Tribal Forest Certification: An Assessment of Policy Impacts of Forest Certification Opportunities for Indian Tribes

by

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ABSTRACT

TRIBAL FOREST CERTIFICATION: AN ASSESSMENT OF POLICY IMPACTS OF FOREST CERTIFICATION OPPORTUNITIES FOR INDIAN TRIBES

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The concept of forest certification has grown over the past two decades as a proposed solution, beyond traditional governmental authority, to address long standing issues with forest resources, particularly aimed at the southern hemisphere. The growth of forest certification as a tool to promote sustainable forest management has also generated a growing body of literature grounded in areas of economics, social sciences, politics, and ecology.

One particular area has been forest certification's derivation of authority based on markets and not traditional means of governmental authority. This is interesting when examined within the context of the unique legal and historical governance structure and relationships associated with Indian tribes and the management of their resources. The primary question examined was whether non-state (that is, non-governmental) market-driven governance systems might impact management of Indian tribes' forest resources, and in what ways?

This research developed an Indian Country case study for an environmental policy analysis of possible impacts for a proposed tribally developed certification program. Based on this research, the very nature of forest certification and its ability to generate support for its legitimacy as a tool to promote sustainable forestry continues to hang in flux, thereby negating some of its perceived impacts to tribal governmental responsibilities. However, lessons derived from a comparison of existing cases studies indicate pro-active measures positioned some to better counteract what were perceived as outside influences impacting decision-making authority. In addition, the comparison of the Indian Country case study with other case studies provides a general framework that could help future research efforts for Indian Country and individual Indian tribes as they further consider forest certification and its policy impacts.

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LIST OF ACRONYMS

BIA - Bureau of Indian Affairs

CAN - Cashore, Auld and Newsom

DOI – Department of Interior

IFMAT – Indian Forest Management Assessment Team

ISDEAA – Indian Self-Determination and Education Assistance Act

ITC – Intertribal Timber Council

FSC – Forest Stewardship Council

MBS – Marketing and Branding Study

MPC&I – Montreal Process Criteria and Indicators

NIFRMA – National Indian Forest Resource Management Act

NSMD – Non-State Market-Driven

PEFC – Programme for the Endorsement of Forest Certification

SFI – Sustainable Forestry Initiative

SFM – Sustainable Forest Management

"*Indian Nations are truly unique forestland owners.*" (Mater 2005).

"*History is the essential foundation for an understanding of American Indian Law and Policy*" (Wilkinson 2004)

1 INTRODUCTION

Indian Tribes and Forest Certification

Over the past twenty years forest certification has emerged on the global and on particular domestic forest scenes as an alternative to address forest degradation where traditional governmental authority is perceived to have failed in addressing these issues. Forest certification has been proposed as one of the most clear and effective examples of a "non-state market-driven" (NSMD) governance system for use in addressing non-sustainable human impacts on forests (Cashore et al. 2004). That is, this is a governance system for promoting sustainable forest management[1] (SFM), which relies on market-based mechanisms to derive its governing authority. Since its inception in the early 1990's, research on forest certification has grown in trying to understand areas of impact including social, economic, public policy, and on-the-ground management (Romero and Tuukka 2013). For public policy, specifically, research on forest certification impacts has focused on possible impacts to traditional forms of governmental authority as well as forest management decisions derived from that authority. Does forest certification

[1] Sustainable Forest Management (SFM) is generally defined as the effort to ensure uses and benefits derived from forests are done so in a manner that provides for present day needs while maintaining the resource for future generations and long term development. In its broadest application this includes the administrative, technical, legal, economic, social and environmental factors associated with the conservation and use of forests (FAO 2011).

complement such governmental authority or replace that authority? Or has it failed to materialize in terms of the market-driven authority as it was originally conceived (Bernstein and Cashore 2007)?

For Indian Tribes[2] with forested lands, management of the forest resource is not as simple as it may be for individual, state or corporate landowners. To begin with, many tribes are managing forest resources on lands that have sustained their people for millennia, either through subsistence activities or contemporary economic ventures such as commercial timber production. This carries with it a high social requirement to manage according to each particular Indian tribe's vision for the land and the forest resource. In many instances, the management of Indian tribes' forests are carried out by programs and departments linked directly to the Indian tribe's specific governance system. Additionally, the lands of Indian Tribes, collectively known as "Indian Country," in the United States are held in common interest for all individual Indians enrolled within a particular Indian Tribe by the U.S. Government which serves as fiduciary trustee based on historical treaties and legislation specific to each Indian Tribe.

Although this is an oversimplified description of tribal histories, governance and management structures, and federal-tribal relations as it pertains to Indian forest management, it introduces a complex legal framework within which Indian tribal forests

[2] Indian Tribes as Sovereign Governments: "Indian Tribe" is both an ethnographic and legal-political term ascribed to a group of Indians recognized by the federal government through its constitutional powers; "Indian" is a legal term used to refer to an individual with a certain amount of Indian blood who is also recognized by a tribe or community; and "Indian Country" is considered all lands within the exterior boundaries of federally recognized Indian reservations. There are other terms used in different literature, such as "Native American", "American Indian", "First Americans", "Indigenous" and others. Also, members of Indian Nations may strongly prefer to identify themselves by their Indian tribal affiliation rather than any of the terms used above. However, for the sake of consistency and clarity, and to the extent possible, this research will use the legal definitions identified in Charles F. Wilkinson's book, "Indian Tribes as Sovereign Governments."

are managed. This management focuses on sustaining the environmental, cultural and economic benefit of Indian communities, and often results in similar benefits for neighboring non-Indian communities (Indian Forest Management Assessment Team III Vol.1). It is a framework rooted in traditional forms of tribal governance, with a specific emphasis on the government-to-government relationship established through treaties between the U.S. federal government and each Indian tribe. Indian tribal forests serve not only as the medium within which these relationships take place, but often serve as cornerstones of sustainability to the tribal communities that live within them.

The emergence of forest certification presents yet another challenge for Indian tribes, and the U.S. federal governments through its trust responsibility to Indian Tribes, as both governmental entities carry out their specific responsibilities for the forest resource and each individual Indian who is sustained from that resource. While the concept of forest certification is partially built on the notion that it is voluntary, research has examined whether forest certification uptake on a global level creates a ratcheting effect for standards, and ultimately whether it creates requirements for the acceptance of forest certification standards (Bernstein and Cashore 2007). In terms of environmental policy, the overarching question that this research explores is whether certification, as a non-state market-driven (NSMD) governance system, is an opportunity or a threat to Indian tribal forest management and what Indian Tribes should consider as they move forward.

Renewed Opportunities: Indian Tribal Forest Certification

In 2010, the Intertribal Timber Council (ITC)[3] with the support of ITC membership initiated a Marketing and Branding Study to "…investigate the potential for a marketing and branding program to increase the presence and value of tribal forest products (TFP's) in the marketplace based upon heightened recognition of the unique qualities that interweave utility, cultural heritage, and environmental protection" (Intertribal Timber Council 2011 Vol. I). The purpose of the study was in response to "a state of emergency" that existed within Indian Country and its forest product markets. A declining U.S. housing market in 2009 wreaked havoc on already low stumpage rates for Indian tribal timber, and historically high unemployment rates for reservation communities. The study concluded in 2011 and resulted in a three-volume report which detailed six main research modules, summarized the findings of each module, and provided recommendations to Indian Tribes for next steps, including alternatives to capitalize on forest certification opportunities.

As part of the overall Marketing and Branding Study, a survey was conducted to examine interest in the different modules, with forest certification set apart as one of the modules for specific consideration. The survey was provided to timber producing Indian tribes throughout the United States, and respondents included enrolled members of Indian tribes and non-members who worked as forest managers, managers of Indian tribal wood processing facilities, and related programs. It included questions to assess knowledge of,

[3] ITC is a national consortium of Indian Tribes, Alaska Native Corporations, and individuals who work cooperatively with the Bureau of Indian Affairs (BIA), private industry, and academia to explore issues and identify practical strategies and initiatives to promote social, economic and ecological values while protecting and utilizing forests, soil, and wildlife. The ITC website indicates over 60 Indian Tribes and Alaska Native Corporations are currently members of the ITC organization (ITC Website).

and perceptions and attitudes toward, third-party forest certification efforts through the leading certification programs in the U.S. the Forest Stewardship Council (FSC) and Sustainable Forestry Initiative (SFI).

Results of the survey seemed to indicate a general lack of knowledge or non-consideration of forest certification as an opportunity. However, cumulative interest for participation in the development of an Indian tribal sustainable forest management certification program did score higher, with 30% being very interested, 30% being somewhat interested, and 32% indicating neutrality on the issue, which the MBS Team took as openness to further activity (Marketing and Branding Study Report Vol. II 2011).

Guided by these results, module 5 was expanded from the originally assigned task to "identify and evaluate alternatives for certification for TFP's" and identified as the focus of the MBS Team:

> Indian forest planning meets the rigorous regulatory standards of federal and Indian governments. Indian management of forests and resultant wood product streams reflect unique cultural and environmental stewardship and sustainability that are worthy of respect and recognition. *A certification system developed and operated for Indians by Indians could more accurately reflect the unique cultural and environmental values of Indian peoples, satisfy CoC and FM certification requirements needed for market access, be endorsed by the power of the federal government, and elevate public awareness of the values reflected by TFPs in the market place*. {Emphasis added}

The Marketing and Branding Study was comprehensive in regard to the tasks it was given and the resulting recommended options for Indian tribes to increase market presence and appreciation for Indian tribal forest products. However, given the unique and historical nature of Indian tribal forestry and the relatively recent and ongoing evolution of forest certification as a non-state market-driven governance system, it seems

clear that future actions would benefit from an environmental policy analysis perspective. Based on this, the initial question to be asked is, what are possible impacts and/or policy implications for "…a formalized system to guide the issuance of government certificates of chain of custody and forest management…"?

Further, a second question in the context of a tribally developed standard, what differences might exist between existing Indian forestry regulations and current forest certification programs, and how would that add to the policy issues? And, then, how would the federal/tribal trust relationship be impacted and/or impact the process of forest certification, which supposes to derive its authority from consumer choices and not governmental authority?

Research Objectives

To better understand the three questions posed above, this research looked to develop an historical assessment of the emergence of forest certification within Indian Country to provide context for a re-examination of the compatibility between existing forestry regulations and existing forest certification schemes. There was also an opportunity to include an analytical framework that was developed and tested through a series of case studies that could provide guidance for an Indian Country case study. The use of this analytical framework to develop an environmental policy analysis perspective on the topic of Indian tribal forest certification could provide further insight as the ITC and its membership consider next steps for the way forward. At the very minimum this research would add to the environmental policy literature for Indian tribal forest management and tribal forest certification.

This research is presented in five chapters. After this introduction, the second chapter reviews forest certification and examines it as an example of a "non-state market-driven" (NSMD) governance system. The third chapter provides an overview on the emergence of forest certification in Indian Country, as a specific sub-region within the original case study for the United States. A fourth chapter assesses the applicability of the analytical framework as applied to earlier case studies (Cashore et al., 2004, Cashore et al. 2006, Cashore et al., 2007) to explain forest certification choices within Indian Country and in turn situate Indian Country alongside the prior case studies. A fifth chapter uses the historical narrative and analytical framework from the previous sections to review the overarching question of what the possible impacts and/or policy implications are for "…a formalized system to guide the issuance of government certificates of chain of custody and forest management…." This final chapter also includes an examination of what the Indian Country case study might add to the analytical framework, but more importantly, what lessons learned from the prior case studies can be applied to the current situation for Indian Country.

Environmental Policy Analysis and Forest Certification

The nature of forest certification as a non-state market-driven governance system means that traditional forms of environmental policy analysis, such as assessment of policy formulation within legislative bodies or the conduct of cost-benefit analysis within regulatory agencies, are not directly applicable in this case. However, it has been noted that public policy is shaped by the interaction of long-term social, economic, technological, and political forces as well as short-term fluctuations in the political

climate (Vig and Kraft, 2003). In this regard, forest certification is not unique, because it too is formulated, adopted, and implemented within social, economic and political contexts (Romero and Tuukka 2013). The primary difference is that certification as a policy achieves its legitimacy and thus, authority, through markets along the supply chain (Cashore 2002). Therefore, an examination of Indian tribal forest certification efforts within a public policy context is important in better understanding possible future implications as forest certification continues to grow in its influence on global and particular domestic timber markets, specifically markets connected to Indian tribes.

To address the potential impacts of NSMD policy for Indian tribal forest management, my research adopts the use of an analytical framework initially developed by Cashore, Auld and Newsom in 2004 using five case studies in regions that have experienced the introduction of FSC style certification. This analytical framework was modified for use in 2006 by Cashore et al., to discuss developing and transitioning countries support for forest certification. And, in 2007, Cashore et al. added a case study on Finland to the original case studies from 2004.

