

BRANDING AND MARKETING TRIBAL FOREST PRODUCTS

"Your Story Is Your Brand"



Volume II. Topic Module Summaries

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Cover: Yakama Reservation (Washington State). Photo courtesy of Larry Workman, Quinault Indian Nation

BRANDING AND MARKETING STUDY TRIBAL FOREST PRODUCTS (TFP)

Volume II TOPIC MODULE SUMMARIES

Components of the Branding and Marketing Study are presented as independent topic summary modules. Each module includes:

- 1) A Topic Summary Briefing Document:
 - Description of the Study Component
 - Team Members Leading the Investigation
 - Statement of Tasks and Objectives
 - Key Terminology
 - Methodology Description
 - Results
 - Discussion and Conclusions
 - Tribal Decisions Needed
 - Appendices
- 2) Full Module Report and Supporting Materials
- 3) References

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FORWARD

Branding and marketing of Tribal Forest Products (TFPs) should be viewed as part of a larger strategy to not only increase Indian presence in the marketplace, but also to educate the uninformed and increase tribal influence. TFP branding and marketing could prove valuable in advancing a variety of Tribal objectives such as restoration of ancestral forests, implementation of landscape-scale approaches to natural resource management, and the development of administrative and legislative policies. At its core, the primary objective for TFP branding and marketing is to heighten public awareness and appreciation of Indian management, stewardship, values, and knowledge.

The Study Team recommendation that a low risk, proactive yet cautious, incremental approach be taken with TFP branding and marketing is reflected throughout Volume II of the Study.

TFP initiatives should be prioritized with respect to cost and the magnitude of potential benefits.

A low risk approach would minimize the potential for harm to existing and long-term market prospects and help contend with shifting federal and state policies on complex matters such as climate change, sustainability, international trade, renewable energy development, and green building.

A proactive approach would anticipate evolving opportunities in forest-based industries, such as certification, Non-Timber Forest Products, ecotourism services, etc.

Finally, an incremental approach would help ensure that TFP enterprises undertake initiatives for which they are adequately prepared, in terms of experience, expertise, and capability. Because public perceptions will be influenced by experiences with “Indians”, it will be important for the actions of individual members to be coordinated and operate under a cohesive strategy. TFP branding and marketing strategies need to be well-informed and executed with consistency and caution.

Module 1

Tribal Interest in Participating in Marketing Programs



Topic: MODULE 1

Tribal Interest in Participating in Marketing Programs

Investigators: Dr. Ivan Eastin and Dr. Indroneil Ganguly

Task: The primary objectives were to: 1) assess perceptions of potential costs and benefits associated with development of various branding and marketing initiatives to differentiate forest products from Indian lands by virtue of unique cultural, environmental services, public benefits, sustainability, and product quality values, 2) identify interest in participating in a TFP branding program and identify the branding attributes favored by tribal respondents, 3) improve understanding of how various forest certification and eco-labeling programs are perceived and have been used by the tribes in marketing their wood products, 4) determine interest in the pursuit of a Native forest certification and chain of custody program and 5) gauge interest among American Indian and Native Alaskan forest managers and wood processors in participating in cooperative marketing and sales programs.

Key Terms & Concepts:

PRODUCT BRANDING: An identifying symbol, words, or mark that distinguishes a product or company from its competitors. Brands are often based on a specific mix of product and product attributes that differentiate a product and provide it with a competitive advantage over similar product offerings. Usually brands are registered (trademarked) with a regulatory authority and so cannot be used freely by other parties.

FOREST CERTIFICATION: Certification is a market-based, non-regulatory forest conservation tool designed to recognize and promote environmentally-responsible forestry and sustainability of forest resources. The certification process involves an evaluation of management planning and forestry practices by a third-party according to an agreed-upon set of standards. Certification standards address social and economic welfare as well as environmental protection. Most forest certification programs include chain-of-custody verifications that allow tracking of forest products through the supply chain. Certification labels are thought to reward responsible environmental performance with market benefit and may be required for participation in some product markets.

COOPERATIVE MARKETING: An arrangement whereby various producers cooperate in the marketing of their products or services. This often involves sharing resources to establish an independent marketing entity that works to market the cooperative product mix by linking potential customers with cooperative members who have products that match the customer's requirements.

Methodology: Two surveys were conducted: (1) A survey of American Indian and Alaskan Native organizations that manage forestlands; and (2) A survey of managers of Native American wood processing facilities.

Manager survey: 54 of 217 tribal resource managers contacted, using two different data collection techniques (web-based surveys and mail-in-questionnaires), participated in the survey (24.9% response rate, representing 66.9% of total tribal commercial forestlands held in trust).

Processor Survey: Surveys were sent by mail to managers of 14 Native wood processing

facilities following individual phone contacts to explain the purpose of the survey. 9 of the 14 managers completed the survey (64.3% response rate)

Results: Manager Survey: Almost three-quarters of survey respondents (72%) indicated that they were interested in participating in a TFP branding program. A majority of respondents also expressed interest in certification and cooperative marketing, Figure 1.

Survey respondents were asked to assess the importance of a set of six attributes in forming the foundation for a TFP brand to communicate core values and effectively differentiate tribal products from other competitive offerings (where a score of 1 indicated that the attribute was perceived as being “not important at all” and rating of 5 indicated that the attribute was perceived as being “very important”). All six of the attributes were perceived as being important with average importance ratings ranging from 3.9 to 4.3, Figure 2. The highest rated attributes were: 1) the traditional forest stewardship ethics of tribes, 2) the spiritual and cultural respect tribes have for the land, resources, and people, 3) tribal interest in supporting economic development within their community and providing employment opportunities for tribal members, and 4) the high quality wood that exists in sustainably managed tribal forests.

