

Why Certify? Motivations, Outcomes and the Importance of Facilitating Organizations in Certification of Community-Based Forestry Initiatives

Sarah Crow · Cecilia Danks

Accepted: 30 December 2009 / Published online: 10 February 2010
© Steve Harrison, John Herbohn 2010

Abstract Despite documented challenges, many community-based forestry (CBF) initiatives pursue forest certification. This study asked community-based forestry practitioners in Vermont what influenced their decisions to seek or not seek certification and what outcomes were realized from certification. Relationships, public image, value alignment and feedback on management practices were most commonly cited as both motivations for and results of certification. Expectations for economic benefits were low and price premiums for products were only occasionally realized. Informants complained of the increasing cost, complexity and time commitment required of certification. Overall, however, certified CBF informants felt certification was worth the expense. Group certificates and external funding significantly reduced certification costs to grassroots CBF initiatives. This study highlights the importance of facilitating organizations that can provide outreach, secure funding, understand the rules, handle documentation and develop markets for certified products.

Keywords Certification · Community-based forestry · Community forestry · Forest Stewardship Council · Sustainable forestry

Introduction

Over the past several decades, community-based forestry (CBF) has grown dramatically in many countries around the world as a way to promote social and

S. Crow · C. Danks (✉)
Rubenstein School of Environment and Natural Resources, University of Vermont,
153 S. Prospect St., Burlington, VT 05401, USA
e-mail: cdanks@uvm.edu

S. Crow
e-mail: sarahmariecrow@gmail.com

ecological sustainability. Nearly 25% of forests in developing countries are under community ownership or management and that amount is expected to double in the next 10 years (Molnar 2004). While community-controlled forests are more prominent in the Global South (White and Martin 2002), forms of CBF have expanded rapidly in the United States (US) since the 1990s (Baker and Kusel 2003; Charnley and Poe 2007; Christoffersen et al. 2008; Danks 2008). More recently, since its introduction in the 1990's, forest certification has quickly become an important feature of forest management, marketing and policy worldwide. By the end of 2007, there were nearly 300 million hectares of forest certified, which was 23% of forests allocated for production or 7.6% of all forest cover worldwide (Auld et al. 2008). Many CBF initiatives have sought forest certification as a way to help meet their ecological, social and economic goals through both forest management and forest-based enterprises.

A growing literature documents the experiences of communities engaged in forest certification, drawn mostly from the Global South (e.g., Butterfield et al. 2005; Humphries and Kainer 2006; Irvine 2000; Molnar 2003). In addition, recent studies have examined forest certification among small-scale, nonindustrial private forest owners in North America and Western Europe (Hansen et al. 2006; Kilgore et al. 2007; Leahy et al. 2008; McDermott 2006; Rickenbach 2002). In contrast, relatively little work examines certification of CBF initiatives in the Global North. The literature suggests that CBF initiatives and small-scale forestry projects face numerous challenges in pursuing certification, including costs, complexity and limited financial return. Still, community forest certifications have grown to 4.2 million hectares worldwide in the FSC system alone (FSC 2009). The question emerges: why, despite growing knowledge of the challenges, do CBF initiatives pursue forest certification and with what results? Furthermore, how does CBF certification in the US compare with that elsewhere?

This paper explores factors influencing CBF certification, objectives sought and benefits realized. Drawing on the experiences and perceptions of practitioners in the US state of Vermont, where both forest certification and CBF have been practiced for over a decade, the study addresses gaps in the literature on CBF certification in the Global North. US-based initiatives likely have greater access to markets, capital and information relative to CBF initiatives in remote communities in the Global South. In addition, the relatively long history of certification in Vermont may provide insights into the opportunities and obstacles where certified markets and certification systems are more mature. While CBF initiatives in the Global North share some of the scale issues encountered by small private forest landowners in the US, motivations and resources relative to certification could differ significantly.

Insights drawn from the Vermont CBF experience can inform both CBF practitioners and forest certification systems. As CBF expands across landscapes, it is important for certification's proponents to understand the conditions under which CBF participants will choose certification, and in doing so, contribute their forests and forest products to expanding certification's market presence. For CBF initiatives, answers to these questions will help groups to better understand the potential costs and benefits of certification relative to their mission and resources. Since forest certification has emerged as an important element in some carbon offset

protocols, observations relative to the access and inclusion of rural communities in certification are increasingly important. As Auld et al. (2008:205) noted, “we need to know why producers certify before we can know to what extent certification is having ... positive effects.”