The design of the Cashore, Auld and Newsom study in 2004 combined concepts and theories from social science and international policy to develop a framework to examine how legitimacy is granted to what the study identified as two different "conceptions" of forest certification. One conception is the Forest Stewardship Council (FSC) style certification, which is performance-based[4] and the other is the development

[4] A performance based standard is one that focuses on the outcomes of the management system being evaluated to determine whether sustainable forest management goals are being met. This requires minimum standards be set beforehand (Fern 2001, p.11).

of industry-led conceptions that are systems based[5], which were developed to counter the FSC-style certification program. These case studies examined certification choices based on individual and intersecting impacts of three common factors identified: place in the global economy; structure of the forest sector; and history of forestry on the public agenda.

This framework includes the use of a historical narrative approach to examine the story of the emergence of forest certification in the case study countries/ regions. Cashore et al. (2004) note that using the historical narrative was appropriate because of the complex historical processes involved in the case studies (p.54). One way to view this historical narrative approach is that it provides an iterative public policy analysis to provide further recommendations based on other case study experiences that may help guide future collective decision-making for Indian Country. Given the juncture that Indian Country is at in the historical sense of determining whether and how to proceed with the development of a tribal forest certification scheme, and the current status of forest certification support in Indian Country, this framework presented a unique opportunity to examine this history even as the next steps are being considered.

The Case for "Indian Country" as a Case Study

The original concept for this research was to develop a draft standard for Indian Country based on existing Indian forestry regulations, as proposed in the ITC Marketing and Branding Study. This draft standard was then intended to be used to assess

[5] A systems based standard evaluates the system in place for meeting sustainable forest management goals, and focus on process rather than outcomes (Fern 2001, p.12).

compatibility between Indian tribal regulations and existing forest certification standards by two groups of professionals: one group made up Indian Country forestry professionals and the other made up of forest certification professionals. It soon became apparent the logistical concerns for administering and securing participation for a survey of this type would be difficult. However, more importantly, after initial discussion it seemed the effort would be promoting the primary issue Indian Country has with existing forest certification standards, they were developed outside of Indian Country.

Therefore, to address my research questions I chose to designate "Indian Country"[6] as a unit of analysis for an additional case study using the CAN analytical framework. This provides a tool with which to examine Indian Country and forest certification from an environmental public policy perspective, but also provides an opportunity to address criticism lodged with comparative historical analyses by moving beyond initial case studies to determine whether identified causal relationships exist in other areas (Cashore et al. 2007, p.2). To use this tool, the first task is to determine the feasibility, or fit, of the Indian Country case study within the parameters utilized by the CAN analytical framework and whether any parameter modifications are needed.

In their seminal 2004 research, Cashore, Auld and Newsom (CAN) chose the United States, British Columbia (Canada)[7], Germany, the United Kingdom, and Sweden for their case studies based on a three pronged approach: 1) focused only on developed ("industrialized") countries to control for general patterns of economic development; 2)

[6] "Indian Country" is considered all lands within the exterior boundaries of federally recognized Indian reservations. (Wilkinson 2011).

[7] Cashore et al. note that British Columbia, a province within Canada, is included because regional contexts are not at play in this particular case, but rather competition between FSC-style certification and FSC-competitor certification.

focused on countries where certification was promoted to forest companies and non-industrial forest land owners; and 3) represented a range of the dependent variable (i.e. support for FSC-style forest certification). In addition, two primary characteristics were used to consider case studies; 1) active production and consumption of industrial wood and paper products; and 2) variable structures of the forest sector and public policy approaches to sustainable forest management across case studies (Cashore et al., 2004).

In 2006, a series of case studies that focused on developing or transitioning countries to explore the question "…of how forest certification might emerge as a force for the promotion of sustainable forest management, and its potential role in limiting forest deterioration while promoting forest conservation…" (Cashore et al., 2006). The authors chose to examine the situation for Africa, Asia-Pacific, Eastern Europe, and Latin American as examples where support for certification efforts is more difficult because the economic, political and social context is not conducive to it. (Cashore et al., 2006 p.18). One of the interesting aspects of this research was that it used the basic outline of the 2004 study to provide a general template ("analytical framework") with which researchers from the case study countries could conduct examinations of their own. The countries themselves were selected according to: 1) total forest area (relative to other countries as a percentage of total land area of the individual country; 2) level of forest certification activity; and 3) identification and availability of a researcher from the case study country.

In 2007, Cashore, Egan, Auld and Newsom, researched an additional case study for Finland utilizing the CAN framework, because Finland, although similar to Sweden, came out in staunch opposition to FSC-style certification to the point of creating an

opposing certification scheme. As part of the objectives for this additional case study an assessment of the CAN framework's applicability to a case study (Finland) outside of the original case studies was addressed. The authors noted that the CAN analytical framework was applicable, but through the process of assessing its compatibility to the Finnish case study, they recommended further nuance to the theoretical framework by revising an existing question posed and the creation of a new question. The authors felt that further specifying foreign market dependence, in terms of product uniqueness, merited closer future consideration (p.34). The final proposed revision to the framework focused on whether FSC supporters viewed a country/region as key to generating support elsewhere, and not necessarily within the country/ region of focus itself (p.35).

These three sets of case studies at different times with different focus groups provide the following basis for applying the CAN analytical framework to the Indian Country case study. First, the 2004 study provides the initial analytical framework; second, the developing and transitioning countries provide interesting lessons given the unique situation of Indian Country politically and economically. Finally, the Finnish case study provides a structure and basis on how to apply the analytical framework to follow up case studies. Taking all of this into consideration the next few paragraphs outline the case for an Indian Country case study.

Developing vs. Developed Countries

As referenced earlier, Indian Country is an ethnographic and socio-political term used to broadly describe the lands within the limits of an Indian reservation under the jurisdiction of the United States government; all dependent Indian communities (e.g.,

New Mexico pueblos); and all Indian allotments still in trust. For the purpose of this case study, Indian Country is further restricted to Indian tribes and lands which include commercial timberlands and woodlands managed for commercial harvests and therefore a target for certification efforts.[8]

The distinction between developing and developed countries used by the Cashore et al.'s series of case studies (2004, 2006, and 2007) considers whether the country/ region is industrialized in terms of the following categories, "consumption of domestic forest products," "consumption of imported forest products," and the "export of forest products[9]." This distinction is then quantified with reported volume of forest products for each category. According to information available for Indian Country, there is evidence for the production of raw timber resources (See Table 4.1, p.53), but limited references to primary and secondary manufacturing facilities in Indian Country. The IFMAT III report states "…harvesting and processing infrastructure is in a critical state of decline..." and that since 2001 ten Indian tribal sawmills have closed leaving only four remaining open (p.31). Although this lack of data related to consumption and production of forest products in Indian Country limits total comparisons with other case studies, it does not

[8] IFMAT III reports that Alaskan Native individuals, tribes, villages and corporations oversee 50 million acres of land (50% forested) with about 460,000 acres in trust status. These lands were not included as part of the IFMAT I and II process, but are indicated as needing to be assessed in the IFMAT III report. Therefore, this research limits the scope of Indian Country further to those trust land within the 48 states.

[9] Each of the case studies use different wording for the products, but they primarily refer to raw resources (Industrial roundwood, which is all roundwood used for any purpose other than energy. It comprises: pulpwood; sawlogs and veneer logs; and other industrial roundwood (e.g. fence posts and telegraph poles), primary manufactured (Sawn wood encompasses planks, beams, boards, laths, sleepers, etc. that exceed 5 mm in thickness. It includes sawn wood that is planed, unplaned, grooved, chamfered, beaded, etc., but it excludes wooden flooring.), and secondary manufacturing (particle board, plywood, wood-based panels). For this report, forest product is the general term that will be used to reference these products unless there is a need for a more specific reference (FAO 2012 Global Forest Products Facts & Figures). The term forest product does not include the expanded definition as presented in 25 CFR sub-section 3103 (6), which also includes items such as nuts, roots, berries, Christmas trees, etc.

limit it from being considered. The next section addresses why it does not limit analysis in this way.

Production and Consumption of Forest Products

The primary reason for this criterion was to assess the level of influence FSC and its supporters had over a country/region due to its level of dependence on imports from and exports to foreign markets (Cashore et al 2004, p.41). In the case of Indian Country, the case is already made for two reasons; 1) Indian Country produces industrial roundwood and possesses little primary or secondary manufacturing facilities, so must therefore to a larger extent depend on surrounding U.S. "domestic" markets[10] to utilize its forest products. In the Cashore et al. (2004) study the U.S. was considered "shielded" from the pressures of the FSC and supporters because it was the largest producer of industrial roundwood and primary and value-added forest products, and that the U.S consumption of wood products outpaced its production.[11] Therefore, Indian Country, could be considered shielded and further that it would not be necessary to have access to reported volumes needed to make this determination specifically for Indian Country.

[10] Indian Country dependence on surrounding U.S. domestic forest product manufacturing markets, which could be considered foreign markets, creates an interesting consideration given the unique history of federal-tribal relations relative to other case studies. In his assessment of the Marshall opinion for Cherokee Nation v. Georgia (1831), Charles F. Wilkerson notes the following, "*Indian tribes are not foreign nations, but constitute 'distinct political' communities 'that may, more correctly, perhaps, be denominated domestic, dependent nations' whose 'relation to the United States resembles that of a ward to his guardian."* The Marshall trilogy of nineteenth century Supreme Court decisions still stand as the legal foundation for affirming the legal standing of Indian nations, even centuries later. The term domestic dependent nations set Indian Country within a vague context as a country/ region. This also serves as the political basis for further consideration in the following section discussing the case for an Indian Country case study.

[11] The United States is still considered a large producer and consumer of forest products as reported for 2011 by the FAO 2012 Global Forest Products Facts & Figures.

Varied structure of forest sector and public policy approaches to SFM

In terms of forest sector structure and public policy approaches to sustainable forest management (SFM), Indian Country provides a unique case study that is wholly different from the other case studies. In this particular case, Indian Country in the United States is made up of lands inhabited and managed by the original inhabitants of the country (Mater 2005). At the very least, it can be conceded that they have been actively engaged, living and making management decisions on these lands thousands of years before the conception of contemporary markets, and now non-state market driven conceptions that derive their authority from markets. But, the relatively recent introduction of federal-tribal relations has introduced a structure and associational system that differs from the other case studies.

Although there are limited, if any, Indian tribes "horizontally" and "vertically" integrated as described in the Cashore et al. study (2004, p.44), collectively there is a considerable variation in the forest sector. Primarily, it is made up of smaller Indian tribal forest management operations with limited access to Indian tribally owned primary and secondary manufacturing facilities. In the same way, the public policy approach is based off of the shared history of federal-tribal relations, specifically through the United States Department of Interior (US-DOI)[12] Bureau of Indian Affairs (BIA) Division of Forestry

[12] Indian Affairs (IA) was established in 1824 in the Department of Interior and now provides services to approximately 1.9 million American Indians and Alaska Natives. There are 566 federally recognized American Indian tribes and Alaska Natives in the United States. Bureau of Indian Affairs (BIA) is responsible for the administration and management of 55 million surface acres and 57 million acres of subsurface minerals estates held in trust by the United States for American Indian, Indian tribes, and Alaska Natives. (IA Website, Who are we?).

and Wildland Fire Management (DFWFM),[13] but also facilitated through the cooperation building efforts of the Intertribal Timber Council (ITC).

Certification Activity

Indian Country has had experience with certification both at the broad general level through intertribal organizational activities such as panels and discussions at the ITC Annual Symposiums as well as projects, and also through the BIA DFWFM ("BIA"). Several individual Indian Tribes have also noted participation in third- party certification activities ((Marketing and Branding Study Report Vol. I, 2011). These activities have also been a part of Indian Country since the early 1990's and have resulted in several large projects aimed at developing Indian Country's interest in forest certification (Forestry Manual 2002). Simply put, certification activity has been a part of the forest management experience by Indian Country since the creation of the initial conceptions for forest certification.

Case Study Diversity Related to Dependent Variable

In their 2004 study, Cashore et al., had identified "…the level of forest company and non-industrial forestland owners support for the FSC" as their dependent variable that would be measured across the case studies (p.51). In the 2006 study the same variable was being assessed, but in the context of why forest certification support in

[13] The Division of Forestry and Wildland Fire Management (DFWFM) is responsible for providing coordination, management, planning, oversight, and monitoring for all activities related to development and protection of trust forest resources on nearly 18 million acres of forest land. (IA Division of Forestry and Wildland Fire website).

general was weaker within developing and transitioning countries as opposed to developed countries (Cashore et al., 2006, p.10). In the case of Indian Country this research examines the way support was developed for forest certification and what the impact of these activities mean for proposed recommendations and next steps as Indian Country continues to examine alternatives.

Given these prior sections it is clear that the use of Indian Country as a unit of analysis within the CAN framework is applicable. It also provides a unique blend of the developing/developed discussions, and governmental/business relations described in the analytical framework. However, one final but ultimately important clarification that must be restated is that all 565 federally recognized Indian Tribes possess unique cultural and historical characteristics. Indian tribes that practice sustainable forest management for commercial timber production, and thus are the focus of this study, are among these nations. The use of the term “Indian Country” should in no way be construed to overlook this fact. It is primarily applied for the practical purposes described in the previous sections.