Certification is becoming more important as federal, state and municipal procurement policies reflect preference for timber products sourced from sustainably managed forests. The two major green building programs in the US award points for projects that source timber products from certified forests. Chain of custody certification is increasingly requested by overseas customers as international concerns about illegal logging influence trade standards. In order for tribes to compete in contemporary shifting markets, it may be important to certify forests and products, either through one of the existing programs or through a yet-to-be-developed tribal certification program.

Survey results indicated that many tribes are either unaware of forest certification programs or they do not have a good understanding of these programs. However, despite the general lack of knowledge regarding certification programs, fully 60% of responding tribes indicated that they would be interested in participating in a tribal certification program while another 32% expressed neutrality on the issue, suggesting that they would be open to the concept.

The third marketing program that was considered by survey respondents was a cooperative sales program which could involve a central organization facilitating sales relationships and customer services for a consortium of enterprises. This strategy could be effective in overcoming the lack of marketing capacity that was reported by most respondents. Of the three marketing programs under consideration in this project, however, this strategy received the lowest level of support, with just 60% of survey respondents indicating that they might be interested in participating in this type of program.

Processor Survey: The survey data, along with anecdotal information derived from discussions conducted at ITC meetings and annual symposiums over the past two years indicates that the lack of marketing capacity hampers ability to compete in both the domestic and international markets. As example, survey data shows that less than 6% of total tribal log and lumber sales were to international markets, Figure 3. Not surprising, all mill managers surveyed indicated that they would like to learn more about international markets. Mill managers expressed strong interest in participating in all three tribal potential marketing programs. Highest

interest, among respondent mill managers, was in branding while lowest was for certification. Mill managers responses were split as to the perceived potential for price benefit from certification but respondents indicated on average that certification could be useful for product marketing.

Discussion & Conclusions:

A TFP brand: Developing a brand requires a long-term commitment of resources in the development and implementation of a branding program. It is equally important to consider both tribal and consumer attitudes and perceptions before settling on the final set of attributes for the brand. Finally, it is important to consider the type of product being branded. While a brand may not be important for marketing commodity products (e.g., dimension lumber), it can be useful in marketing value-added products or when selling into specialty niche markets that appreciate tribal products or in increasing public awareness of tribal values and management practices.

Marketing capacity: Historically, TFPs have generally been sold as commodities in the domestic market with little effort to distinguish or differentiate them from similar products. Despite weak domestic demand, US lumber exports to Japan, China and Vietnam were up by 11.1%, 19.4% and 2%, respectively, suggesting untapped export opportunities for tribes. Many Indian forestry programs produce logs with unique qualities, such as large diameters and tight grain; attributes that are highly valued in export markets. Survey results, however, suggest deficiencies in the sales expertise to enter and compete in these international log and lumber markets.

TRIBAL DECISIONS NEEDED: *The purpose of this module was to gather information from Indian forest and wood processing facility managers. Surveys indicate strong interest in development of national marketing, branding, and certification strategies for TFPs. Three major decision areas flowing from the surveys are:*

(1) Should a team be assembled to prepare a strategic plan for developing and marketing a TFP brand? Which areas of interest (a branding, certification, and/or cooperative marketing) should be pursued, prioritized, postponed, or excluded? Which enterprises wish to participate?? What types and volumes of forest products will be available for sale? What support resources are needed to proceed?

(2) Should a long-term program aimed at gaining access to international markets be developed to provide a measure of protection against economic downturns in domestic markets?

(3) Should an outreach program be conducted to inform tribes about requirements, costs, and benefits of chain of custody and forest sustainability certification?

Appendices:

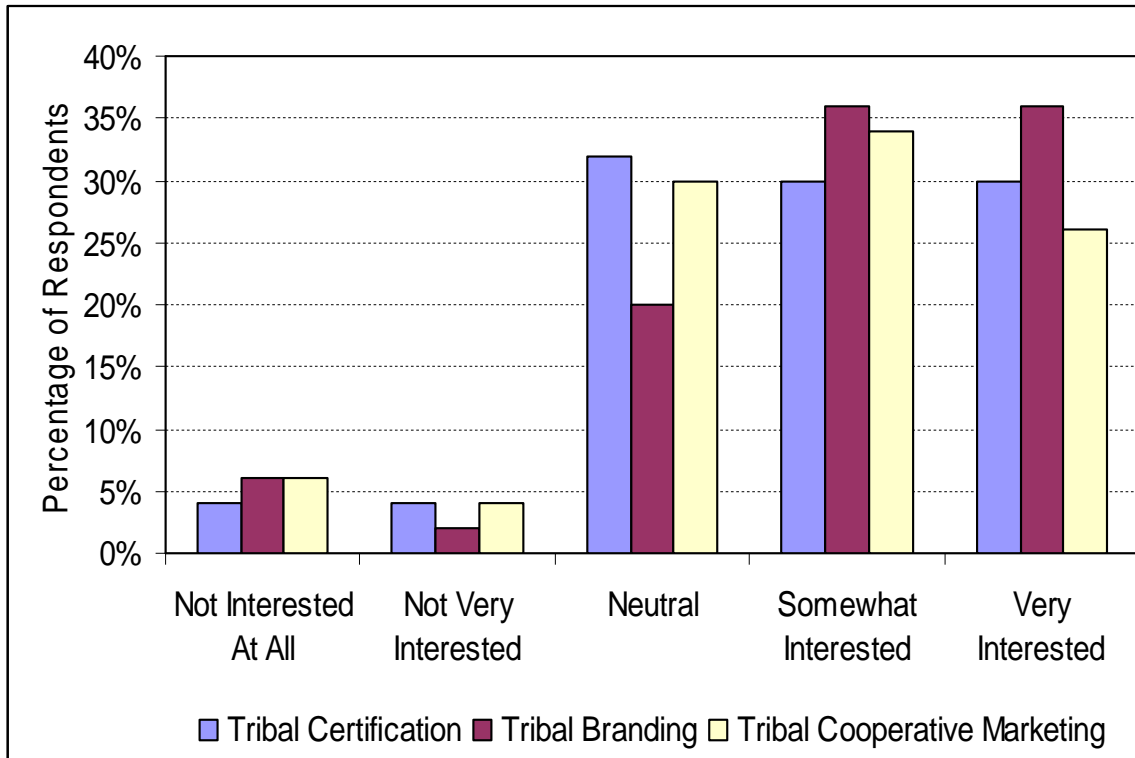
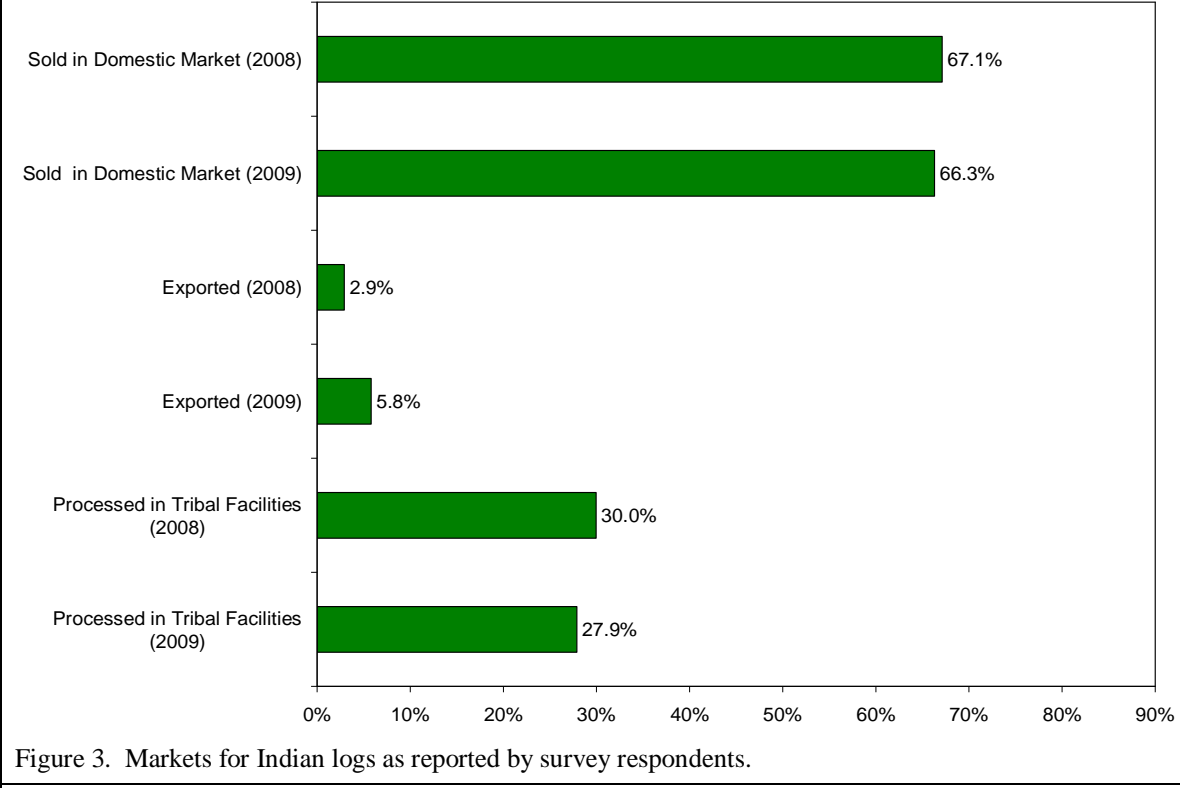
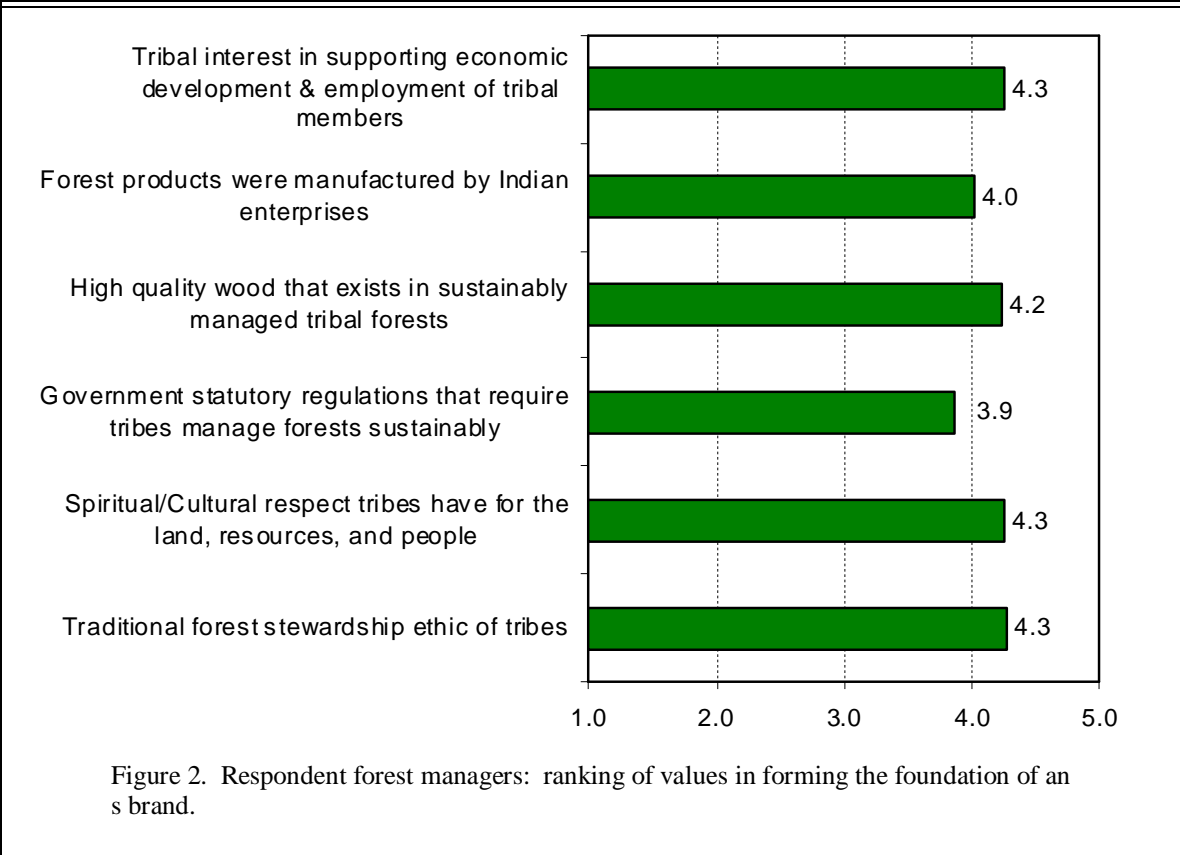