Community-Based Forestry and Forest Certification

Although definitions of community-based forestry (CBF) are as diverse as its practice (Baker and Kusel 2003; Christoffersen et al. 2008, Danks 2009; Glasmeier and Farrigan 2005), the term is used here to describe forest management, forest protection and forest-based industries which are undertaken collaboratively to enhance the social and environmental sustainability of rural communities. CBF in the US shares many elements with CBF worldwide, including sustainable resource management, rural development, capacity-building, shared decision-making, innovations in ownership and community learning, and the manufacturing and marketing of forest products (Charnley and Poe 2007; Danks 2009; Glasmeier and Farrigan 2005; Gray et al. 2001). CBF initiatives involve unique projects, processes and practices that have evolved based on local needs and values (Christoffersen et al. 2008). CBF can be undertaken on public or private lands and can involve collaboration of non-profit, for-profit and governmental entities in diverse forest-based projects (Danks 2008). Examples of CBF in the US include collaborative planning and implementation of restoration projects on federal lands, a community-owned sawmill, a cooperative processing facility for wild-crafted medicinals, sustainable timber management combined with educational goals in a town forest, a community-based training program for ecosystem management technicians, a marketing cooperative of family forests and invasive species control efforts that cross public and private ownerships. Because such efforts represent multi-faceted projects by a collaboration of players, rather than a single organization or formalized group, we use the term “CBF initiative.” Given the nature of certification, however, only CBF partner organizations that are managing forests or marketing products are certified.

Forest certification is a market-based mechanism designed to provide incentives for sustainable forest management through product differentiation, access to green markets and premium prices for certified products. It is also intended to educate consumers and provide them with a recognizable brand signaling that products were sourced, harvested and processed using sustainable practices. In the US, the Forest Stewardship Council (FSC) and Sustainable Forestry Initiative (SFI) programs have emerged as the dominant certification systems (Cashore et al. 2003). Both systems certify forest management operations and chain-of-custody procedures for processors, wholesalers and retailers. “Forest management” certification verifies that a forest is managed in compliance with established standards. “Chain-of-custody” certification refers to the tracking of materials through the supply chain to ensure that certified products for sale in the marketplace can be traced back to certified forest origins (Harris and Germain 2003; Vidal et al. 2005). The certification process, for both forest management and chain-of-custody, involves verification and

monitoring by independent, third-party auditors for compliance with a system's standards (Hansen et al. 2006).

Motivations to Pursue Forest Certification

Just as CBF initiatives engage in forestry for a combination of social, environmental and economic reasons, their pursuit of forest certification is also motivated by a range of factors. Many anticipate that certification will help fund their forestry activities by providing access to specialized markets or premium prices for their environmentally and socially responsible products. Value alignment, or the degree to which an individual's or group's values are consistent with their perceptions of certification, has been identified as an impetus for certification among small-scale forest initiatives (Meidinger 2003; Rickenbach 2002). An assurance that their practices are deemed sustainable by a third party is appealing to many forest communities and landowners (Molnar 2003; Rickenbach 2002). Public image or recognition may also be an incentive for parties seeking certification (Gerez-Fernandez and Alatorre-Guzman 2005; Markopoulos 2003; Meidinger 2003; Molnar 2003; Thornber 2003). Stakeholder relationships and affiliations have been identified as factors influencing the adoption of certification among family forest owners (Kilgore et al. 2007; McDermott 2006). Moreover, many forest communities value the dialogue about social equity issues, such as worker welfare, citizen participation and community resilience, which is promoted and legitimized by some certification systems (Molnar 2003).

Challenges to Accessing Markets and Certification Systems

CBF initiatives face significant challenges in accessing markets. Studies spanning many nations, including the US, have found that rural communities are typically poorly situated in terms of scale, information, capital, technology and geography to access markets, including both certified forest products and carbon markets (Scherr et al. 2003; Smith and Scherr 2003; Boyd et al. 2007; Minang et al. 2007; Molnar 2003). Small volumes, mixed species and intermittent harvests can significantly limit the market power of small-scale forestry producers (Butterfield et al. 2005). Certified markets present particular challenges because they are still in the early stages of development (Butterfield et al. 2005; Molnar 2003). The costs of assessment and compliance can be major deterrents in the decision to seek certification, particularly when costs are not compensated by the market (Butterfield et al. 2005; Molnar 2003; Kilgore et al. 2007; Rickenbach 2002). Lack of information is also a factor (see Leahy et al. 2008), and investigating certification systems and evaluating options involves considerable time and effort (Leslie 2004; Rickenbach 2002; Scrase 2000). These tasks are made more difficult as the procedures and language associated with certification are increasingly complex (Higman and Nussbaum 2002; Vidal et al. 2005).

To facilitate adoption of certification by CBF initiatives and small landholders, non-governmental organizations and government programs have subsidized the direct costs of certification (Gerez-Fernandez and Alatorre-Guzman 2005; McDermott 2006; Molnar 2003). Studies of small-scale and community forestry efforts note the role of local producer organizations, landowner associations and marketing

intermediaries in aggregating supply, vertically integrating projects, developing market expertise and, ultimately, increasing the value of forest products (Butterfield et al. 2005; Molnar 2003; Scherr et al. 2003). In addition, certification systems have sought to accommodate small-scale participants. The FSC standards were developed with specific principals and criteria for local communities and forest workers (Molnar 2003) and, in 2004, FSC adopted the Small and Low Intensity Managed Forest (SLIMF) protocols (FSC 2004), now called the Family Forest Program in the US, with streamlined administrative processes to enable the participation of small forest ownerships. Under the FSC Family Forest program, multiple ownerships are certified under a single “group certificate” held by a managing entity that handles compliance with standards and interactions with auditors (FSC-US n.d.). A similar group certificate option is offered for chain-of-custody certification for small-scale processors. Most of the studies that identify challenges to certification were conducted before these programs were developed.