2 FOREST CERTIFICATION: NON-STATE MARKET-DRIVEN GOVERNANCE

Forest Certification History

Concern over forest destruction and a growing recognition of the importance of forests environmentally and socially became issues of global discussion in the early 80's. But, it was not until the 1992 United Nations Conference on Environment and Development (UNCED), or what is commonly referred to as the Rio Summit that discussions led to action at the global level. In the case of forests, action came in the form of the drafting of Agenda 21 a non-legally binding set of forest principles. However, this perceived lack of concrete action by nation states led non-governmental groups and other concerned environmental groups to view this as inadequate in the face of forest destruction (Nussbaum 2005).

Even before the Rio Summit took place, a group of concerned timber users and representatives from environmental and human rights groups met in California in 1990 to discuss and approve of the concept for the Forest Stewardship Council (FSC). While the results of the Rio Summit may not have met expectations of NGOs, environmental organizations and concerned citizens, it did provide the forum within which support was developed for the FSC concept, the idea of non-governmental, independent and international means for promoting and ensuring sustainable forest management. In 1993, the FSC as an organization was officially assembled during a founding convention in Toronto Canada (FSC 2013). This was the first step in the development of what has come to be considered the most relevant example of a "non-state market driven" mechanism to promote social and environmental change (Cashore et al. 2004).

CAN NSMD

Cashore et al. have described key features of non-state market-driven governance systems in 2004; 1) there is no use of state sovereignty to enforce compliance; 2) institutions constitute governing arenas in which adaptation, inclusion, and learning occur over time and across a wide range of stakeholders; 3) these systems govern the "social domain" – requiring profit maximizing firms to undertake costly reforms that they otherwise would not pursue; 4) authority is granted through the market's supply chain; and 5) the existence of verification procedures designed to ensure that the regulated[14] entity actually meets the stated standards (Cashore et al. 2004). In the 2007 case study for Finland the key features are repeated, but an emphasis is placed on the fact that "there is no use of state sovereignty to enforce compliance" (Cashore et al., 2007).

[14] In this case the term "regulated" refers to any forest company or non-industrial private forest land owner who has voluntarily chosen to submit to the requirements of a forest certification standard, which is then "regulated" through audits to verify conformance to the standard, and the use of market based sanctions imposed for non-conformance.

Table 2.1 Key Features Identified for NSMD Governance Systems

Role of the state	State does not use its sovereign authority to directly require adherence to rules
Role of the market	Products being regulated are demanded by purchasers further down the supply chain
Role of stakeholders and broader civil society	Authority is granted through an internal evaluative process
Enforcement	Compliance must be verified

(Source: Cashore et al., 2007).

Creating the New System

The concept of forest certification in the case of FSC was based on the intent that governing authority derived from market mechanisms would steer the uptake of sustainable forest management (SFM) standards, and increased levels of commitment. To achieve this, the FSC initially created nine principles (with a tenth principles added in 1999) and multiple criteria, as requirements for forest owners to meet to receive certification of SFM. The principles included consideration for legal compliance, land use rights, indigenous people's rights, and environmental impact. Compliance with FSC standards is enforced through authority derived from market-based mechanisms. On one end of the supply chain, certification for sustainable forest management is only given to organizations that meet the standards, based on findings from rigorous third-party audits. On the other end, large retail users of forest products are encouraged to implement FSC only procurement policies to create exclusive markets.

In terms of structure the basic elements of a certification program, regardless of type (i.e., performance-based vs. systems based), is broken into two components: sustainable forest management and chain of custody certification. Simply put, SFM

determines whether the forest is being managed sustainably according to whatever goals are in place by the authorized decision-making entity; and chain of custody is a means to track the transport of products derived from that forest through the supply chain to its final destination market to verify claims of sustainable wood/fiber sources. Both are enforced through market based compliance mechanisms (i.e. removal of certification and removal of the certified label from the forest products being sold).

The development of the FSC governance structure was based on a balancing of interests, which included the creation of a three-chamber body of representation for environmental, social and economic interests. Each chamber was further balanced through the inclusion of equal representation between the northern and southern hemispheres, in an effort to lessen the dominance of the north over the south. The balancing efforts in this organizational governance were meant to deter one interest from overreaching the other interests, specifically business over environmental and/or social interests. However, as noted in the Cashore et al. study (2004), this balancing was also seen as a lumping together of interests, where both the implementers of SFM rules were included in the same chamber as purchasers of the certified product, the same purchasers who are targeted for influence by environmental and social interests to create the market-based authority that is at the heart of forest certification.

The combination of these two groups into the one chamber was perceived by some industry and forest landowners as an infringement on their ability to manage their own affairs. In general, this issue embodied the reasons why a backlash against FSC style certification began and, which ultimately led to the development of alternative forest certification concepts. More visible programs in the North American continent that came

into being as a result of this backlash were the Sustainable Forestry Initiative (SFI) in the United States, and the Canadian Standards Association (CSA) in Canada. On the international level, the Programme for the Endorsement of Forest Certification (PEFC) was developed as an umbrella organization for landowner associations looking for global recognition in opposition to the FSC global efforts (Cashore et al. 2004). Although these two conceptions of forest certification were developed in counter to each other, one important fact to remember is that both look to promote the overall concept of sustainable forest management.

Differences between the two forest certification conceptions, FSC –style and industry-led, have been described as a matter of "stringent and wide in scope" and "flexible, procedural" Cashore et al. 2004. And, while in both cases each is in pursuit of the promotion of SFM, the audiences to which these forest conceptions differ in terms of where along the supply chain promotional efforts are undertaken. Cashore et al. (2004) found that at the implementation level (on the ground management) FSC supporters explained why their system was no different from FSC competitor programs, while FSC competitor programs emphasized the differences. In a reverse of this finding, further down the supply chain for companies who purchased certified products, FSC supporters emphasized superiority of their program over other programs and FSC competitor programs noted the similarities of each program (p.238).

As both of these forest certification conceptions have evolved, some of the initial differences have disappeared while other differences have remained or grown. Quantitatively, the differences between the two conceptions (represented in this study as FSC and SFI) can be classified according to standards, criteria and indicators. These can

also be broken down in terms of structural hierarchy, prescriptive nature and numerical. The hierarchy of principles is less important than indicators in terms of auditing and certification efforts. Principles are higher up in terms of overall hierarchy, but they only contain general or vague references which provide the context for the lower levels. Middle levels provide further refinement in relation to the intent of the standard, but are still not specific for auditing purposes. The lowest level of the structure, is the indicator level, which provides the specific point where auditing occurs for a particular forest. Indicators are important because they influence what is audited, how it is audited, and ultimately, the impact on forest management activities. Examples where the two forest certification conceptions differ include clearcutting and opening size limits, green-up requirements, land use conversion, calculation of harvest levels, management plan updates, and old growth to name some of the more visible (Dovetail 2011).

At the same time forest certification has grown, the field of literature looking to better understand this phenomenon and its various impacts has also grown. Projects have explored the success of conservation impacts (Kaechelle 2011), as well as impacts on management practices and standards revisions (Moore, Cubbage, and Eicheldinger 2012). There have also been efforts to better understand how legitimacy for a certification program is gained (Cashore 2004), as well as examining forest certification impacts on traditional environmental policy making processes, the abundance of bio-diversity, the associated economic benefits and costs, and related social perceptions and acceptance (Auld et al. 2008; Moore et al. 2010).

The research focus for my study is in relation to these literature development efforts, specifically using research that explores how certification programs gain

legitimacy for rule-making, obtain authority to enforce these rules, what that means for traditional forms of forest governance, and how Indian Tribes might proceed as they consider their next steps. The following section will provide an overview of the history of forest certification in Indian Country and in particular, introduce the issues that Indian tribes have raised.

3 EMERGENCE OF FOREST CERTIFICATION AND INDIAN COUNTRY

This chapter deals with the history of the introduction of forest certification into Indian Country up to the release of the Marketing and Branding Study recommendations. In assessing the feasibility of Indian Country as a case study, the noted complexities of Indian tribes as both sovereign governments, yet dependents of the United States ("domestic dependent nations"), shows a link both politically and economically, in regards to forest certification and the U.S. case study by Cashore et al. (2004). This specific situation itself lends a new perspective with which to view the key features of a non-state market driven governance system as identified by the Cashore et al. studies (see table 2.1, p. 27).

Politically, there is a unique aspect of governmental authority at play here that is not in the Cashore et al. studies, specifically in terms of the domestic dependent nation's status (Wilkinson 2004). Based on this description, there are two governmental roles at play in regard to forest management in Indian Country, one is the tribal governments themselves, and the other is the U.S. federal government. Both have a responsibility to the forest resource, one as matter of representation to their own Indian tribal members, and the other due to trust responsibility based on treaties and agreements specific to each Indian tribe and its membership.

Economically, aside from a few individual Indian tribes' efforts to create niche markets or gain access to international markets for their own forest products (raw timber, rough lumber, and finished products), the majority of commercial timber producing Indian tribes are tied to local or regional forest products markets because they do not consume all of the materials they produce. The impact of the 2009 housing decline on

Indian tribal communities by the ITC Marketing and Branding study demonstrate the ties, specifically in terms of the depressed markets for forest products, which led to lower stumpage revenues, and therefore loss of forest industry related jobs in Indian tribal communities (ITC Marketing and Branding Study Vol I. p.1).

Cashore et al. (2004) describe history of forest certification introduction for the U.S. as being relatively later than the other case studies, with only limited access for small markets up to the early 1990's. However, once pressure was exerted by FSC supporters on large purchasers of forest products like Home Deport to endorse FSC certified products, the U.S. forest products industry began to take notice (p.88). Although the concept of forest certification had its origins in the U.S. and the FSC conception was supported by several U.S. environmental groups, the FSC struggled to gain access in the U.S. The case study notes this was due primarily to two issues: 1) U.S. companies did not see the market benefits espoused by the FSC and its supporters; and 2) concern over logistical issues related to the performance-based approach for forest management, and chain of custody requirements in relation to centralized manner in which forest companies procured timber from thousands of smaller producers.

This resulted in the American Forest and Paper Association (AF&PA) developing and implementing its own industry led certification system, which they considered a legitimate and more applicable alternative to their membership. From 1993 through 1995 the development of the Sustainable Forest Initiative (SFI) took root and grew from these initial efforts by the U.S. forest products industry (p.99-100). The FSC supporters viewed this action as an effort to green-wash the industries forest management efforts, but as Cashore et al. note, "…FSC supporters do not appear to have taken into account the depth

and strength of this commitment to the SFI…" by the AF&PA companies that lead its creation (p.101).

In contrast, Indian Country had just finished going through the federal legislative process to address decades of inadequacies related to Indian tribal forest management. Lack of clear and consistent, or in some cases, any statutes, laws and policies related to management in conjunction with severely understaffed and underfunded programs had led to the push for legislative reform. Indian tribal governments considered their options, and instead of individual lawsuits by each Indian tribe, they worked through the Intertribal Timber Council (ITC), which focused both Indian tribal efforts and the Bureau of Indian Affairs on efforts to develop and push for the reforms. These efforts culminated in 1990 with the enactment of the National Indian Forest Resources Management Act (NFIRMA). Although not everything the Indian tribes wanted was included in NIFRMA, one important activity that resulted was the requirement for a national assessment of Indian forestry every decade (Rigdon 2006).

Between the enactment of NIFRMA and the initial report of Indian Forest Management Assessment Team (IFMAT), there was one Indian tribe that did apply for and was certified under the FSC standards in 1992 (Forestry Manual 2002). In 1993, the IFMAT[15] came out with its report which documented not only the inadequacies of federal

[15] There are 8 legislatively mandated tasks stipulated by NIFRMA for these assessments: (A) An in-depth analysis of management practices on, and the level of funding for, specific Indian forestland compared with similar federal and private forestlands; B) a survey of the condition of Indian forestlands, including health and productivity levels; C) an evaluation of staffing patterns of forestry organizations of the BIA and of Indian Tribes; D) an evaluation of procedures employed in timber sale administration, including preparation, field supervision, and accountability for proceeds; E) an analysis of the potential for reducing or eliminating relevant administrative procedures, rules, and policies of the BIA consistent with the federal trust responsibility; F) A comprehensive review of the adequacy of Indian forestland management plans, including their compatibility with applicable tribal integrated resource management plans and their ability to meet tribal needs and priorities; G) an evaluation of the feasibility and desirability of establishing

government responsibility for Indian tribal forests, but also reaffirmed the vital importance of the forests to the Indian tribal communities that were sustained within them. Although the 1993 report made no specific mention of forest certification at that time, it is interesting to note in its set of stipulated tasks there is one that looks to review "…the adequacy of Indian forestland management plans and their ability to meet tribal needs and priorities…" and another that proposes to evaluate "…the feasibility and desirability to establish minimum standards against which the adequacy of the forestry programs of the BIA in fulfilling its trust responsibility to Indian tribes can be measured" (IFMAT I 1993).