Figure 1. Comparison of interest in participating in certification, branding, and marketing programs.



Module 1 Survey Results: Capacity and Interest

Submitted by Dr. Ivan Eastin and Dr. Indroneil Ganguly, Center for International Trade in Forest Products (CINTRAFOR), School of Forest Resources, University of Washington.

INTRODUCTION

The total area of tribal reservations is 57,105,943 acres of which 32.6% (18,637,903 acres) is forested. Tribal forestland is broken into two categories Unreserved and Reserved. Basically, the distinction between these categories is that timber located on unreserved forests is administratively available for harvest whereas timber located in reserved forests is not available for harvest. Unreserved forestland totals 17,382,324 acres and represents over 90% of total tribal forestland. Unreserved forestland is further subdivided into accessible and inaccessible forestland, with all of the commercial forest area located in the accessible category of forests. Accessible forestland totals 15,330,420 acres and is defined as being “forestland that is physically, administratively and economically accessible to harvest or is anticipated to become so during the management plan period” (BIA 2009). Accessible forestland is comprised of timberlands (41.2%) and woodlands (58.8%). Timberlands are defined as being “forest lands stocked, or capable of being stocked, with tree species that are regionally utilized for lumber, pulpwood, poles or veneer products” whereas the term woodlands refers to forests that are “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”. Finally both timberlands and woodlands are broken into commercial and non-commercial forests. Total commercial forestland totals 9,769,444 acres with 61% being located in timberlands and 39% located in woodlands. The area of non-commercial forestland totals 5,560,977 acres, the vast majority of which (93.6%) is located in woodland forests. While both of these types of forests can be economically harvested, commercial forestlands are viewed as being productive sites that warrant investment in replanting and active management whereas non-commercial forests are generally perceived as being low quality forests that do not merit significant investment in future management activities.

Overall, forests cover 32.6% of tribal reservations in the US although the commercial forest area is just 17.1% of total reservation area Table 1. Approximately 52% of the total tribal forest area is commercial forestland. Native American reservations are grouped into 12 different geographic regions within the US, ranging in size from less than half a million acres to over 17 million acres. The regions with the highest percentage of commercial forest area are the Midwest (58%), the Eastern (50%), the Northwest (41.9%) and the Pacific (35.1%). In contrast, the tribal reservations in the Great Plains (6.2%), the Rocky Mountain (12.6%) and the Eastern Oklahoma (20%) regions have a relatively low ratio of forest cover. With the exception of the Navajo, Western and Southwest regions, the forests in most tribal regions are heavily weighted towards commercial forests. Interestingly, just four regions (the Navajo, Western, Pacific Northwest and Southwest regions) represent 70% of total tribal reservation area, 81% of tribal forest area and 71% of tribal commercial forests area.

OBJECTIVES

The primary objectives of the Tribal Branding project were to: 1) Determine potential opportunities and benefits from branding and marketing initiatives to differentiate forest

products from Indian lands by virtue of unique cultural, environmental services, public benefits, sustainability, and product quality values provided through Tribal forest management and 2) Identify the tribes interested in participating in a TFP branding program, and develop an inventory of available products, processing capabilities, species, locations, etc. The main objectives of the tribal branding study conducted by CINTRAFOR were to (i) understand how various forest certification and eco-labeling programs are perceived and used by the tribes in marketing their wood/wood products, (ii) explore the potential and acceptability of a TFP branding program and (iii) identify the branding attributes favored by Tribal respondents.

Table 1. Summary statistics of tribal forestland in the US, in acres

Region	Reservation Area	Forest Area	Commercial Forest Area	% of Region Forested	% of Region in Commercial Forestland	Ratio of Commercial Forest to Total Forest Area	% of Total Tribal Commercial Forestland
Alaska	1,178,529	478,114	346,926	40.6%	29.4%	72.6%	3.6%
Eastern	657,659	413,142	328,869	62.8%	50.0%	79.6%	3.4%
Eastern Oklahoma	620,644	123,892	99,849	20.0%	16.1%	80.6%	1.0%
Great Plains	5,922,378	364,930	303,488	6.2%	5.1%	83.2%	3.1%
Midwest	1,525,041	1,046,788	884,173	68.6%	58.0%	84.5%	9.1%
Navajo	17,170,109	5,333,474	1,527,735	31.1%	8.9%	28.6%	15.6%
Northwest	5,032,778	2,848,614	2,111,080	56.6%	41.9%	74.1%	21.6%
Pacific	463,366	199,459	162,642	43.0%	35.1%	81.5%	1.7%
Rocky Mountain	6,360,787	804,622	804,622	12.6%	12.6%	100.0%	8.2%
Southern Plains	481,959	99,230	98,653	20.6%	20.5%	99.4%	1.0%
Southwest	5,055,173	2,902,215	1,313,847	57.4%	26.0%	45.3%	13.4%
Western	12,637,520	4,023,423	1,936,206	31.8%	15.3%	48.1%	19.8%
Total	57,105,943	18,637,903	9,769,444	32.6%	17.1%	52.4%	

METHODOLOGY

The sample frame for the forestland section of the project consisted of 228 potential respondents and by utilizing multiple delivery strategies we were able to successfully contact 217 tribes, using two different data collection techniques (web-based surveys and mail-in-questionnaire). In total there are 125 tribes with more than 2,000 acres of commercial forest land in the US while 60 tribes have little (<100 acres) or no commercial forest land.