Study Context

Vermont was selected as the setting to examine the intersection of CBF and forest certification because both CBF and certification have relatively long histories in the state. Numerous certified and uncertified CBF initiatives operate under the same forest regulations in the same regional forest economy. Many communities in Vermont are reviving historical forms of CBF such as town forests, some of which date back 300 years (McCullough 1995). Other CBF initiatives include acquisition of new municipal forestlands, communal ownership strategies, value-added forest products networks and forest user collaborations.

Vermont is also home to some of the earliest adopters of FSC certification worldwide, dating back to the mid-1990s. The headquarters of the US working group of FSC was initially sited in Vermont before relocating to the Washington, DC area. Moreover, the world headquarters of the Rainforest Alliance’s SmartWood Program, a primary certifier of FSC, is located in Vermont. This history provides conditions to study certification in a place where knowledge of certification and development of certified markets is relatively advanced. In 2009, there were four FSC forest management certificates in Vermont covering at least 197,000 acres, which does not fully reflect all of the acres managed under group certificates. In addition, there were 25 chain-of-custody certificates (FSC-US 2009). There were no active SFI certificates in the state at the time of the study.

Vermont has a population of 624,000 and a land area of almost 6 million acres, of which over 75% is forested. While 197,000 certified acres (4.25% of the state’s forestlands, excluding state-owned lands) may seem small, it is five times the certified acreage of its larger neighbor, Massachusetts (38,608 certified acres, 1.5% of non-state owned forestlands) and comparable to the much larger state of New York (208,860 certified acres or 1.4% of non-state forestlands; FSC-US 2009). Eighty-four percent of Vermont’s forests are privately owned (67% non-corporate, 16% corporate) and 16% are public (8% federal, 7% state 2% local; USDA Forest Service 2007). Because CBF is decentralized and includes diverse ownerships, the total number of CBF initiatives in Vermont and associated forest acreage is unknown.

In 2005, forest-based manufacturing generated \$1 billion in shipments which was 9.3% of Vermont's total manufacturing sales. It is estimated that each 1,000 acres of forestland in Vermont supports 1.4 manufacturing, logging and forestry jobs and an additional 1.4 forest-related tourism and recreation jobs (North East State Foresters Association 2007). Compared to CBF in the Global South, certified forestry operations in Vermont are physically proximate to the large, urban and environmentally conscious markets of the northeastern US.

Methods: Initiative Identification, Data Collection and Analysis

We sought to identify and interview knowledgeable leaders of 100% of certified CBF initiatives in Vermont and about a third as many uncertified CBF initiatives to provide a comparative perspective. Data were collected primarily through semi-structured interviews conducted between June 2007 and January 2008. Guided by a prepared instrument, interviews consisted of open-ended questions and follow-up prompts to probe specific motivations and challenges identified in the literature. Certified initiatives were also asked to identify outcomes. Descriptive information regarding the goals, history, partners and activities of each CBF initiative was collected through both interviews and review of program documents.

To identify certified CBF operations, we developed criteria for CBF initiatives and applied them to the official lists of certificate holders published by FSC and SFI. The CBF criteria were based on the "critical dimensions" and "pathways" of community-based ecosystem management developed at a workshop held in Bend, Oregon in 1998 (Gray et al. 2001). The description of CBF compiled at the Bend workshop provides a valuable basis for understanding CBF in the US because it was the product of a collaborative process that integrated both academic and practitioner perspectives and is consistent with summative literature on CBF (e.g. Charnley and Poe 2007; Glasmeier and Farrigan 2005). These criteria encompass diverse manifestations of CBF such as collective forest ownership, forest products collaboratives and forest-based educational initiatives.

Because there were no SFI certificates in the state, FSC was the only certification system included in this study. From among the certificate holders listed in the FSC-US databases of forest management and chain-of-custody certificates, we identified those that met the CBF criteria through the use of key informants, discussion with group certificate holders and direct contact with the initiatives in question. A total of 13 certified CBF initiatives was identified. In addition, a list of uncertified CBF initiatives was compiled based largely on key informants. Of those, five uncertified CBF initiatives were chosen to reflect organizational and geographic diversity.

One to three key informants who were knowledgeable about the decision to become certified were interviewed for each initiative. For larger initiatives, multiple informants were interviewed to capture diverse perspectives. Ultimately, 29 interviews were conducted for 18 CBF initiatives. Of the 13 certified initiatives, five held forest management certification only, five held chain-of-custody certification only and three initiatives held certification for both forest management and chain-of-custody. The CBF initiatives included environmental education

organizations that owned and managed forestland, furniture manufacturers, town forests, collectively owned private forests, a wood products network, a sawmill, a college that owned and managed forestland and a national historic park. Interviews were taped and transcribed. All data were coded and analyzed for the motivations and constraints to participation in certification identified in the literature, as well as for emergent themes. Interview information was triangulated and supplemented with programmatic documents from CBF initiatives, certificate records and site visits.