The report concluded that Indian forest management plans had the potential to meet tribal goals and priorities, but were hindered by the use of the more quantitatively defined term sustained yield[16], which limited its application to address management considerations for Indian tribe's vision of all forest products, including what is termed non-timber forest products (p.V-38). In addition, the report also concluded that federal trust responsibilities for Indian forests were not clearly defined in existing laws or regulations, which the report noted, posed problems for the efficient management and operations for Indian tribal forests and associated manufacturing efforts (p.V-51).

From 1996 to 1997 a group of tribal foresters working with Ford Foundation, and the First Nations Development Institute developed a grant program titled "Sustainable

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minimum standards against which the adequacy of the forestry programs of the BIA in fulfilling its trust responsibility to Indian tribes can be measured; and H) a recommendation of any reforms and increased funding levels necessary to bring Indian forestland management programs to a state-of-the-art condition. 25 U.S.C. § 3118.

[16] Sustained yield means the yield of forest products that a forest can produce continuously at a given intensity of management 25 U.S.C. § 3118, Sec. 304.

Forestry Fund," designed to offer assistance to Indian Tribes interested in exploring forest certification. The program provided technical assistance and some funding assistance, and also aimed to educate Indian tribes on these efforts in general and more specifically what forest certification could mean for their lands and the forest products coming from those lands (Forestry Manual 2002). Initial meetings hosted by the Intertribal Timber Council (ITC) included panels during the annual ITC National Timber Symposiums.

During this same time period, another Indian Tribe considered third- party forest certification, but withdrew due to the cost of the annual review and on the advice of legal counsel. This led to a reported lack of commitment by a large domestic retail purchaser because the Indian tribes sustainable management activities were not independently verified (MBS Team Vol II P.56). The instability created by these growing pressures did mean that Indian tribes needed to more fully consider their options, both at the individual tribal level and collectively through the ITC, in regards to forest certification. At the 2002 membership meeting at the ITC annual symposium, Indian tribes discussed mounting pressures from outside timber companies, brokers, and lumber "treaters" that expressed the need for Indian tribes to become certified before their timber or lumber would be purchased. The discussion was prompted by the efforts of the IFMAT II study that was just wrapping up (ITC April 2002).

Prior to commencement of the second decadal Indian Forest Management Assessment Team (IFMAT) project, the non-profit organization Pinchot Institute for Conservation approached the Intertribal Timber Council (ITC) with a proposal to engage interested Indian tribes with a forest certification opportunity. The Pinchot Institute

included Indian tribal forests as part of their larger and longer term examination of the usefulness of forest certification on public lands in the United States (Sample et al. 2007). The proposal was to use both the Forest Stewardship Council (FSC) and Sustainable Forestry Initiative (SFI) to; 1) provide for the in-field audit component of the IFMAT report; 2) provide a comparative analysis of compatibility between Indian forestry management and both certification program standards; and 3) provide a "reserve assessment" to rank Indian tribes perception of compatibility between management and standards (Mater 2001).

The study results indicated that while there were limitations (i.e., small sample size relative to total Indian tribal forests and generalized criteria were difficult to operationalize against multiple situations) the main findings indicated that Indian tribes were more prepared to be certified under the FSC than the SFI. In this instance, the reasoning given was due to the differences in the performance based FSC certification and the SFI systems based certification. Indian tribes were less suited for a systems based certification because of a lack of staff and resources to develop and maintain the documentation (paper trail) required by SFI. On the other hand, Indian tribal forestry programs were more adept at implementing projects in the field and thereby being more "well positioned" to achieve FSC certification because of on-the-ground performance.

The results of these pre-assessments indicated that Indian Tribes were not ready to pursue FSC Certification, but did point out barriers that were separated into three categories: "1) Apprehension about FSC certification and preparedness for the certification process, 2) Structural barriers in the forest management organization and/or the community that hinder the pursuit of certification; and 3) Shortcomings in the forest

management approach that may generate 'pre-conditions' or 'conditions' during the certification process" (Mater 2006).

Mater (2006) also stated that trying to determine a "…'collective voice' on tribal views of forest health and sustainability remains difficult." This comment came after Mater and the Pinchot Institute for Conservation explored the degree to which tribal views correlated with the globally accepted Montreal Process Criteria and Indicators (C&I's). This "reverse" assessment, while indicating indigenous rights and cultural resource protection, and maintaining a balance between the social, ecological and economic values were important to most Tribes, also showed less agreement for relevance of specific C&I's for economic benefits, efficient product utilization, evaluating certain management practices, and establishing credibility with outside entities. In discussing the results of the assessment, Mater did note one vital piece of information that is important to consider in the forest certification process;

> At its core, the reluctance of tribal governments to accept and employ standards comprised of criteria and indicators that reflect values of external societies is a matter of policy. To attempt to measure sustainability of tribal forests in a judgmental way through the imposition of an inflexible universal yardstick represents a fundamental failure to respect the legitimacy of tribal prerogatives to use and manage their own resources. (Matter 2006, p.16)

Within each individual tribal community, to varying degrees, the decision-making process on what a Tribe's goals are for the management of their forests may not reflect alignment with a standard that has been previously developed. This means tribal decision-making for timber harvests may not fall within expected forest industry standards for species rotation. As Motanic (1998) notes in an article regarding the

implementation of NIFRMA, “Before white settlement began in America, the rules, roles and relationships linking Indians to their forests were not governed by legal codes. They were parts of a way of life that dominated the North American landscape for thousands of years.”

As a result, management practices might be altered where old-growth forests dominate much of the landscape, and do not fully conform to and industry standard of sustained yield (MBS 2011). Also, because tribes make a living from their land base, the same land they reside on, whether as managers or as users of the forest and its products, management decisions must be lived with once completed. Visual impacts as well as impacts to water, wildlife, food and medicinal plants, are always a question because tribal members still use these resources in much the same way their ancestors did. Management objectives with an eye toward longer rotations, which result in old-growth forests, or treatments that favor the development of species that provide material for cultural products like birch bark baskets, might not fit within the standards of current forest certification schemes. Other areas mentioned include how the forest certification process and specifically government involvement would be considered in the process (Corrao 2012).

Interestingly, in 2003, the FSC developed a public lands policy, which basically restricted government institutions from submitting public lands for certification efforts. However, a specific clarification was included in the policy, which states “For the purposes of this policy, the Forest Stewardship Council – US (FSC US) does not consider lands held in trust for Native American nations and tribes to be federal lands, due to the sovereign nature of Native American governments.” In this same year the Deputy

Commissioner on Indian Affairs had released guidance for the determination of sustainability for a "federal government trademark assurance," which was based on NIFRMA Title III of Public Law 101-630[17], its enacting regulations under 25 CFR, part 163 General Forestry Regulations, specifically 163.11 c[18], and the requirements of the Indian Self Determination and Education Assistance Act (P.L.93-638) (Yurok 2010).

Between 2003 and 2010 there was little further effort to push forest certification as an opportunity. It was not until the 2009 Annual ITC Symposium in Lewiston Idaho that the issue was raised again. Membership at that time asked what happened to the effort and resources put into certification discussions during the 2003 IFMAT. These

[17] "SEC. 305. MANAGEMENT OF INDIAN FOREST LAND. (a) MANAGEMENT ACTIVITIES- The Secretary shall undertake forest land management activities on Indian forest land, either directly or through contracts, cooperative agreements, or grants under the Indian Self-Determination Act (25 U.S.C. 450 et seq.). (b) MANAGEMENT OBJECTIVES- Indian forest land management activities undertaken by the Secretary shall be designed to achieve the following objectives-- (1) the development, maintenance, and enhancement of Indian forest land in a perpetually productive state in accordance with the principles of sustained yield and with the standards and objectives set forth in forest management plans by providing effective management and protection through the application of sound silvicultural and economic principles to-- (A) the harvesting of forest products, (B) forestation, (C) timber stand improvement, and (D) other forestry practices; (2) the regulation of Indian forest lands through the development and implementation, with the full and active consultation and participation of the appropriate Indian tribe, of forest management plans which are supported by written tribal objectives and forest marketing programs; (3) the regulation of Indian forest lands in a manner that will ensure the use of good method and order in harvesting so as to make possible, on a sustained yield basis, continuous productivity and a perpetual forest business; (4) the development of Indian forest lands and associated value-added industries by Indians and Indian tribes to promote self-sustaining communities, so that Indians may receive from their Indian forest land not only stumpage value, but also the benefit of all the labor and profit that such Indian forest land is capable of yielding; (5) the retention of Indian forest land in its natural state when an Indian tribe determines that the recreational, cultural, aesthetic, or traditional values of the Indian forest land represents the highest and best use of the land; (6) the management and protection of forest resources to retain the beneficial effects to Indian forest lands of regulating water run-off and minimizing soil erosion; and (7) the maintenance and improvement of timber productivity, grazing, wildlife, fisheries, recreation, aesthetic, cultural and other traditional values."

[18] "The harvest of forest products from Indian forest land will be accomplished under the principles of sustained yield management and will not be authorized until practical methods of harvest based on sound economic and silvicultural and other forest management principles have been prescribed harvest schedules will be prepared for a specified period of time and updated annually. Such schedules shall support the objectives of the beneficial land owners and the Secretary and shall be directed toward achieving an approximate balance between net growth and harvest at the earliest practical time."

discussions slowly led to the development and re-introduction of efforts to examine alternatives for Indian tribes and forest certification (Personal experience).

Forest Certification Deliberations Begin: Alternatives for Indian Tribes

The 2010 Marketing and Branding study has provided the most comprehensive effort to date to assess Indian tribal knowledge of forest certification and determine interest in recommended courses of action. The survey conducted during this time period provided some guidance, along with a presentation on the study and the work that was done.

In January 2011 the MBS Team released a two-part Branding and Marketing report,[19] which outlined the study and its results. Included in volume I was a synthesis of key project findings, recommendations, and requests to tribal leadership for further guidance. Volume II provided a more in-depth reporting on methodologies, findings, and discussion on sub-topics (Intertribal Timber Council 2011a, 2011b). The reports helped outline the study components, or modules, that the team used to address its hypothesis that the story of Indian forestry would be compelling enough to garner price-premiums within informed and environmentally friendly markets.

Module 1 of the MBS Study looked to evaluate tribal interest in three marketing and branding strategies being investigated by the team. Overall, the group of respondents, made up of American Indian and Alaskan Native organizations that manage forestlands and managers of Native American wood processing facilities, ranked certification second

[19] The BMS Team also released Volume III, which outlined response to a special meeting where the BMS Team reported on the Study to interested ITC membership, managers and processors.

in terms of priority for further study. TFP brand development was ranked as a high priority and cooperative marketing as low priority. Within the context of certification, the survey looked to assess tribal knowledge of, and perceptions and attitudes toward, 3rd party forest certification efforts through organizations like the Forest Stewardship Council (FSC) and Sustainable Forestry Initiative (SFI). Results of the survey seemed to indicate a general lack of knowledge or non-consideration of forest certification as an opportunity (MBS Report Vol. II 2011). However, cumulative interest for participation in the development of a Tribal Sustainable Forest Management Certification Program did score higher, with 30% being very interested, 30% being somewhat interested, and 32% indicating neutrality on the issue, which the MBS Team took as openness to further activity.

Guided by these survey results, module 5 of the Marketing and Branding Study looked to expand on the assigned task to "identify and evaluate alternatives for certification for TFP's" and the proposed to evaluate the following questions, "*A certification system developed and operated for Indians by Indians… …accurately reflect the unique cultural and environmental values of Indian peoples, satisfy CoC and FM certification requirements needed for market access, be endorsed by the power of the federal government*." (Marketing and Branding Study Vol. II, p.45). Based on this direction module 5 expanded a proposal for the development of an unprecedented alternative Tribal Forest Certification standards for sustainable forest management and chain of custody, along with the development of structural and procedural considerations for verification. This included recommendations on the role that the federal government could play, either through the Department of Interior or Bureau of Indian Affairs.

At this time, the efforts of the MBS Team present the most current effort to date on Indian Country examining the issues of forest certification. To assist in the consideration of the proposed environmental policy of a Tribal Forest Certification program, the next chapter examines the analytical framework originally developed by Cashore et al. in 2004, for applicability to the Indian Country case study to determine whether it helps explain decisions made, and whether it can help link with other case studies to identify possible policy impacts.

4 REVIEWING THE EXPLANATORY FRAMEWORK AND MODIFICAITONS

As described earlier, the applicability of the 2004 CAN analytical framework for the Indian Country case study provides an opportunity to both examine Indian Country as a case study and to further test the beyond the original case studies. While the dependent variable for the original case study focused on forest company and non-industrial forestland owner support for FSC-style certification, the study also examined how independent variables intersected and affected the dependent variable. Cashore et al. describe this as a process of strategies for converting, conforming, or informing (2004).