The data collection for the Study was undertaken over a period of six months (from January to June, 2010). A total of six waves of email requests were sent out over a period of four months (from March to June, 2010) to the tribes with functional email addresses (155 members). We received responses from 34 tribes (30 within the first two months of the survey). Mail surveys were also sent out along with self-addressed stamped return envelopes to the remaining tribes with no (or unusable) email addresses. Seven surveys were returned as undeliverable and we received five completed surveys either by mail or by fax. Questionnaires were also distributed among the tribal representatives during the ITC annual meeting. This activity resulted in 15 responses; however, only 7 were complete and were used in the Study. In the latter stages of

data collection a more focused approach was adopted, where, the non-respondents with significant commercial forest holdings were targeted, resulting in an additional six completed surveys being received.

The research methodology specifically targeted tribes with large forest holdings; however, all the tribes in the list were given a chance to complete the survey. Ultimately, a total of 54 tribes from across the US completed the survey, Figure 1. The total response rate based on the number of total number of Tribes with forestlands was just 24.9% (54/217). However, if we base the response rate on the percentage of total forestlands covered by respondents, then the response rate jumps to 69.4%. For this survey, we have chosen to focus on commercial forestlands to calculate the response rate, providing us with an effective response rate of 66.9%. We also received a response rate of 56% from the tribes with wood processing facilities, although one large sawmill did not complete the survey.

As a result of the stratified sampling method, the response rate was much higher among the tribes with large commercial forests. In total 50% of the tribes with more than 100,000 acres of commercial forest land responded to the survey, whereas, less than 9% of the tribes with less than 2,000 acres of commercial forest land responded to the survey.

Table 2. Response rates calculated using several relevant factors.

- A total of 54 tribes responded to the survey out of a population of 229 tribes for a response rate of **23.6%**.
- Total reservation area is 57,105,943 acres and survey respondents represent 31,255,168 acres with tribal reservation coverage of **54.7%**.
- Total forest area is 18,637,903 acres and survey respondents represent 12,929,237 acres with tribal forest coverage of **69.4%**.
- The total commercial forest area of the tribes is 9,769,444 acres and survey respondents represent 6,540,013 acres, with tribal commercial forest coverage of **66.9%**.
- Response rate for ITC member tribes was **62.3%** (38 of 61 members responded)

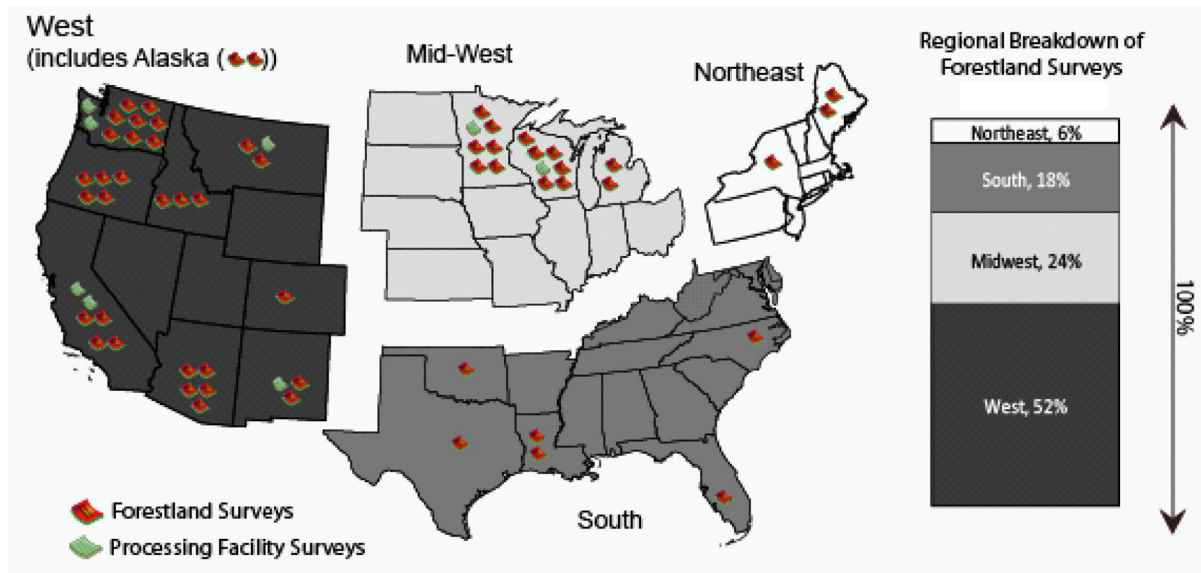


Figure 1. Locations of survey respondents

FORESTLAND SURVEY RESULTS

Basic Demographics

The geographic distribution of the respondents is shown in Figure 2. The West is the region with the largest area of commercial forest, representing 69.4% of total commercial forests followed by the South (14.5%, the Midwest (13.2%) and the Northeast (3%). Based on this assessment, it appears that the West may be somewhat underrepresented in the survey responses whereas the other regions are overrepresented.

Every effort was made to ensure that the surveys were completed by forest managers or their equivalent, since it was felt by the project teams that these individuals would be most knowledgeable about the forest operations within each tribe. However, despite our best efforts this was not always possible. The summary of the job titles for the survey respondents are presented in Figure 3. Among the survey respondents, 47% were forest managers, 17% were foresters and 16% of the respondents identified themselves as managers and environmental/program managers. The remaining 20% of the respondents were identified as holding a variety of jobs within the tribes, including chairmen and directors.

