly employed people from the local community. Over half (20) of the organizations organized social events for community members with the intent of extending information to people who may be unable or disinclined to attend formal meetings; these events had been attended by four to 1000 people. Most organizations reported the number of people attending consultation events to be in the range of 15 to 100, although sustaining interest is not always easy:

"Despite considerable effort in community consultation (a public meeting each month, and at least one large social event each year), there is very little feedback from the community - unless there is an issue. The local media stoke conflict. Is lack of interest implied trust or apathy or both?" (CFO 5)

Within community forests in BC, this commitment to self-organization and community-based decision-making was the most dominant shared feature in a very diverse collection of organizations: 81% of CFOs in this survey reported 'faithful community representation' as being of primary importance to their purposes.

Finally, we examine one policy goal of government, promoting communication between Aboriginal and Non-Aboriginal communities. This reflects a broader policy shift in the Province to establish a 'new relationship' with Aboriginal groups, and, as part of that, provide opportunities to engage in the forestry sector (Wood and Rossiter 2011). Within this area CFAs have been one option, but First Nations in BC have not pursued CFAs as enthusiastically as non-

Aboriginal groups. The reasons remain under researched (Curran and M'Gonigle 1999; Booth and Muir 2013), but are likely a combination of institutional and cultural barriers as well as ongoing wider legal issues concerning treaty negotiation with the Canadian government. Certainly reconciliation between indigenous cultural values and industrial forestry is problematic (Booth and Muir 2013). Despite this, 14 of the 38 organizations we surveyed were First Nation-led or First Nation partnerships and only 5 of the 38 organisations did not see First Nations' traditional cultural values as a priority in their management. There is no doubt that there are wider structural issues at play reflecting the traditional disenfranchisement of First Nations in forestry in BC, however, as the quotes below suggest, the CFA does appear to provide an opportunity for successful engagement.

"The community forest has created community interaction and friendship between us and white people". (CFO 8)

"[The community forest has developed] a really good relationship with local First Nations." (CFO 13)

Our data is not sufficient to be able to speculate in depth about the factors at play here, and further qualitative study would be beneficial to explore these issues.

3. Conclusion

The Community Forestry Initiative represents one of many contemporary attempts to devolve natural resources management to local communities, a global trend which has persisted for two or more decades with varying levels of success. This research is concerned with CFOs in BC, rather than in comparing them to other forms of tenure. In terms of CFOs' suitability as a vehicle for local involvement in forest management, the development of the CFI can be seen as part of a general trend in the 1990s towards the devolution of resource management to local communities (Berkes 2010). The CFI embraced the idea that decisions about local common resources should be taken by those who are most directly affected, and reflects the ascension of Ostrom's (1999) collection of evidence in defence of self-organization. We also discussed the inherent difficulty facing CFOs, in which they are expected to incorporate timber and non-

timber values (environmental, recreational, and non-timber forest products), different worldviews, and different types of knowledge into their management of forest ecosystems, something is not expected to the same extent elsewhere in other traditional forms of tenure in BC.

The research presented evidence of how CFOs assessed the success of the Community Forestry Initiative (CFI); to do this the original aims of the CFI were taken and CFOs invited to comment on their organisations' experience of attempting to achieve these aims; the method was productive, we found that CFOs were committed to the formal management of timber and non-timber values, but often unable to achieve this balancing act within the policy and market environment. The CFA grants rights beyond timber harvesting, which theoretically could allow communities to diversify their operations to buffer the effects of timber market downturns; but our study found that diversification was not borne out in the experience of the great majority of CFOs to date due to issues of scale and economic considerations. Despite their efforts after 17 years of CFAs, community forests have generally been unable to diversify to sell botanical plants, mill timber, or generate revenue from outdoor recreation, carbon offsets, or biofuels. Almost all the organisations are dependent on timber harvesting and selling raw logs. To enable the desired degree of diversification, most CFOs would need a more supportive policy environment or the development of new markets. In terms of economic returns, community forests face the same structural difficulties as those faced by the broader forest sector in BC.