Findings and Discussion

Three interrelated factors emerged as highly influential in the decisions of CBF initiatives to pursue certification: facilitating organizations, group certification and external funding. Together, these factors supported motivations and removed barriers to certification. Below, we discuss these factors and the themes identified in the literature that were most frequently reported by informants. Outcomes and overall assessments of the value of certification are also discussed.

Emergent Factors Influencing Certification

Facilitating Organizations

Given the financial and time demands of certification, one might expect that organizational capacity would be correlated with the decision to pursue certification. In this study, organizational capacity of the CBF organizations, measured in terms of budget, staff, membership and longevity, was not clearly related to the decision to become certified, nor did it influence informant experiences or outcomes of certification. However, organizations that facilitated certification and marketing were clearly crucial to the adoption and maintenance of certification among CBF initiatives in Vermont. Three organizations committed to supporting CBF held group certificates under which most CBF initiatives were certified: a community-based non-profit organization, a for-profit consulting forestry firm and a statewide network of small, for-profit, forest products companies. A fourth facilitating body was a local branch of a national environmental organization that encouraged CBF initiatives to become certified through outreach and cost-share efforts. Even the larger CBF initiatives with in-house forest management staff valued the certification-specific knowledge and capacities provided by the facilitating organizations.

At a minimum, the facilitating organizations provided assistance in preparing for audits, compiling paperwork and interpreting standards. They often provided technical expertise for forest management and harvest. As part of their CBF support missions, these facilitating organizations often subsidized the direct costs of certification to the CBF initiatives. In addition, facilitating organizations were instrumental in developing markets for certified products and directly marketing CBF products to institutional buyers and other consumers in the region. In some cases, they aggregated products from multiple ownerships to meet market demand.

There was consensus among certified participants that without the support of the facilitating organizations, certification might not be feasible.

Group Certification Option

Ten of the 13 certified CBF initiatives were part of group certificates. These ten included three early adopting initiatives, certified before 2000, that had dropped their stand alone status to join group certificates in response to rising costs. As a representative from an early adopting initiative with chain-of-custody certification reported, “When we first got certified [in 1998], we paid \$800; 3 years later, we paid \$2,000. It became difficult to justify.” Without the low cost option of group certification, several informants indicated that they might have dropped certification entirely. Unfortunately, participants under group certificates lose visibility because only the primary certificate holder is listed in public FSC databases.

External Funding

For many CBF initiatives, the upfront costs of certification were funded by external sources rather than recovered through the enhanced value of the certified products. All four facilitating organizations received grants in the prior 5 years to fund their work with community groups and forest certification. This funding enabled them to cover much of the outreach, preparation and auditing costs of the operations that they facilitated or directly managed under group certificates. This combination of funding and technical assistance greatly reduced barriers to certification. As one CBF forest manager reported, “because it did not cost us much, it was a no-brainer.” Moreover, external funding was instrumental in supporting facilitating organizations’ efforts to coordinate specific producer-customer arrangements and to develop markets for value-added certified products.

Salient Motivations and Barriers

Professional Relationships

Consistent with the findings of McDermott (2006) and Kilgore et al. (2007), affiliations and relationships were an important motivation to pursue certification for 11 of 13 certified CBF initiatives sampled. Informants from ten of 13 certified initiatives indicated that the desire to collaborate with new partners or reinforce existing relationships with other organizations was the factor that tipped the scales in their decisions to pursue certification. These relationships ranged from business and supply chain arrangements to collaborative partnerships and local social and professional networks. Often, informants cited preexisting respect for their partnering organizations that supported certification, including facilitating organizations. For many certified initiatives, connections to a valued institutional customer, a local college, were critical to their support of certification in the late 1990s. That college’s procurement policies, which emphasize local products and compliance with Leadership in Energy and Environmental Design (LEED)

specifications for regionally sourced certified wood, remain an important factor in the certification of a cluster of CBF initiatives in Vermont. While these relationships could and often did contribute to economic benefit, informants emphasized that they valued the relationships, independent of economic gain.

Public Image and Credibility

For every certified CBF initiative sampled, public image was an important factor influencing their decision to seek certification. Nearly all informants expressed interest in certification as a way of establishing credibility for their management in the public sphere or developing a “green” image. In a comment typical of forest managers, one certified informant said “We wanted to have a green stamp on our forest practices. It is a publicly recognized badge of honor.” Informants from uncertified initiatives noted that an appealing aspect of certification was the potential to raise visibility or create opportunities to secure funding or public support for their work. While public image and credibility may contribute indirectly to economic benefits, informants’ comments tended to focus on how these factors supported initiative goals, rather than potential economic returns.