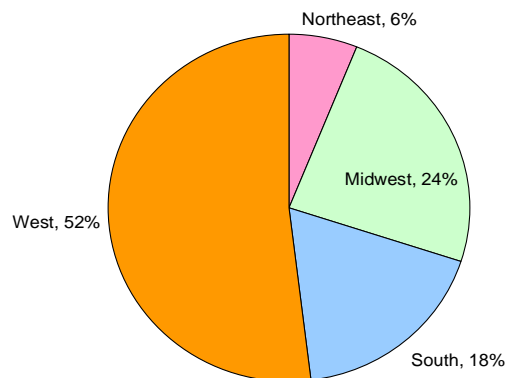


Figure 2. Regional breakdown of survey respondents.

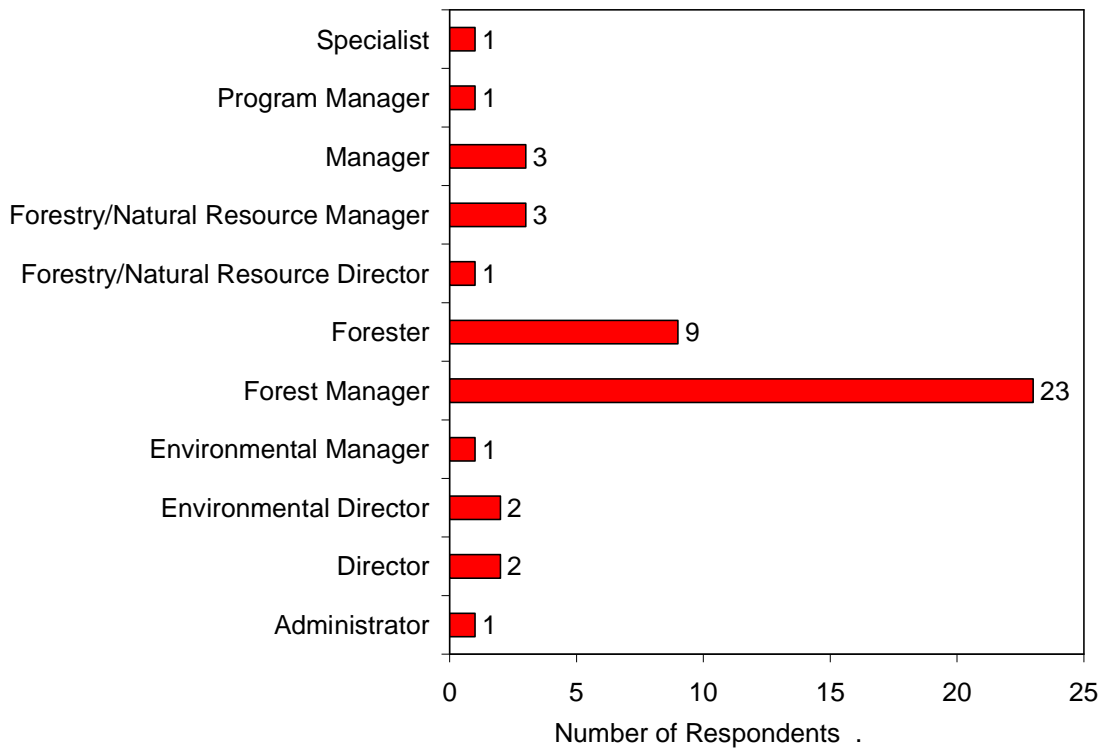


Figure 3. Job titles of survey respondents.

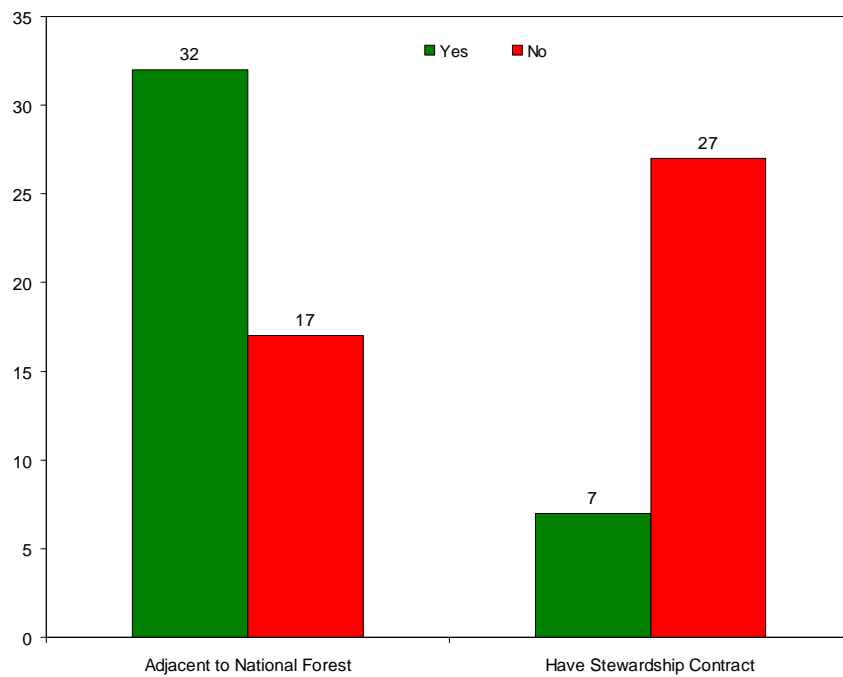


Figure 4. Geographic proximity of tribal reservations with National Forests and prevalence of stewardship contracts.