Converting and Conforming

The 2004 CAN study is an assessment of strategies for the promotion of sustainable forest management standards and practices, measured by whether forest companies and non-industrial forest land owners supported FSC-style certification. The analytical framework for examining this phenomenon and associated variables was developed due to the noted absence, at that time, of existing literature on the subject of NSMD (Cashore et al. 2004, p.31). The research design itself was derived from literature grounded in various disciplines, including political science and organizational sociology. In essence, the Cashore framework was built to first classify, then measure the dependent variable The dependent variable being whether or not pragmatic legitimacy was granted to the FSC by forest companies and forest land owners (i.e. the operationalization of the

dependent variable).The framework posed 10 questions[20] to examine the differences in support for FSC style certification, inductively drawing from the case studies themselves and existing literature.

The CAN study identified the use of conforming, converting, and/or informing strategies as a means for an organization, in this case FSC, to obtain legitimacy from target groups (i.e., forest companies and non-industrial forest land owners) to affect its original conception of forest sustainability. The converting strategies were considered to be efforts by FSC and/or its supporters to influence forest companies and forest landowners to adopt or change preferences to FSC style certification. In contrast, and less desirable, were the conforming strategies which required the certification program to change its original conception to more readily accommodating target participants. The third strategy was informing, but for the CAN study, was not considered as vital of a strategy because it was considered part of both the conforming and converting strategies.

Based on this framework, the eight questions developed were grouped under three structural factors that CAN considered important in whether forest companies and forest landowners supported or discounted FSC style certification. The structural factors were: place in the global economy; structure of the forest sector; and the history of forestry on the public policy agenda.

The 2007 study by Cashore et al., to include Finland as an additional case study using the original 2004 framework provides the process by which the case study for Indian Country is assessed. With the Finland case study, the authors looked to answer questions of the transformative potential of the NSMD mechanism by assessing the 2004

[20] There were 7 initial hypotheses developed by Cashore et al. (2004) for examination across their case studies, with three more developed and proposed as part of their initial findings (p.233).

theoretical framework for applicability to the Finland story. They proposed this as a means to expand on the original applicability of the comparative historical analysis to assess the theoretical framework itself. The authors of the 2007 case study also proposed Finland as a case study because of the contrast to the Swedish case study, in that, the Finnish case study resulted in the development of a Finnish Forest Certification Scheme whereas Sweden accepted FSC-style certification (Cashore et al. 2007).

With the current status of forest certification in Indian Country through the MBS Team recommendations, which includes a proposal to develop a Tribal Forest Certification Scheme, a new way of examining this issue could help provide clearer recommendations for this non-state market driven policy effort. Use of the CAN analytical framework in examining Indian Country as a case study provides a fresh perspective in the form of a public policy analysis. The identification and justification of Indian Country as a unit of analysis for case study through the theoretical framework was the first step, and now this next section will overview the theoretical framework, by assessing the eight hypotheses developed for the framework, and discussed in regards to how the Indian Country case study fits within them.[21]

CAN Framework: Place in the Global Economy

The first two questions developed by Cashore et al. (2004) under the structural factor of "place in the global economy" describe the international context within which FSC supporters operate and work to obtain support for FSC-style certification from forest

[21] All eight of the questions developed by Cashore et al., in 2004 are included in the appendices for reference.

companies and forest land owners. In essence, converting forest companies and forest land owners to support FSC-style certification is easier to do if the forest companies and forest land owners export to and import from countries/regions which support FSC style certification. In both cases, the backlash for this section includes internal criticism for the possibility of outside influences circumventing the sovereignty of the country/region (i.e., political authority and decision-making powers) (Cashore 2004). The initial market boycotts that led to consideration of more nuanced market-based initiatives are an example of this (Nussbaum 1999). The fear of losing to competitors in countries/regions that have procurement preferences for FSC-style certified products is a result of the development of these initiatives.

Assessing 1 and 2 against the Indian Country Case

Indian Country is highly dependent on export of its commercial timber production. While direct support is not available, in general, the purpose of the Marketing and Branding Study by ITC was in response to the "state of emergency" brought about by the impacts of the 2009 economic decline which brought about U.S. unemployment, a drop in new housing starts, and the associated decline of timber markets. Historically, Indian tribes were already receiving less value for their timber on markets than other producers (MBS Team). In addition, since 2001 ten Indian owned and operated sawmills have closed leaving only four remaining open (IFMAT III p.31). The volume offered and harvested in FY2011 shows a representative sample of what could be exported out of Indian Country (MBS Vol I. p.12).

Since the initial U.S. case study by Cashore et al. (2004), the U.S. has maintained its role as the largest producer of round wood and value-added products which, despite the two year decline in 2009-2010, has seen production rebound in 2011 and 2012 (FAO 2012). As referenced in the earlier CAN study, this was interpreted to mean it shielded the United States from FSC international market pressures, whether through producers "feeling" pressure from outside buyers, or moral suasion where international imports led to the same demands for domestic production. The U.S. has maintained its ability to be shielded from FSC market pressure tactics, specifically as a result of SFI development into a more independent certification standard in competition with the FSC-style certification standard.

In limited cases, some individual tribes have been able to develop deals that interact with international brokers or buyers for their timber, but those are few and far between. This represents a limited number of tribes and therefore, would play only a little part in creating the pressures as described in the CAN framework. In addition, some Indian tribes include procurement policies or ordinances in place that require the use of Indian tribal forest products. But, again, there is no data available to track or confirm the effectiveness of these policies and/ or whether they have contributed to the development of processing infrastructure in Indian Country. Given these considerations, Indian Country in general can be seen as both primarily exporting the majority of its forest products (with minimal primary and secondary processing), and importing the majority of the processed forest products that are utilized on reservation lands.

Discussion

With Indian Country dependent on the surrounding domestic U.S. markets, the "place in the global economy" factor identified by the CAN framework, would be similar for both Indian Country and the U.S. Because the U.S. had the least dependence on imports and exports, there was a lower level of support by forest companies and forest landowners, despite widespread efforts by FSC and its supporters to utilize converting efforts. Also, while converting strategies met a not so receptive environment within the U.S., the focus on retailers further down the supply chain also did not have the desired effect seen in the German and U.K. case studies. Cashore et al. propose that the U.S. forest sector limited FSC converting strategies, and the slow effort to develop regional FSC standards was outpaced by the development of industry led programs that more quickly adapted to the U.S. environment (Cashore et al., 2004, p.121).

In the late 1980's there were already early efforts by groups within the U.S. to develop forest certification programs. These same early starters also participated in the initial development of the Forest Stewardship Council in 1990, including the Rainforest Alliance, World Wildlife Fund, and others. While the groups involved in the initial development of FSC seemed to provide opportunity for acceptance in the U.S., Cashore et al. 2004 contend that two primary factors prevented FSC from appealing to U.S. forest companies and forest land owners; few companies saw potential in the marketing opportunities described; and there were concerns by the associated chain of custody requirements, which did not lend themselves well to the structure of the U.S. forest

sector, primarily large companies purchasing timber from thousands of small forest land owners (Cashore et al., 2004, p.100).

An interesting part for Indian Country is that during this same time frame, efforts were made to introduce forest certification to Indian tribes using informing strategies, the same strategy that Cashore et al., 2004 describe as being unimportant.[22] Also, at this time efforts by Indian tribes were primarily focused on the development of the National Indian Forest Resources Management Act (NIFRMA). This is what Cashore et al., 2004 referred to as an intersecting effect of variables, because it is part of the "history of forest policy on the public agenda." While all of these events took place in a short time span, the development of NIFRMA language was not a specific effort to match up with the forest certification schemes being introduced at the time.[23] Also, the Indian Forest Management Assessment Team (IFMAT) was preparing to conduct its first ever national assessment of the state of Indian Forestry (IFMAT I 1993). While this initial report did not mention anything related to forest certification it did discuss reform and development of trust standards for Indian Tribal Forestry.

[22] Part of these consistent introduction periods or timelines can be attributed to the unified efforts of philanthropic foundations at this time, including the Ford Foundation, which in conjunction with the MacArthur Foundation and Rockefeller Brothers Fund, created the Sustainable Forestry Funders network to support the development and implementation of the FSC (Gulbrandsen, p.156).

[23] Personal interview G.M. 2013. The official that discussed this history did not feel there was a planned effort to create similar language for NIFRMA based on existing certification schemes. But, a quick comparison of the certification schemes and Indian forestry regulations in appendix B indicates similarities which could either be attributed to the discussions of the era and/or the core commonalities of sustainable forest management.

CAN Framework: Structure of Domestic Forest Sector

Within the "structure of the forest sector" factor, Cashore et al. note there are three key features that need to be discussed to examine the interactive efforts of certification activities: the concentration of industrial forest companies; landownership patterns; and the existence of strong associational systems (2004 p.93). The following questions developed by Cashore et al. (2004) examine these features within the context of the case studies.

Questions 3 and 4 described in the original CAN framework state that larger and more concentrated forest land ownerships are more easily targeted by FSC supporters due to higher visibility. This is due to size of the operations and acreage owned, but also because they have multiple operations along the entire supply chain (tree to final in-store product). In addition, being larger operations, if FSC-style certification is adopted, they have the financial and staff resources to more readily incorporate FSC-style certification activities such as access to certified forest products and tracking mechanism for chain of custody requirements. On the other hand, fragmented forest land ownerships are able to resist FSC-style certification because they are not as visible and normally the cost for implementation is disproportionate compared to larger companies making it a less desirable effort. But, just as important, implementation may not even be considered due to inherent management philosophies such as sensitivity to the influence of outside organizations (i.e., non-governmental groups) dictating management policies (Cashore et al., 2004).

Question 5 is aimed more at the types of associations and the cohesion of these associations in terms of whether FSC-style certification is successful in converting

strategies. In essence, the more integrated or "cohesive" the associational systems in the country/region, the better able it is to ignoring conversion strategies of FSC supporters. It can also help maintain solidarity, or at least a common front, among forest land owners opposed to FSC-style certification (Cashore et al., 2007). However, the original case study also indicated that when one independent variables' effect intersected with another variable's effect, one of the variables' effects could be reversed. In this case, CAN found that if a country or region's place in the global economy led to uptake of FSC-style certification, that this could be more quickly facilitated through the same associational systems (Cashore et al., 2004).

Assessing 3, 4 and 5 against the Indian Country Case

In the case of Indian Country, all three questions provide an interesting discussion in relation to the original CAN framework, because these elements are intertwined throughout the story of Indian Country. While I have argued for the use of Indian Country to represent the common interests of timber producing Indian tribes, this point provides an opportunity to again note that Indian Country is a mix of separate and sovereign entities with varying interests in other areas of community life. That being said, the common interest of concern over forest certification creates this unique opportunity to examine the history and status of support for it.

Within Indian Country, I have included timber producing Indian Tribes, because these are the focus of forest certification strategies. Also, I have noted the reliance that Indian Country has on off-reservation U.S. domestic markets, which in turn have their own level of import and export traits. Thus, the assessment here is how concentrated

Indian Country is in terms its ownership, production, and manufacturing capacity. According to BIA reports, there are approximately 57,105,943 acres of reservation lands that the U.S. government has a trust responsibility for. Of that total there is 18,637, 903 acres of forested land, with 9,769,444 acres considered operational for commercial timber harvest (Table 1). The nuances come into play when breaking down the totals into regions within Indian Country.[24] For the most part, the majority of commercial production comes from the approximate available commercial timberland[25] and some from available commercial woodlands.[26]

[24] As noted earlier, Alaskan forestlands are not considered for this project due to limitations of available literature, reports and statistics as noted in the IFMAT III report.

[25] 25 CFR Part 163.1 "Definitions" *Timberland* means forest land stocked, or capable of being stocked, with tree species that are regionally utilized for lumber, pulpwood, poles or veneer products.

[26] 25 CFR Part 163.1 "Definitions" *Woodland* means forest land not included within the timberland classification, stocked, or capable of being stocked, with tree species of such form and size to produce forest products that are generally marketable within the region for products other than lumber, pulpwood, or veneer.

Table 4.1. BIA Classification of Commercially Available Acres for Timber Harvest from Indian Tribal Lands by Region

BIA Regions	Commercial Timber	Non-Comm. Timber	Comm. Woodland	Non-Comm. Woodland	Total Acres
Northwest	2,667,000	796,000	235,000	122,000	3,820,000
Lake States	1,091,000	193,000	359,000	5,000	1,649,000
Southwest	1,718,000	725,000	3,133,000	6,567,000	12,143,000
Eastern	311,000	30,000	11,000	12,000	364,000
Alaska	175,000	51,000	174,000	61,000	461,000
TOTAL (Trust)	5,963,000	1,795,000	3,912,000	6,766,000	18,437,000
TOTAL (Trust & Fee)	6,051,000	1,812,000	3,912,000	6,803,000	18,593,000

(Source: IFMAT III, p. 28)

In general, across Indian Country, the volume of timber harvested from commercially available acres is primarily exported to surrounding U.S. domestic markets due to the limited manufacturing capabilities found within Indian Country. This creates a link between Indian Tribes, who may not be specifically targeted by FSC supporters, and the larger forest companies that Cashore et al. contend are targeted because of their size. However, while individual Indian Tribes may not be targeted for converting strategies like a large industrial forest company, as a group Indian Country has been targeted for informing strategies. Several examples exist that show the informing strategies used, including creation of the 1993 Sustainable Forestry Fund technical assistance program, publication of the 2002 Forest Certification on Tribal Lands Manual, and the use of both

SFI and FSC forest certification field audit procedures for the 2003 Indian Forest Management Assessment Team's (IFMAT) report.