Value Alignment and Educational Value

Nearly all informants participating in this study, certified or not, offered support for the concept of certification and indicated that it aligned with their goals. Informants from 11 of 13 certified initiatives suggested that the decision to pursue certification signaled a larger commitment to sustainability. This was particularly important for CBF initiatives with public demonstration goals. Several informants felt that they were promoting the practice of sustainable forestry generally by participating in certification and supporting the forest sustainability movement. For example, one forest manager said that the decision to adopt certification reflected a desire to “promote certification, not for us, because we did not think it would make a difference, but for the broader regional and societal benefits.”

Input on Forest Management

For all eight initiatives holding forest management certificates, the opportunity to examine their forest management with a third party or to ensure that current practices were ecologically appropriate was an important incentive. However, most participants did not expect to alter management practices significantly as a result of certification because they felt they were already practicing sustainable forestry as part of their CBF missions. Likewise, informants from four of the five uncertified CBF initiatives anticipated that their current management would comply with certification standards.

Financial Costs and Demands on Time

Concern about potential financial and time costs was a major consideration for every informant that participated in the study, certified or not. Because certification

requires research and preparation, as well as on-going documentation and management, time demands emerged as the most important barrier to participation. Financial costs associated with auditor fees, document preparation and compliance were concerns across the board. While representatives of certified initiatives indicated that costs were a factor in their decision to become certified, such expenses did not ultimately deter them because they “just wanted to do it.” An informant from a forest education organization noted “We want to be certified irrespective of cost because that is what we want to demonstrate.” Conversely, informants from all five uncertified initiatives reported hearing that certification was very expensive and time intensive. Perceptions about costs were critical deterrents to their pursuing certification.

Perceptions and Knowledge of Certification

The decision to pursue or not to pursue certification was often based on perceptions formed, in large part, by discussion with colleagues, rather than detailed knowledge of certification or investigation of its feasibility. Despite the history of certification in Vermont and the growing visibility of certification in forestry circles and the popular media, many informants had limited knowledge of how certification works. While some individuals, especially forest managers of certified organizations, had detailed knowledge of FSC procedures and standards, other informants often failed to differentiate between independent auditors, such as Smartwood, and the larger FSC structure. There was also limited understanding of how costs were assessed and policies were developed. This lack of clarity was prevalent among both uncertified initiatives and those certified initiatives that received assistance from facilitating organizations and were under group certificates. Facilitating organizations thus assisted in overcoming the information and complexity barriers to certification by handling the logistics themselves, rather than by transferring that capacity to the CBF initiatives under their group certificates.

Outcomes of Certification

Economic Returns

Some certified CBF initiatives reported direct economic benefits, such as market access or premiums, while others reported none. Given the small-scale nature of CBF operations, harvests were infrequent, low in volume and of mixed species. These factors made development of and access to certified markets difficult, despite proximity to environmentally conscious consumers. Where certification did result in market benefits, reported price premiums and market access were associated with local institutional buyers, such as a college or museum, or value-added product lines, such as veneer and flooring. However, these outcomes were not consistent over time or among all certified participants. Institutional purchases tended to be associated with specific construction projects and were coordinated by a facilitating organization or the institutional buyer.

Many informants commented that, because certification forced them to examine their operations, they recognized inefficiencies and areas for improvement, often learning new techniques. For example, one initiative's forest manager described how certification catalyzed an upgrade in their maple syrup operation, resulting in additional revenue.

Costs

Despite universal concern about costs, only a few CBF initiatives could provide comprehensive accounting of the costs they incurred for certification. Informants holding group or stand alone certificates reported that initial, first year audits and start-up costs totaled around \$5,000. Direct costs for maintenance of the certificate were estimated between \$2,000 and \$3,000 annually with additional indirect bookkeeping and administrative costs also estimated around \$2,000 per year. Under group certificates, costs were reduced considerably by external funding, ranging from free to \$450 annually. Indirect costs associated with maintenance of certification were quite varied and difficult to quantify. Startup funding for certification of some CBF initiatives was provided by private foundation grants directly or indirectly through facilitating organizations. In addition, certification costs were sometimes included with the cost of forest management services. Many informants under group certificates were not aware of the full costs to the primary certificate holder of maintaining certification.

Environmental Sustainability

While all CBF groups felt they were already practicing exemplary forestry, half of the initiatives certified for forest management reported that certification forced them to refine management or move more quickly on some projects (like upgrading culverts). As one resource manager noted, "When you get certified, even when you do not think you will change your management, you always do, and it is always for the better." Moreover, the environmental value of certification was often described by informants as extending beyond the localized ecological outcomes on the CBF initiative's forest. Many informants felt that, through certification, they were supporting a global movement that provided environmental benefits worldwide. Locally, they intended that their land serve as a model for good forestry and that their certified products inform consumers about forest sustainability.

Image and Credibility: External and Internal

Informants reported that certification did enhance their public image, which they described as "green," "cutting-edge" or "responsible." Similarly, informants suggested that certification helped them to promote themselves and differentiate their products in the marketplace. However, for most initiatives, certification was only one component of an overall branding strategy built around a name and identity that already had currency in the community or marketplace. As several informants expressed, "It [certification] helps us tell our story." Similar to findings

in the Global South (Humphries and Kainer 2006), informants also reported that certification supported credibility, not just to the outside world but internally, among initiative members. FSC's third-party auditing served to confirm the validity of forest management. Following the audit process, CBF managers reported feeling greater comfort with their management. For chain-of-custody participants, certification was a way of "walking the talk" on sustainable sourcing.