Proximity to National Forests

Survey respondents were asked to indicate whether their tribal forestlands were located adjacent to a National Forest and, if so, whether they had entered into a Stewardship Contract with the Forest Service to conduct forest management activities with the National Forest, Figure 4. This information was important to document since Tribes are widely recognized for their sustainable forest management practices on their Tribal forests. Given tribal reputation for stewardship and the passage of the Tribal Forest Protection Act in 2004, the Forest Service has been working with Tribes to expand stewardship contracting opportunities where Indian lands are adjacent to National Forests. Almost two-thirds of the survey respondents (65.3%) indicated that their tribal forests were located adjacent to a National Forest. Approximately 30% of those tribes with forests that are adjacent to National Forests have engaged in stewardship contracts with the Forest Service.

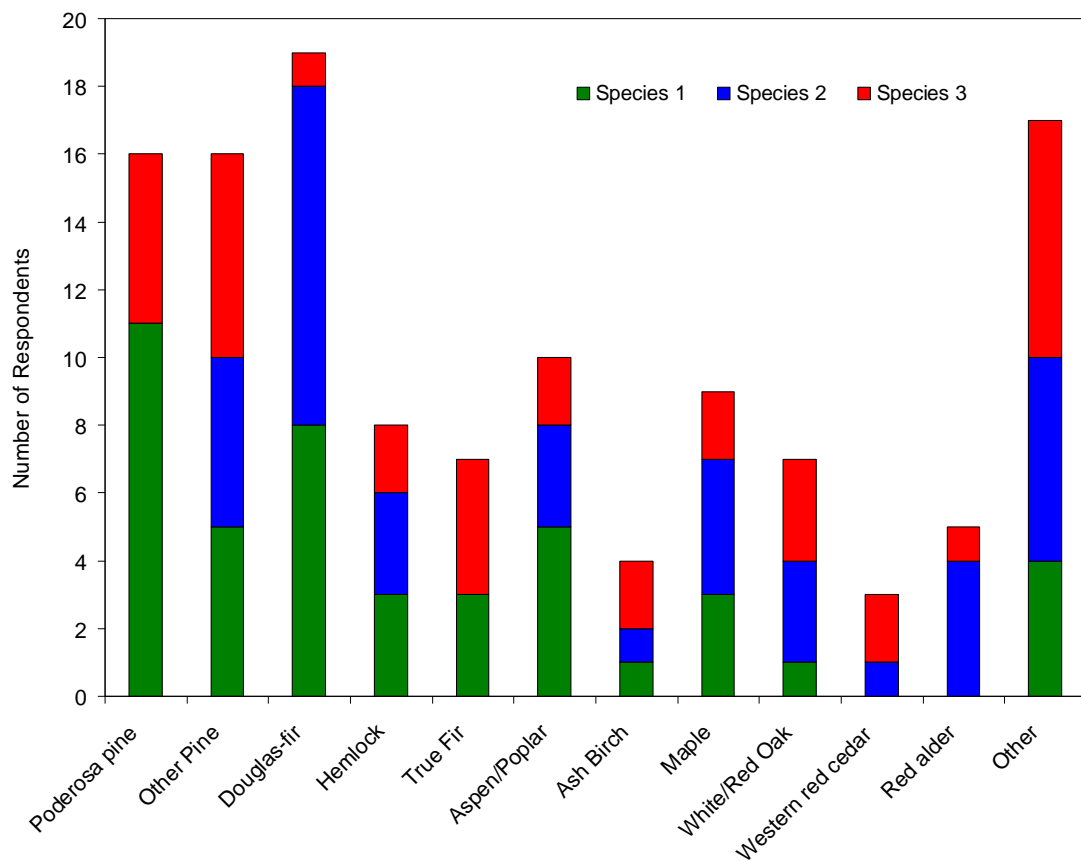


Figure 5. Prevalence of timber species in timber harvests from tribal forests.

Survey respondents were asked to identify the three main timber species that were harvested from their forests in 2009, Figure 5. Looking at individual timber species, the most harvested species were ponderosa pine followed by Douglas-fir, aspen and other pine. Combining the three choices shows a slightly different picture with Douglas-fir being the most harvested species followed by other species, ponderosa and other pine (these species tied) and aspen/poplar.

The majority of the logs harvested from tribal forests are sold into the domestic market followed by sales to tribal processing facilities and finally the export markets, Figure 6. Between 2008 and 2009, there was a slight decline in the percentage of logs sold into the domestic market and tribal mills in favor of sales into the export markets. The percentage of timber harvest exported doubled between 2008 and 2009 from 2.9% to 5.8%.