The other part of the equation is a question of land ownership patterns. Figure 2 shows that a majority of the larger Indian Tribes with relatively significant land holdings and timber resources can be found in the West and Midwest regions of the United States. The majority of these reservation lands are located in rural areas, and in many cases do not constitute many, if any, coordinated intertribal agreements for supply of forest products to manufacturing facilities. On one hand, this means Indian tribes conduct marketing of their products separately, but on the other hand, the linkage between Indian Tribes is created by the common denominator of the U.S. federal government's trust responsibility, especially over the sale of trust resources like timber.

The physical separation of Indian Tribes' forest production and forest products manufacturing facilities means Indian Country as a case study would indicate they are not considered "un-fragmented." However, this does lead back to the initial argument for Indian Country as a case study. Due to the U.S. federal government trust responsibility to Indian tribes, there exists a cohesive associational system, which Cashore et al. correlate to less susceptibility to accept FSC-style certification (46). In response to corresponding and common pressures on Indian tribes who produce timber, the Intertribal Timber Council (ITC) developed as a means to inform, prepare, and support Indian Tribes in their efforts to address these issues. The ITC has served as the strongest associational system for timber producing Indian tribe over almost 40 years, by bringing together the Bureau of Indian Affairs, private industry and academia to address forest issues with the 60 plus Indian tribes represented by ITC.

Discussion

According to the CAN analytical framework, the U.S. case study involved only a few large industrial forest companies with high levels of vertically integrated operations, which should have made the U.S., and likewise Indian Country, more susceptible to FSC converting strategies. However, as noted by Cashore et al., FSC converting strategies were unsuccessful because the large industrial U.S. forest companies produced a high degree of specialized forest products, maintained close associational ties through organizations like the American Forest & Pulp Association (AF&PA), and because they procured almost half of their fiber supply from private forest land owners who were less visible targets for converting strategies. This not only insulated the U.S. market from FSC converting strategies, but due to Indian Country reliance on U.S. markets, it meant most individual Indian Tribes were insulated to these efforts, to a certain extent.

This was not necessarily the case for all Indian Tribes, as some noted during that time that there was increasing pressures from suppliers for Indian Tribal timber to be certified (ITC 1997). As noted in the U.S. case study, not all of the forest companies were reluctant to certify with FSC, and in fact, some were part of the initial development of FSC activities within the U.S.

The CAN framework describes associational system cohesion as a coordinated effort between organizations with common purposes, concerns, and issues. The examples for the U.S. case study primarily included the AF&PA, which was the result of a merge by three national associations (Cashore et al. 2004, p.95). Likewise, for Indian Country, there is one primary organization that has consistently provided an organizational setting

within which Indian Tribes and partners have come together to discuss, consider, and develop answers to issues facing Indian Forestry. The primary success of ITC and its staying power might be attributed to the fact that it promotes a "Tribe first mentality" and serves on behalf of Indian tribes at a national level, and in some instances, has delved into the international setting on different topics. In addition ITC has been nominated in some instances to possibly serve as the third party facilitator for the recommended Indian Tribal Forest Certification entity.

CAN Framework: History of Forestry on the Public Policy Agenda

The final set of initial questions posed by Cashore et al., 2004 to describe legitimacy granting for the FSC certification scheme focuses on the public policy history surrounding forestry, which they contend are key to understanding FSC strategies because they determined where the debate over forest certification would take place. Question 6 is based on the consideration that forest companies and forest land owners who operate within countries/ regions where longstanding disagreements over forestry practices take place will more readily adopt FSC standards to protect their interests from targeting. Question 7 rationalizes that close business-government relations are less likely to support FSC style certification because it differs from the normal manner in which business is able to advocate for its interests.

<u>Assessing 6 & 7 against the Indian Country Case</u>

At the same time forest certification efforts were beginning to take shape globally and within the United States, Indian Country was involved in the development of the

National Indian Forest Resources Management Act ("NIFRMA") which was enacted as Title III of Public Law 101-630,[27] on November 28, 1990. Prior to its passage there were very limited laws related Indian tribal forestry, basically three statutes from the early 1900's that were a total of two pages to guide the management of the 17.1 million acres of Indian forestlands (Motanic 1999).

The long history of federal-tribal relations reveals an evolution of a complex mix of treaties, federal legislation, court decisions, and regulations, all of which have some impact on or relevance for tribal forest management. At its core, the issue of the "trust responsibility" doctrine is centered on the land base of Tribes along with all of its associated natural resources (Mondou 1997). This means natural resources, especially revenue generating timber sales, become an area of importance not only for Tribes, but also for the U.S. government as they consider their respective roles in terms of accountability for these resources. The U.S. government's accountability oversight and the Tribes' desire to keep management decisions in their own hands have been areas of tension for many years.

In 1975 Congress passed Public Law 93-638, the Indian Self-Determination and Education Assistance Act (ISDEAA), whose purpose was to "…respond to the strong expression of the Indian people for self-determination by assuring maximum Indian participation…" P.L.93-638 set the course for the self-determination era. This collaboration between Tribes and the U.S. government began a push towards the Tribes assuming more control and responsibility over programs and services that had originally been provided by the federal government. This included the creation of tribal forestry

[27] 104 Stat. 4531, 25 U.S.C. §§ 3101

organizations that carry out a wide variety of forest management functions for Indian forests (Davis 1993).

In 1990, the National Indian Forest Resources Management Act (NIFRMA) was signed into law by President George Herbert Walker Bush. The legislation was intended to increase the voice of Tribes over the management and protection of their own forest resources, in coordination with the Secretary of Interior. Mondou (1997) calls NIFRMA "the *organic* Act for Indian Self-Determination allowing Tribes to create forest management plans on their respective reservations." Since 1990, Tribes have increased their ability to manage, and make resource decisions on, their own lands.

NIFRMA also included a requirement, for the "…Secretary of Interior, in consultation with affected Indian Tribes… …with a non-federal entity knowledgeable in forest management practices… …to conduct an independent assessment of Indian forest lands and Indian forest management practices" (NIFRMA 1990). In 2003, the Indian Forest Management Assessment Team (IFAMT-II) noted in its second decadal report, that "Indian forests remain a vital part of tribal life on many reservations in every part of the contiguous United States and Alaska." This vitality is found not just in timber production, but also in non-timber product use and cultural use. In spite of changing economic, political, and even ecological conditions, Indian communities have remained steadfast in their effort to manage their resources because of their historical and cultural connection to their land base and the subsistence it provides. While this connection to the land has provided the ability for Indian communities to weather external forces, it often adds obstacles and difficulties not experienced by non-tribal communities and forest product enterprises.

The primary agency charged with carrying out the day-to-day governmental fiduciary responsibility for Indian tribal trust resources is the Bureau of Indian Affairs (BIA), located within the Department of Interior (DOI). Over the years, there has been a need for, and many efforts to, reform the haphazard development of regulations related to management of tribal lands and accountability for Indian tribes. The relationship between Indian tribes and Bureau of Indian Affairs, as the face of the U.S. trust responsibility, has been one of mutual obligation to the resources of the members of the Indian Tribes, but one that maintains its historical contentiousness.

Discussion

This proves as the most interesting of the questions in the framework for the Indian Country case study, and delves to the heart of one of the recommendations by the MBS Team. The effort not only proposed to develop a certification system by Indian Tribes, but one that could be certified through issuance of a government statement for compliance. Cashore et al., 2004 outline the roles of certain actors and key conditions for this type of NSMD governance, where the role of the state (governing entity) "does not use its sovereign authority to directly require adherence to rules" (p.20).

CAN Framework: Further Influences - Independence of Forest Owners

In their summary of the case study findings for the 2004 Cashore et al. analysis, the authors included three additional hypotheses that they felt further explained the influences on whether forest companies and non-industrial private forestland owners decided to support FSC-style certification or not. These additional hypotheses included

the following: the structure of the forest sector along the supply chain (specifically for retailers); the independence of forest owners (specifically, non-industrial private forestland owners); and the role of competitors (specifically whether a country/ region) had a competitor program in place (p.233-235). The primary question of interest for the Indian Country case study is the focus on the independence of the forest owners. The initial observation by the authors was that the private forest land owners did not necessarily oppose the FSC standards, but rather the groups supporting the FSC standards. In many of the case studies, the authors note that alternative forest certification schemes developed to counter FSC-style certification were similar in regard to addressing sustainable forest management principles. Further, the long history of private ownership of lands and common values presents a unique refinement of their initial hypotheses. The question then posed is why do private non-industrial forest land owners feel more independence than the larger profit-maximizing forest companies.

Assessing additional question 9 against the Indian Country Case

In the 2002 edition of the Tribal Forest Certification manual, a section on community forestry provides an apt description of some of the intrinsic issues Indian must consider which conflict with the essence of the forest certification schemes. That is, no matter how accommodating the standards try to be for the indigenous peoples of North America, they fall short because they are intrinsically and by nature, outsiders.

> Tribal forest management is in most cases a uniquely community-based process with specific social and political objectives, in which many tribal

> members have a voice. At first glance, the community aspect of forest management that enables community members to benefit from the land appears an ideal match for the social objectives of FSC certification. However, community decision-making can be very time-consuming and typically involves a wide array of concerns, of which forest management may form but a part. In this context, pursuit of an innovation such as certification may not receive a high priority….In some cases, tribal community objectives for forest management work against compliance with FSC-endorsed certification standards. Several Native communities focus primarily on satisfying social and cultural needs, which at times can only be met at the expense of sound, long-term silvicultural and ecological objectives. For example, as employment programs, some tribal forest management operations may sacrifice efficiency and profitability. Tribes that focus their forest management practices on ceremonial activities and use forest products predominantly for internal, non-commercial use may not be interested in the market-driven characteristics of FSC certification. Some tribal forest management operations are geared to provide affordable construction materials, household and food products to tribal members within the community, rendering certification irrelevant for marketing purposes. Among other tribal communities, financial targets and internal politics may set the parameters for decisions in forest management in ways that diverge from certification standards. (Tribal Forestry Manual 2002, Appendix 5-3).

Discussion

The independence of forest owners is an interesting consideration from the CAN framework because it is likely one of the two more relevant questions posed by Cashore et al. as part of their framework for understanding support for FSC-style certification. The general description provided in the Tribal Forest Certification manual, on the internal social complexities of Indian tribes provides a clear example of why "…private ownership[28] and… …associated common values prove a key explanatory factor…" in whether FSC style certification was supported or not. These "culturally important traits"

[28] In this case, "private ownership" would refer to the exclusive use of these lands by Indian tribes, which are held in trust by the United States government on behalf of each individual Indian tribal member, for each specific federally recognized Indian tribe.

described by Cashore et al., 2004 (p.235). The IFMAT III report released in 2013 continues to show that these values of community forestry within Indian communities still ring true. The consideration for the development of a specific tribal certification program could therefore, in the case of Indian Country, seemingly be a given based on the independence factor alone.

The development of this feasibility assessment of Indian Country utilizing the CAN analytical framework provided the introduction into an environmental policy analysis setting. Now with this application, an assessment of the specific recommendation of the ITC Marketing and Branding study can be conducted using the framework.

5 THE WAY FORWARD: INDIAN COUNTRY AND TRIBAL FOREST CERTIFICATION

The final volume of the Marketing and Branding Study is titled "The Way Forward," and it is a final summary of the larger study's findings and recommendations. It also incorporated the proceedings from a project report-out workshop held in March 2011, including the findings and recommendations related to the forest certification section. This final chapter looks to examine the MBS recommendation to develop "…a formalized system to guide the issuance of government certificates of chain of custody and forest management…" (Marketing and Branding Study Vol.II. 2011, p.45). As the previous chapters have illustrated, the use of the CAN analytical framework and its application to an Indian Country case study found interesting considerations for both the case study and future use of the analytical framework. Attention now turns to providing an initial environmental analysis of the proposed Tribal Forest Certification Standard (TFCS) proposed by the Marketing and Branding Study.

Environmental Policy Analysis for a TFCS

To address the Marketing and Branding Study recommendation on forest certification a specific section was developed which laid out a basic plan of action for the development of a proposed alternative Tribal Forest Certification Standard (TFCS). This was not just as an alternative to the two larger certification programs in the U.S. (FSC and SFI), but to all non-tribally developed forest certification programs. The authors of the section noted this could address the perceived intrusiveness of the application of standards developed by entities outside of Indian Country. Further, this would require a

standard that would need to meet a myriad of federal and tribal requirements related to the economic, social, environmental, and cultural areas of consideration, just as a baseline (Corrao and Mason 2012).