Relationships

Not only was strengthening relationships with partners a critical motivation for seeking certification, it was also an important outcome. Certification promoted networking and knowledge transfer among practitioners. One forest manager commented that certification introduced her to a new circle of professional contacts and arenas to discuss emerging forestry issues. Other informants suggested that certification contributed to internal group unity.

Complexity of Certification Process

Nearly all of the certified informants complained that certification was logistically onerous and unnecessarily complicated. Several informants commented that they maintained certification "in spite of" these challenges. The demands of complying with the documentation and procedural requirements of certification came as a surprise to some certified respondents. Remarks on the subject included "If I had known about the paperwork, I might not have been up for it" or "They do not really tell you what is required until it is too late." Even facilitating organizations found the certification process challenging. They reported that it was difficult to keep up with the changes to FSC policy and standards with no clear place to direct their questions. As a representative from one facilitating organization observed, "They are kind of throwing this stuff out and no one is responsible for interpreting it for you. We have a relatively skilled crew in our office and we can figure it out, but it takes a lot of time and it is not always clear. It is very frustrating."

Unlike the findings for family forest owners in the US (Kilgore et al. 2007), the requirement for a management plan was not a barrier to certification. Seventeen of all 18 CBF initiatives, certified and uncertified, already had management plans, and the one uncertified initiative without a plan was in the process of developing one.

Certification's Value to CBF: An Alternative Calculation?

Despite uneven economic returns, most certified CBF initiatives reported that, for now, certification was worth the expense and effort. Most reported that they reassess the value of certification at each renewal period and would allow their certificate to lapse if they felt it was counterproductive. Weighing certification's costs and benefits, however, proved complex for CBF initiatives. Several informants were quick to note that certification's value was not based on economic benefits alone. In fact, many reported that they fully expected to lose money on certification. One informant reflected on certification's value in this way: "It is like comparing apples

to oranges because the benefits have all been intangible and the costs have been very tangible; the costs are numerical. I do not know how to evaluate that.” Furthermore, CBF initiatives may not need to make certification pay for itself economically if it supports other initiative goals. As one informant reflected, “for us, the benefits do outweigh the costs but we do not have to make money; we incur costs differently.”

The idea that CBF initiatives “do not have to make money,” however, was not universal. Among the uncertified informants, there was a general impression that certification simply would not pay for itself in the short-term or into the future. This assessment was influential in their decision not to pursue certification, suggesting that for some CBF groups, economic returns from certification are important.

Summary and Conclusions

Despite growing knowledge of the challenges, why did CBF initiatives in Vermont pursue forest certification? They did so largely for environmental, social, educational and indirect economic reasons. The desire to support and demonstrate the goals of forest certification encouraged groups to pursue certification, especially if costs and management of the certification process were handled by someone else. While most informants were hopeful about the prospect of market benefits, economic returns were not cited as a motivation to become certified. This finding is noteworthy because certification is based on the notion that market incentives promote sustainable management. These findings are not entirely unexpected for CBF initiatives because social and education goals are fundamental to their missions. Moreover, the lack of importance attributed to economic returns was likely influenced by colleagues who suggested returns would be limited and by financial assistance that defrayed the costs of certification. To many participants in CBF initiatives, especially for-profit businesses, economic viability remained important.

While some suggest that “... it is the rules of the scheme that have the most influence in the extent to which small landholders participate” (Grieg-Gran et al. 2005:1524), the results of this study highlight the significance of local relationships and local facilitating organizations. Certified and uncertified CBF initiatives shared many of the same values, motivations, concerns and organizational capacities relative to forest certification. What distinguished certified from uncertified initiatives was the assistance provided by facilitating organizations. The local professionals in these organizations played critical roles in the transmission of information, access to supporting resources, maintenance of certificates and resulting outcomes for CBF groups. Procedural changes, such as FSC’s Family Forest program, that offered flexibility and potential cost savings to small-scale practitioners were clearly valuable but not sufficient to enable CBF initiatives to engage in certification. By becoming the holders of group certificates, local facilitating organizations took on the responsibility of understanding a complex and changing certification system and interacting with (and paying) auditors. The facilitators thus removed some of the biggest challenges to certification, as expressed by the CBF groups,—knowledge, time and expense. Because certification requires specialized

expertise at periodic intervals, CBF initiatives chose to rely on facilitating organizations to maintain certification, rather than create and sustain such capacity internally. In addition to technical assistance, all four facilitating groups sought and shared supplemental funding to reduce the direct costs of certification. Perhaps most importantly, they created certified markets and market access. They not only forged new market connections but also aggregated product to meet demand. It is unclear if certification can be sustained among small-scale operations without local actors to perform these functions.