Despite these challenges, the CFA does permit communities to manage for community values that may be at odds with conventional commercial timber harvesting. This provision is essential to the success of community forests, as it encourages a wide-range of forest users to participate in the management of forested lands, and allows for a variety of opinions to be voiced and considered. Management objectives (and consequences) may be more readily voiced and agreed upon through a wide level of community participation. These agreements then reduce the level of conflict that may arise due to management decisions not satisfying all

forest users, a perennial issue in BC (Brooks and Grant 1992) and a concern in the current management of forests (BC Forest Practices Board 2013). The evolution of longer term CFA tenures also allows communities to develop long-term business and management plans that could allow for consistency and continuity in management practices, and long-term community stability.

Despite the limited economic benefits, CFOs deliver environmental stewardship and management for multiple values. CFOs have been successful in their commitment to community involvement and public participation; even with no further evolution of policy these benefits are likely to remain. The feedback received highlighted the outcome that CFOs made important contributions to community cohesion, the creation of shared projects, providing employment, and fostering familiarity within and between communities as well as the distribution of profits for community benefit. CFOs reported satisfaction with their ability to manage forests for multiple values such as water, long term sustainability of timber and ecosystem based management. In addition to the objectives laid out in the CFI we also found that community forests have also delivered training and skills development, as well as education and heightened awareness among people about forest management and climate change, which echo the findings of Gunter and Mulkey (2012).

Looking ahead, CFOs will remain a fixture in the forest tenure mix; absent further policy change, however, they are unlikely to play a large role in BC's forest economy or address any of the objectives of the CFI in anything other than at a very small scale; they are after all "small potatoes" (CFO 24) licensed to cut 2% of the province's total timber (Gunter and Mulkey 2012). However, where they are situated they will continue to play an important role in the life of resource dependent communities, some First Nations, and in environmental stewardship at the local scale, primarily because they provide an opportunity for local citizens and communities to focus on non-economic values. They demonstrate that alternative models can exist and allow for new approaches to forest management including demonstrating high standards of public

engagement and participation. What is currently needed is a better understanding of what can be done to better support and expand the business opportunities open to CFOs, including improving existing timber returns which will still continue to be an important part of most CFOs' business model. The research did not collect data on other forms of tenure, and one area of future research would be to develop Maryudi et al.'s (2012) technique to compare socio-economic outcomes and environmental measures (beyond compliance with regulations but informed by the aims of the policy) between tenure types at a local level, while also taking into account regional and provincial level conditions.

It can be generally stated that forest policy developments in BC are gradual, and as Wilson (1998) states in his study of wilderness politics in BC, “[n]ew ways of thinking generally come to the fore only after long gestation periods” (p. 13); such has been the case for community forestry. Seventeen years later changes in markets, reductions in government spending and climate change adaptation are leading us to explore new ways to govern and manage public forest resources. Despite the challenges they face, the success of community forest organizations in being able to collectively identify and implement management objectives and decisions needs to be acknowledged. Using the objectives of the CFI to assess the state of CFOs in BC the research suggests five common themes in the CFO experience in BC that may apply to similar organisations involved in community based natural resource management elsewhere. In particular we found firstly that maintaining community participation required sustained effort from CFOs; secondly that they suffer from a lack of economic security, they have differing values from conventional forestry (where cutting and selling logs is the only source of income from the forest) and a difficulty in diversifying away from this conventional forestry model, finally that their motivations for pursuing community forestry are diverse and multiple: often about environmental or First Nations' traditional cultural values. These findings echo Ambus and Hoberg's (2011) study of devolution of power to CFOs in BC and Bullock et al. (2009) who present cases studies of four additional CFOs in BC). This body of work suggests firstly that similar successes and challenges may be found in community managed natural resources

elsewhere; and secondly that continued and supportive policy change is necessary in BC to enable communities to sustainably deliver what the CFI aimed for: a stronger local economy, increased employment, environmental stewardship and wider community involvement.

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