The management of forest resources in Indian Country has gone through tribal control for thousands of years, to U.S. government control, back to tribal control, and now to a more integrative and cooperative relationship between U.S. and tribal governments within just the last 100 years (IFMAT III 2013, Appendix IX). The emergence of forest certification schemes in the last twenty years and the continuing analysis on whether they can legitimately be considered impactful from a global governance perspective requires further careful consideration by Indian tribes beyond just economic considerations. While certification continues to be a voluntary effort, the emergence of competing certification schemes has been discussed in terms of ratcheting up sustainable forestry standards globally (Bernstein and Cashore 2007, Cashore et al. 2004). In essence, this means the possible imposition of someone else's view of sustainable forest management into Indian tribal forest management.

Whether certification does become a prerequisite to access markets, and especially when market access is already limited for Indian tribes, it might be best to heed the actions of the AF&PA efforts to be pro-active in being prepared. The development of the Sustainable Forestry Initiative (SFI) as a response to FSC attempts to secure support shows that pro-active, pre-emptive efforts can be useful. However, the initiative to develop a forest certification scheme is not just limited to the U.S. The case study for Finland resulted in the development of a Finnish Forest Certification scheme (Cashore et al. 2007); an industry led certification scheme developed in Indonesia led to the

establishment of the Indonesian Eco-labeling Institute (Cashore et al 2006, p.565); and in Brazil the development of a specific certification scheme led by the government resulted in the establishment of the Brazilian Forest Certification Program (CERFLOR) (Cashore et al., 2006, p. 564).

While there are many other government, industry, and non-profit led efforts to develop certification schemes as alternatives, Cashore et al. (2006) noted there are also issues of retention which seem to limit the longevity of some country/ regions certification efforts. From their 2006 case studies in developing and transitioning countries, they noted that one of broader lessons learned may be one of the most important, that because of the relatively recent introduction of forest certification, it would be wise to make decisions on how to proceed not just in terms of the current situation, but what the potential is and what the future may hold (p.590). For Indian tribes this means the development of literature and resources that examine these issues and maintain vigilance as forest certification continues to grow.

The following sections are broken down according to the specific sections developed by Corrao and Mason in the section of the ITC Marketing and Branding Study report that addressed the tribal forest certification module (p.88). Although the MBS report lists out several recommended steps for Indian tribes to consider in the development of a Tribal Forest Certification Standard, only the following two recommendations are considered in this assessment; developing the initial drafts of a tribal standard; and organizing a tribal standards development committee. These two recommendations serve as core components that provide the basis for and guide further

development of the other recommendations, and therefore merit the closest examination out of all the sections.

ITC Recommendation: Developing the Initial Drafts of a Tribal Standard

The recommendation to develop an initial draft of a Tribal Forest Certification standard would be interesting in the regard that it would serve as the baseline for further regional specific or even tribal specific considerations for associated objectives. The common requirements for Indian forest management contained in NIFRMA, limited as it may be in addressing all Indian forest management needs (Rigdon 2006; Morrisett 2002), would serve as that baseline. However, additional consideration would need to be addressed for other associated federal legislative acts, including but not limited to the National Environmental Policy Act (NEPA) which is required based on requirements associated with federal agency involvement (i.e., Bureau of Indian Affairs) and use of federal funding (i.e., P.L.93-638 contracts for forest management, forest development and fire management activities).

Appendix 2 of this research provides a rough assessment for a comparison between existing NIFRMA legislation and existing forest certification schemes. Interestingly enough, this comparison actually illustrates the close nature that existing certification schemes have with the existing Indian forestry regulations. One participant in the development of the NIFRMA legislation noted that the development of the language was not directly influenced or specifically directed to address the emerging

discussions for forest certification at the time (Personal Interview). This is interesting to the extent that it could be considered either an indicator of some of the generally agreed upon concepts of sustainable forest management, or that forestry circles (whether federal, tribal, academic, or non-governmental) often have overlap.

Whichever it is, this consideration also introduces the first issue related to the non-state market-driven nature of forest certification. As identified in the CAN analytical framework (table 2.1) the exercise or use of state governmental authority to enforce compliance is not a key feature. Does this mean that the development of a TFCS, developed by tribal governments responsible for enforcing tribal laws, with either assistance, verification, or both by the federal government acting through its legal responsibility and federally enacted laws undermines this key feature?

In many of the Cashore et al., case studies, governmental entities participate in the development of forest certification standards. In addition, the case studies seem to indicate that the emergence of forest certification prompt discussions on existing national forest policies and whether revisions are necessary, not just in terms of alignment with certification standards, but in terms of whether it creates better sustainable forest management results. The issue of whether enforcement of compliance is a consideration comes into play would not necessarily mean enforcement of forest certification standards. If national forest policy and forest certification were aligned, it would mean the enforcement would come as a part of normal governmental functions for the existing laws, with additional compliance coming in the form of economic sanctions through market-driven authority. In many cases, compliance with governmentally developed

policies would be the larger prompt, whereas the economic sanction would be a secondary but important consideration. Therefore, alignment of these standards would not necessarily be a negative for the key features of NSMD, but it would be important for the specifically affected forest company and non-industrial private forest land owner to be a large part of developing reasonable and applicable standards.

ITC Recommendation: Organizing a Tribal Standards Development Committee

The next recommendation was to create a tribal standards development committee which would not only continue to guide the development of the standards, but also the organizational structure of the TFCS. The structures of the FSC and SFI could be considered by Indian tribes as a model, but it would specifically come down to how Indian tribes viewed this development. The importance of this aspect also relates to the different conceptions of forest certification as described by the CAN analytical framework. Although the current distinctions between the FSC and SFI have shrunk since the original Cashore et al. studies, the primary issues to consider here are whether Indian tribes are looking to go with the FSC-style conception, which is more prescriptive and more closely evaluates whether on-the-ground accomplishments meet the agreed upon standards for sustainable forestry. In regard to on-the-ground accomplishments, during the pre-assessment conducted for the IFMAT II report, Indian tribes were considered more ready to meet FSC-style certification requirements.

The other structure to consider is the SFI-style, which is considered more systems based and was created to address industry issues with the perceived intrusiveness of FSC-style certification. The SFI model of certification relies more on a system-based approach, where the emphasis is largely on whether procedures or systems are in place to reach agreed upon standards for sustainable forestry. In regard to a systems based approach, none of the Indian tribes who participated were considered ready for a full audit based on the requirement for documentation, even though on-the-ground accomplishments may have been met in regards to that portion of the SFI standard (Mater 2005).

At a cursory glance for Indian tribal forest management, it seems there is a need to consider a mixed approach, or the possibility of a gradually increased approach. Indian tribes are adept at making due with staffing and funding resources, and meeting the many social, economic, ecological, and cultural demands for their forests. In one way this fits the FSC style certification because of the close consideration for the social, economic, ecological and cultural demands which are often part of federal and tribal governmental laws. On the other hand, the restrictions of working with limited staffing and funding to address all of these concerns leaves Indian tribal forest managers to focus on what they can, which results in more on the ground performance, rather than paper work and documentation. This may not be an issue for Indian tribes per se, but is considered an issue with the U.S. federal government, especially in their role as trustee over the resources being managed and harvested.

The Tribal Standards committee would therefore need to walk fine line for the development of a Tribal Certification Standard. The decision for how to bring together the governmental nature of Indian tribal forest management and the non-state market-driven nature of certification becomes very important at this juncture. Because, while a standard could be developed that better meets Indian tribe's needs and its unique considerations it cannot go so far as to disregard or forget about the outside markets within which this standard will be used.

Table 5.1 Proposed elements of a comparable Indian tribal forest certification standard structure.

	FSC Draft 8.1 in Review	**SFI 2010-2014 Program**	**Proposed Base for a Tribal Certification Standard**
Principles/Objectives	10 Principles	20 Objectives	7 Principles[29]
Criterion/Performance Measures	57 Criteria	39 Performance Measures	34 Objectives[30]
Indicators	190 Indicators	115 Indicators	tbd

(Source: Corrao and Mason 2012).

[29] Title 25 - Section 3104 - Management of Indian forest land. Based on the recommendations from the Corrao and Mason report, the use of the section from the enacted NIFRMA legislation could serve as the principles, similar to the FSC and SFI principles outlined in Appendix 2.

[30] 25 CFR, Part 163, Sub-parts A (163.3-163.4), B (163.10-163.37), C (163.40-163.42), F (163.80-163.83). Based on the recommendations from the Corrao and Mason report, the use of the existing regulations could serve as criteria/ or objectives similar to the FSC Criteria and SFI Objectives.

These two sections provide the most important steps in the proposed recommendations from the ITC and are important for the future of whether or how forest certification continues to take shape in Indian Country. While forest certification is still considered voluntary, this may not necessarily be the case for Indian Country as may Indian tribes already have to contend with scarce markets for their resources, linking them to the demands of outside interests, including forest certification. This issue, along with declining federal funding for management programs, increasing ecological threats to the forest resource, low stumpage rates, declining local markets, and tribal manufacturing infrastructure requires diligent monitoring of associated issues like forest certification. Although it is considered voluntary at this moment in time, the future of forest certification is an environmental policy issue that requires continued vigilance on the part of Indian Country.

Conclusion

The use of the CAN framework in this thesis provided an interesting opportunity to develop and assess a case study of Indian Country and Forest Certification. It took important work developed by and on behalf of Indian tribes, specifically the Marketing and Branding Study reports and the IFMAT reports, and provided a fresh perspective through the use of this environmental policy analysis tool. This research expanded the literature for Indian tribes and forest certification through further examination of the possible impacts from non-state market-driven governance systems. The governmental nature of Indian tribal forest management and the non-state market-driven nature of forest certification certainly seem to indicate possible conflicting issues. The research to date seems to indicate the full potential of forest certification has not yet been realized, and with the amount of time, support and effort invested into these systems they are not likely to go away anytime soon. Therefore, continued vigilance on the part of Indian Country as forest certification continues to evolve is warranted.

One lesson that Indian Tribes could take is the proactive approach taken by American Forest & Pulp Association in the U.S., which resulted in the development of the Sustainable Forestry Initiative. It shows that the concern was not a wait and see impact, but rather develop opportunities now so they were more capable of responding should the public become more accepting of forest certification. In the case of the SFI, it has been a slowly developing program in and of itself. Although forest certification is considered voluntary, the current state of certification acceptance seems to indicate that to a certain extent there is a minimum standard set if an organization wants to participate in ever increasingly linked global markets. One of the things that came out of this study is

how governmental entities should be involved in forest certification efforts for the conception, scheme, or program to be considered legitimate by the global community of FSC supporters.

Political Legitimacy: Importance of Historical Understandings

In a 2007 study by Cashore and Bernstein, the analytical framework to study NSMD, specifically focused on the political legitimacy aspect of forest certification characteristics. They consider the social structure that is needed to support the implementation of NSMD systems within global markets, and that they have great transformative potential for those markets. Interestingly, they also note the importance that community building has for support of political legitimacy. This is because it requires more stakeholders with multiple interests, and therefore may disagree over which performance criteria determines political legitimacy.

For Indian tribes, political legitimacy could be viewed in terms of what one participant at the ITC Marketing and Branding study noted as, "…we've been doing this for ten thousand years." In Mater's 2005 assessment of Indian tribal values and Montreal Protocol Criteria and Indicators, one finds the statement that "at its core, the reluctance of tribal governments to accept and employ standards comprised of criteria and indicators that reflect values of external societies is a matter of policy." In essence, this means that Indian tribes have only provided limited consideration for the political legitimacy that is spoken of by forest certification researchers, because of perceived implications they may have for possible impact on decision-making authority over Indian tribe's resources.

Whether the voluntary aspect of forest certification is really voluntary, or Indian tribes are just along for the ride because of their connection to outside markets, the most likely way forward for Indian tribes may require further pro-active measures based on the ITC recommendations. In addition, the primary reason for pro-activeness is the concern related to the granting of political legitimacy through the forest certification efforts. This is not to say that there will be extreme changes required of Indian tribal forest management if more of the global markets take up certification principles. It means a slow, cautious approach should also address the continued vigilance and monitoring of the situation, along with appropriate action to address the situation. For the foreseeable future, forest certification is here to stay, and this alone means another layer to consider within the already complex historical, economic, social and cultural layers that exist for Indian tribal forest management.

Recommendations for Future Research

One of the areas that became clearer as this research proceeded is that the efforts of Indian Country to wrestle with and consider viable options with forest certification is a need for the resources at the individual Indian tribes' level to pursue these efforts. In a 2012 study on identified research needs for Indian Country, Beatty and Leighton report that Indian tribes place more importance on relationship building within the context of integrating traditional ecological knowledge and western science; as well as scaling research to meet localized needs on topics of invasive species, fire, water, etc. (p.570). In this regard, the application and refinement of an environmental policy analysis framework to an Indian Country case study provides the broader framework within which

to determine specific applicability to either regional Indian Country considerations ore even individual Indian tribal considerations. This provides an analytical tool that can better examine and address the specific needs of Indian tribes whether they have separate or integrated forest management and wood processing facilities, whether they are situated within a rich or poor market environment, and regardless of the size of their reservations.

In this way, more information is developed and provided to help Indian tribal leaders and their land managers as they make decisions that will not only impact our generation, but generations to come. It is these future generations that we focus on, and why we consider all impacts of the situations we face.