What were the results of certification? On balance, certified CBF initiatives felt they had benefited from certification, even when direct economic returns were not realized. Most informants from CBF initiatives felt certification was worthwhile and that it helped them to achieve their goals. Benefits cited tended to be intangible, such as image and relationships, the value of which was difficult to calculate. Facilitating organizations, as well as those initiatives managing their own certificates, noted frustration with the complexity and costs of the certification process. Those initiatives under group certificates, however, were somewhat insulated from these issues.

How do the experiences of CBF initiatives engaged in certification in the US compare to the existing body of literature? While the importance of external funding and technical assistance for planning, auditing and market development is consistent with the literature on CBF certification in the Global South, we expected such external assistance to be less important in the context of Vermont. With a relatively long history of certification, the relatively high organizational capacity of some CBF initiatives and proximity to large markets, we expected fairly good knowledge of certification and access to certified markets. Instead, we found widespread but superficial awareness of certification and very limited markets. Detailed knowledge of both the procedures and problems associated with certification was concentrated in a few individuals who directly engaged the certification system. Moreover, facilitating organizations not only connected CBF initiatives to markets, but often painstakingly created markets for CBF products from scratch. In doing so, the local, socially responsible story of the CBF initiative was at least as important as the globally recognized certificate of sustainability, if not more so. Without clear economic incentives to participate, certification was attracting those who were already sympathetic to the goals of forest certification. Thus, in several ways, certification for small scale producers in Vermont was still in the early phases of the market development, attracting early adopters who were willing to support a new approach, if risks were reasonably mitigated.

The small-scale and local nature of facilitating organizations in Vermont contrasts with the larger, international non-governmental organizations that often assist with CBF certification in the Global South. The sustainability of these small, community-based facilitating organizations appeared more fragile than some of the CBF initiatives, which were sometimes larger, older and financially stronger. Informants expressed concern that financial support for the facilitating organizations to engage in certification was not secure over the long-term. As one informant noted, "Oh, the money (for certification) will definitely run out." A drop in financial support for the group certificate holders would leave CBF initiatives vulnerable to

losing their certification status, and, thus, jeopardize any benefits gained in terms of public image or market access.

The subsidization of certification for CBF remains a contentious issue (Gerez-Fernandez and Alatorre-Guzman 2005; Markopoulos 2003; McDermott 2006; Molnar 2003). With limited market returns, it is unclear how either CBF initiatives or facilitating organizations could engage in forest certification without external funding. This could still change as market linkages for certified products are formed and more purchasers choose to pay extra for sustainability. New markets for ecosystem services may be a complementary avenue to enhance economic returns. Some carbon protocols already encourage or require forest certification (e.g., Chicago Climate Exchange, Voluntary Carbon Standard) to ensure sustainable management. However, the challenges to CBF participation in certification will likely be replicated in new systems for assuring high quality carbon offsets and ecosystem services projects. If CBF initiatives are to participate in forest certification and markets for ecosystem services, it is likely that facilitating organizations will have a continued role in helping them to access new verification systems and markets.

Acknowledgments The authors thank Dr. Marla Emery and Dr. Eva Wollenberg for their valuable input on this project, and two anonymous reviewers for their thoughtful comments on this manuscript. This research was funded in part by the USDA, Forest Service, McIntire-Stennis Program.

References

- Auld G, Gulbrandsen LH, McDermott CL (2008) Certification schemes and the impacts on forests and forestry. *Annu Rev Environ Change* 33:187–211
- Baker M, Kusel J (2003) Community forestry in the United States: learning from the past, crafting the future. Island Press, Washington, DC
- Boyd E, Gutierrez M, Chang M (2007) Small-scale forest carbon projects: adapting CDM to low-income communities. *Global Environ Resour* 17(2):250–259 (A: Hum Policy Dimens)
- Butterfield R, Hansen E, Fletcher R, Nikinmaa H (2005) Forest certification and small forest enterprises: key trends and impacts, benefits and barriers. Forest Trends, Washington, DC
- Cashore B, Auld G, Newsom D (2003) The United States' race to certify sustainable forestry: non-state environmental governance and the competition for policy-making authority. *Bus Polit* 5(3):219–259
- Charnley S, Poe MR (2007) Community forestry in theory and practice: where are we now? *Annu Rev Anthropol* 36:301–336
- Christoffersen N, Harker West, Lyman M, Wyckoff B (2008) The status of community-based forestry in the United States: a report to the U.S. endowment for forestry and communities. U.S. Endowment for Forestry & Communities, Inc, Greenville
- Danks C (2008) Institutional arrangements in community-based forestry. In: Donohue E, Sturtevant V (eds) Community and forest connections. Resources for the Future, Washington, DC, pp 185–204
- Danks C (2009) Benefits of community-based forestry in the US: lessons from a demonstration program. *Int For Rev* 11(2):26–40
- FSC (2004) FSC standard: SLIMF eligibility criteria. FSC-STD-01-003 (Version 1–0) EN. Forest Stewardship Council, A. C. Bonn
- FSC (2009) Global FSC certificates: type and distribution. Forest Stewardship Council, A. C. Bonn
- FSC-US (2009) Forest Stewardship Council Certificates. Accessed October 1, 2009 at http://www.fscus.org/certified_companies/index.php?num=*&state=VT&letter=&order=Organization_Name&type=forests
- FSC-US (n.d.) Forest Stewardship Council US Family Forest Program. Accessed June 12, 2009 at http://fscus.org/standards_criteria/family_forests_program.php

- Gerez-Fernandez P, Alatorre-Guzman E (2005) Challenges for forest certification and community forestry in Mexico. In: Bray DB, Merino-Perez L, Barry D (eds) *The community forests of Mexico: managing for sustainable landscapes*. University of Texas Press, Austin, pp 71–87
- Glasmeier A, Farrigan T (2005) Understanding community forestry: a qualitative meta-study of the concept, the process, and its potential for poverty alleviation in the United States case. *Geogr J* 171(1):56–69
- Gray GJ, Enzer MJ, Kusel J (eds) (2001) *Understanding community-based forest ecosystem management: an editorial synthesis of an American forests workshop, Bend, Oregon-June 1998*. American Forests, Washington, DC
- Grieg-Gran M, Porras IT, Wunder S (2005) How can market mechanisms for forest environmental services help the poor? Preliminary lessons from Latin America. *World Dev* 33(9):1511–1527
- Hansen E, Fletcher R, Cashore B, McDermott C (2006) *Forest certification in North America*. Oregon State University Extension Service
- Harris S, Germain R (2003) Improving forest management through the supply chain: an assessment of wood procurement management systems in the forest products industry. In: Teeter L, Cashore B, Zhang D (eds) *Forest policy for private forestry: global and regional challenges*. CABI Publishing, New York
- Higman S, Nussbaum R (2002) *How standards constrain certification of small forest enterprises*. ProForest, Oxford
- Humphries SS, Kainer KA (2006) Local perceptions of forest certification for community-based enterprises. *For Ecol Manag* 235:30–43
- Irvine D (2000) Certification and community forestry: current trends, challenges and potential. *For Trees People* 43:4–11
- Kilgore MA, Leahy JE, Hibbard CM, Donnay JS (2007) Assessing family forestland certification opportunities: a Minnesota case study. *J For* 105(1):27–33
- Leahy JE, Kilgore MA, Hibbard CM, Donnay JS (2008) Family forest landowners' interest in and perceptions of forest certification: focus group findings from Minnesota. *No J Appl For* 25(2):73–81
- Leslie AD (2004) The impacts and mechanics of certification. *Int For Rev* 6(1):30–39
- Markopoulos MD (2003) The role of certification in community-based forest enterprise. In: Meidinger E, Elliot C, Oesten G (eds) *Social and political dimensions of forest certification*. Forstbuch, Remagen-Oberwinter, Germany, pp 105–131
- McCullough R (1995) *The landscape of community: a history of communal forests in New England*. University Press of New England, Hanover
- McDermott CL (2006) *FSC in the northern Appalachians: a regional and sub-regional analysis of forest stewardship council certification as a tool for forest conservation*. A report prepared for the Kendall foundation. Yale Program on Forest Certification, New Haven
- Meidinger E (2003) Forest certification as a global civil society regulatory institution. In: Meidinger E, Elliot C, Oesten G (eds) *Social and political dimensions of forest certification*. Forstbuch, Remagen-Oberwinter, Germany
- Minang P, McCall M, Bressers H (2007) Community capacity for implementing clean development mechanism projects within community forests in Cameroon. *Environ Manag* 39(5):615–630
- Molnar A (2003) *Forest certification and communities: looking forward to the next decade*. Forest Trends, Washington, DC
- Molnar A (2004) Forest certification and communities. *Int For Rev* 6(2):173–179
- North East State Foresters Association (2007) *The economic importance and wood flows from Vermont's forests*. Accessed on November 12, 2008 at <http://www.vtfpr.org/includes/documents/ecimportfor.pdf>
- Rickenbach MG (2002) Forest certification of small ownerships. *J For* 100(6):43–47
- Scherr SJ, White A, Kaimowitz D (2003) Making markets work for forest communities. *Int For Rev* 5(1):67–73
- Scruse H (2000) FSC certification of forest products for small enterprises: improving access, issues and options. *For Trees People* 43:57–62
- Smith J, Scherr SJ (2003) Capturing the value of forest carbon for local livelihoods. *World Dev* 31(12):2143
- Thornber K (2003) Certification: a discussion of equity issues. In: Meidinger E, Elliot C, Oesten G (eds) *Social and political dimensions of forest certification*. Forstbuch, Remagen-Oberwinter, Germany, pp 61–82

- USDA Forest Service (2007) Forest Inventory Assessment RPA Resources Tables. Available at: <http://www.fia.fs.fed.us/program-features/rpa/default.asp>
- Vidal N, Kozak R, Cohen D (2005) Chain of custody certification: an assessment of the North American solid wood sector. *Forest Pol Econ* 7:345–355
- White A, Martin A (2002) Who owns the world's forests? Forest tenure and public forests in transition. Forest Trends, Washington, DC