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APPENDIX A: CAN ANALYTICAL FRAMEWORK HYPOTHESES

The original analytical framework developed by Cashore, Auld, and Newsom (CAN) in their 2004 study on forest certification and the emergence of non-state authority includes 8 hypotheses that they contend explained whether FSC-style certification was adopted in a country/ region or not. The hypotheses were created "inductively from the case studies and deductively from the existing literature on economic globalization, internalization, and public policy" (p.41).

Hypotheses: Place in the Global Economy

Hypothesis 1: *Forest companies and non-industrial forest owners in a country region that sells a high proportion of its forest products to foreign markets are more likely to be convinced to support the FSC than those who sell primarily in a domestic-centered market.*

Hypothesis 2: *Forest companies and non-industrial forest owners selling wood to a domestic market in a country/ region that imports a large proportion of the forest products it consumes are more likely to be convinced to support the FSC than those in a country/ region that imports a small proportion of the forest products it consumes.*

Hypotheses: Structure of Domestic Forest Sector

Hypothesis 3: *Large and concentrated industrial forest companies are more likely to be convinced to support the FSC than relatively small and less concentrated industrial forest companies.*

Hypothesis 4: *Unfragemented non-industrial forest ownerships are more likely to be convinced to support the FSC than fragmented non-industrial forest ownerships.*

Hypothesis 5: *Forest companies and non-industrial forest owners in a country/ region with diffuse or non-existent associational systems are more likely to be convinced to support the FSC than those in a country/ region with relatively well-coordinated, unified associational systems.*

Hypotheses: History of Forestry on the Public Policy Agenda

Hypothesis 6: *Forest companies and non-industrial forest owners in a country/ region with sustained and extensive environmental groups and public dissatisfaction with forestry practices are more likely to be convinced to support the FSC than those in a country/ region with less dissatisfaction.*

Hypothesis 7: *Forest companies and non-industrial forest owners in a country/ region where access to state forestry agencies is shared with non-business interests are more likely to be convinced to support the FSC than those in a country/ region where forest companies and non-industrial forest owners enjoy relatively close relations with state forestry agencies vis-à-vis non-business interests.*

APPENDIX B: COMPARATIVE ALIGNMENT OF FSC-US STANDARD, SFI STANDARD, AND NIFRMA

Alignment of the Forest Stewardship Council Principles (FSC 2010), Sustainable Forestry Initiative Principles (SFI 2010), and the National Indian Forest Resources Management Act (NIFRMA) in this paper are not intended as a strict side by side comparison for this research. The table in this appendix has been provided for easy reference to these existing frameworks that were noted as possible starting points in the ITC Marketing and Branding Study. There are structural differences between the certification standards even before putting Indian forestry regulations alongside. Therefore, the purpose of the appendix is to provide the reader with ready access to language involved in these examples of non-state market-driven and governmental policies.

The Forest Stewardship Council (FSC) U.S. Standard was used as the primary alignment because it is the focus of the Cashore et al. study series, with SFI being aligned next to it as the initial U.S. industry led counterpoint to FSC-style certification, and finally the National Indian Forest Resources Management Act (NIFRMA) statute being used because of its proposed starting point for the development of an Indian tribal forest certification standard, as noted in the ITC Marketing and Branding Study report.

The alignment is a simple review of whether there are comparable statements to the FSC-style principle. If there is not a clear match in this regard a note is included describing this researchers decision on why a principle or regulation was not identified.

FSC-US Forest Management Standard	SFI 2010-2014 Standard	NIFRMA - U.S. Legislative Statute
Principle 1 – Compliance with Laws and FSC Principles: Forest management shall respect all applicable laws of the country, in which they occur, and international treaties and agreements to which the country is a signatory, and comply with all FSC Principles and Criteria.	**9. Legal Compliance:** To comply with applicable federal, provincial, state, and local forestry and related environmental laws, statutes, and regulations.	**Section 309 – Secretarial Recognition of Tribal Laws.** Subject to the Secretary's responsibilities as reflected in sections 302(2) and 303(1) and unless otherwise prohibited by Federal statutory law, the Secretary shall comply with tribal laws pertaining to Indian forest lands, including laws regulating the environment or historic or cultural preservation, and shall cooperate with the enforcement of such laws on Indian forest lands. Such cooperation shall include-- (1) assistance in the enforcement of such laws; (2) provision of notice of such laws to persons or entities undertaking activities on Indian forest lands; and (3) upon the request of an Indian tribe, the appearance in tribal forums.

FSC-US Forest Management Standard	SFI 2010-2014 Standard	NIFRMA - U.S. Legislative Statute
Principle 2 – Tenure and Use Rights and Responsibilities: Long-term tenure and use rights to the land and forest resources shall be clearly defined, documented and legally established.	**Researcher Note:** None of the current principles provided a clear match with the corresponding FSC principle. This does not take into account any further refinement through associated objectives.	**Section 304 – Definitions.** (10) 'Indian Land' means land title to which is held by – (A) the United States in trust for an Indian, an individual of Indian or Alaska Native ancestry who is not a member of a federally-recognized Indian tribe, or an Indian tribe, or (B) an Indian, an individual of Indian or Alaska Native ancestry who is not a member of a federally-recognized Indian tribe, or an Indian tribe subject to a restriction by the United States against alienation;…..

FSC-US Forest Management Standard	SFI 2010-2014 Standard	NIFRMA - U.S. Legislative Statute
Principle 3 – Indigenous Peoples' Rights: The legal and customary rights of indigenous peoples' to own use and manage their lands, territories, and resources shall be recognized and respected.	**Researcher Note:** None of the current principles provided a clear match with the corresponding FSC principle. This does not take into account any further refinement through associated objectives.	**Section 302 – Findings:** The Congress finds and declares that-- (1) the forest lands of Indians are among their most valuable resources and Indian forest lands-- (2) the United States has a trust responsibility toward Indian forest lands; **Section 321 - Trust Responsibility:** Nothing in this title shall be construed to diminish or expand the trust responsibility of the United States toward Indian forest lands, or any legal obligation or remedy resulting there from.

FSC-US Forest Management Standard	SFI 2010-2014 Standard	NIFRMA - U.S. Legislative Statute
Principle 4 – Community Relations and Workers Rights: Forest management operations shall maintain or enhance the long-term social and economic well-being of forest workers and local communities.	**11. Training and Education:** To improve the practice of sustainable forestry through training and education programs. **12. Public Involvement:** To broaden the practice of sustainable forestry on public lands through community involvement.	**Section 303 – Purposes:** (3) Increase the number of professional Indian foresters and related staff in forestry programs on Indian forest land… **Section 305 – Management of Indian Forest Land:** (b)(2) the regulation of Indian forest lands….with the full and active consultation and participation of the appropriate Indian tribe….(3) the regulation of Indian forest lands in a manner that will ensure….sustained yield….continuous productivity and a perpetual forest business….(4) the development of Indian forest lands and associated value-added industries….to promote self-sustaining communities….(5) the retention of Indian forest land in its natural state when an Indian tribe determines that the recreational, cultural, aesthetic, or traditional values of the Indian forest land represents the highest and best use of the land...

FSC-US Forest Management Standard	SFI 2010-2014 Standard	NIFRMA - U.S. Legislative Statute
Principle 5 – Benefits from the Forest: Forest management operations shall encourage the efficient use of the forest's multiple products and services to ensure economic viability and a wide range of environmental and social benefits.	**1. Sustainable Forestry:** To practice sustainable forestry to meet the needs of the present without compromising the ability of future generations to meet their own needs by practicing a land stewardship ethic that integrates reforestation and the managing, growing, nurturing and harvesting of trees for useful products and ecosystem services such as the conservation of soil, air and water quality, carbon, biological diversity, wildlife and aquatic habitats, recreation, and aesthetics.	**Section 305 – Management of Forest Land:** (b)(1) the development, maintenance, and enhancement of Indian forest land in a perpetually productive state in accordance with the principles of sustained yield…. the application of sound silvicultural and economic principles….that will ensure the use of good method and order in harvesting so as to make possible, on a sustained yield basis, continuous productivity and a perpetual forest business…..to promote self-sustaining communities, so that Indians may receive…not only stumpage value, but also the benefit of all the labor and profit that such Indian forest land is capable of yielding.....

FSC-US Forest Management Standard	SFI 2010-2014 Standard	NIFRMA - U.S. Legislative Statute
Principle 6 – Environmental Impact: Forest management shall conserve biological diversity and its associated values, water resources, soils, and unique and fragile ecosystems and landscapes, and, by so doing, maintain the ecological functions and the integrity of the forest.	**2. Forest Productivity and Health:** To provide for regeneration after harvest and maintain the productive capacity of the forest land base, and to protect and maintain long-term forest and soil productivity. In addition, to protect forests from economically or environmentally undesirable levels of wildfire, pests, diseases, invasive exotic plants and animals and other damaging agents and thus maintain and improve long-term forest health and productivity. **3. Protection of Water Resources:** To protect water bodies and riparian zones, and to conform with best management practices to protect water quality. **4. Protection of Biological Diversity:** To manage forests in ways that protect and promote biological diversity, including animal and plant species, wildlife habitats, and ecological or natural community types.	**Section 305 – Management of Forest Land:** (b)(6) the management and protection of forest resources to retain the beneficial effects to Indian forest lands of regulating water run-off and minimizing soil erosion….

FSC-US Forest Management Standard	SFI 2010-2014 Standard	NIFRMA - U.S. Legislative Statute
Principle 7 – Management Plan: A management plan -- appropriate to the scale and intensity of the operations -- shall be written, implemented, and kept up to date. The long term objectives of management, and the means of achieving them, shall be clearly stated.	**Researcher Note:** There is no specific principle that requires or otherwise mentions a written management plan.	**Section 305 – Management of Forest Land:** (b) MANAGEMENT OBJECTIVES- Indian forest land management activities undertaken by the Secretary shall be designed to achieve the following objectives--(1) the development, maintenance, and enhancement of Indian forest land in a perpetually productive state in accordance with the principles of sustained yield and with the standards and objectives set forth in forest management plans by providing effective management and protection through the application of sound silvicultural and economic principles to….

FSC-US Forest Management Standard	SFI 2010-2014 Standard	NIFRMA - U.S. Legislative Statute
Principle 8 – Monitoring and Assessment: Monitoring shall be conducted -- appropriate to the scale and intensity of forest management -- to assess the condition of the forest, yields of forest products, chain of custody, management activities and their social and environmental impacts.	**14. Continual Improvement:** To continually improve the practice of forest management, and to monitor, measure and report performance in achieving the commitment to sustainable forestry	**Section 312- Assessment of Indian Forest Land and Management Programs:** (a) INITIAL ASSESSMENT- (1) Within 1 year after the date of enactment of this title, the Secretary, in consultation with affected Indian tribes, shall enter into a contract with a non-Federal entity knowledgeable in forest management practices on Federal and private lands to conduct an independent assessment of Indian forest lands and Indian forest land management practices. (2) Such assessment shall be national in scope.... (b) PERIODIC ASSESSMENTS- On each 10-year anniversary of the date of enactment of this title, the Secretary shall provide for an independent assessment of Indian forest lands and Indian forest land management practices under the criteria established in subsection (a) which shall include analyses measured against findings in previous assessments.

FSC-US Forest Management Standard	SFI 2010-2014 Standard	NIFRMA - U.S. Legislative Statute
Principle 9 – Maintenance of High Conservation Value Forests: Management activities in high conservation value forests shall maintain or enhance the attributes which define such forests. Decisions regarding high conservation value forests shall always be considered in the context of a precautionary approach.	**6. Protection of Special Sites:** To manage forests and lands of special significance (ecologically, geologically or culturally important) in a manner that protects their integrity and takes into account their unique qualities.	**Section 305 – Management of Indian Forest land:** (5) the retention of Indian forest land in its natural state when an Indian tribe determines that the recreational, cultural, aesthetic, or traditional values of the Indian forest land represents the highest and best use of the land…. **Section 309 – Secretarial Recognition of Tribal Laws.** Subject to the Secretary's responsibilities as reflected in sections 302(2) and 303(1) and unless otherwise prohibited by Federal statutory law, the Secretary shall comply with tribal laws pertaining to Indian forest lands, including laws regulating the environment or historic or cultural preservation, and shall cooperate with the enforcement of such laws on Indian forest lands.

FSC-US Forest Management Standard	SFI 2010-2014 Standard	NIFRMA - U.S. Legislative Statute
Principle 10 – Plantation Management: Plantations shall be planned and managed in accordance with Principles and Criteria 1- 9, and Principle 10 and its Criteria. While plantations can provide an array of social and economic benefits, and can contribute to satisfying the world's needs for forest products, they should complement the management of, reduce pressures on, and promote the restoration and conservation of natural forests.	**Researcher Note:** None of the current principles provided a clear match with the corresponding FSC principle. This does not take into account any further refinement through associated objectives.	**Researcher Note:** None of the sections provide a clear match with the corresponding FSC principle. This does not take into account any further refinements through the development of specific implementing regulations , or technical manuals.