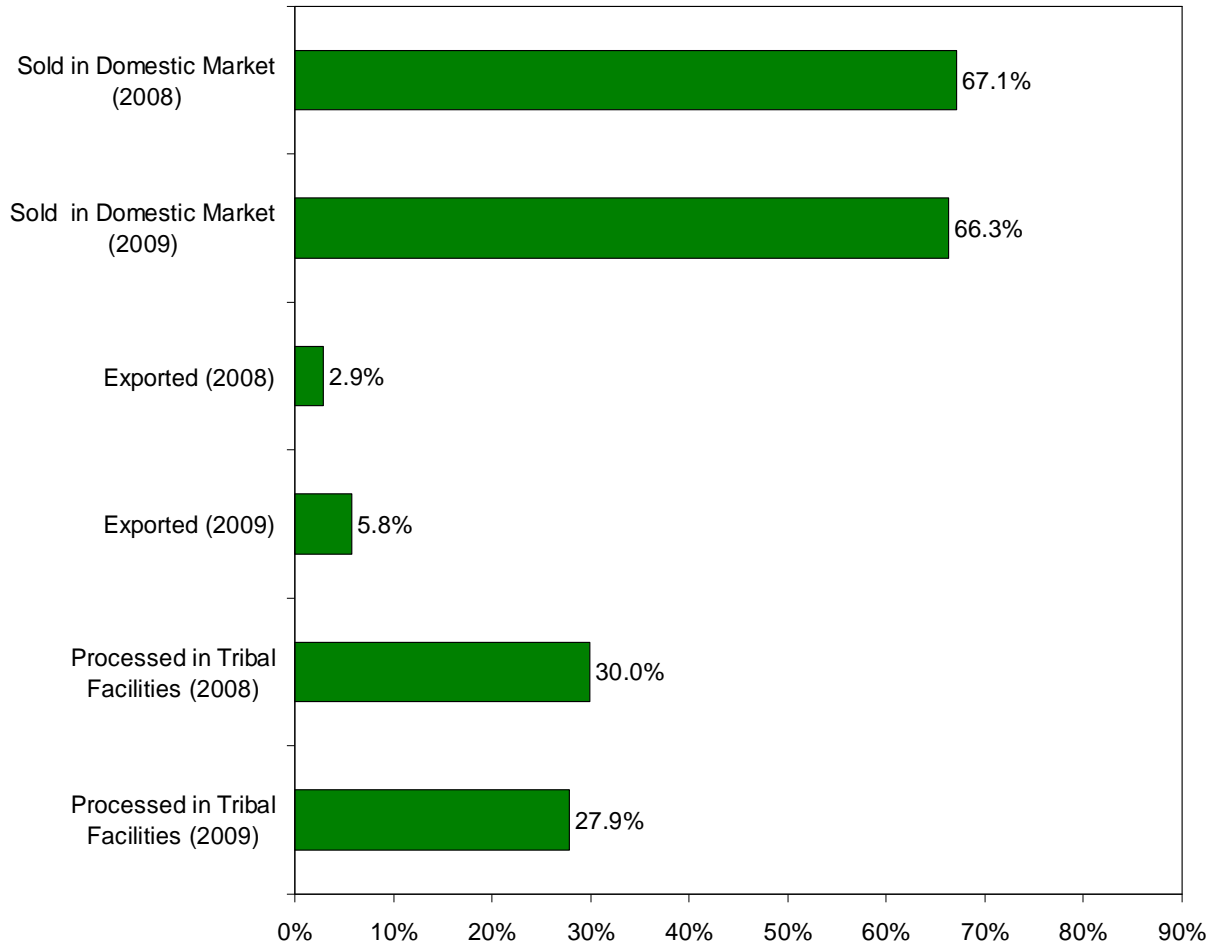


Figure 6. Markets for tribal timber harvests in 2008 and 2009.

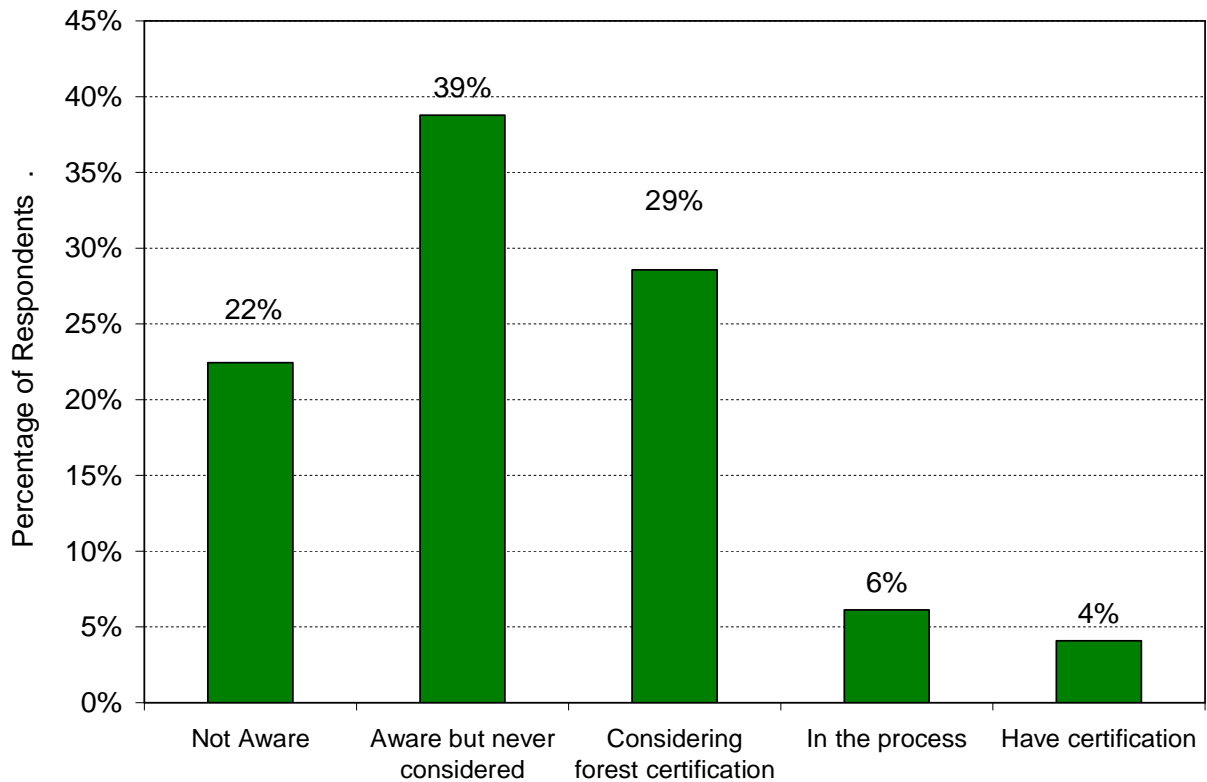


Figure 7. Tribal awareness and current status of forest certification.

Forest Certification

The survey was also designed to determine the status of tribes with respect to forest certification and their perceptions and attitudes towards sustainable forest certification through one of the nationally recognized forest certification programs (e.g., Sustainable Forestry Initiative, SFI or Forest Stewardship Council FSC). In 2009, there were three tribes who indicated that their forest was third party certified; two by FSC and one by SFI, Figure 7. The two tribes certified under FSC indicated that they felt that they received some marketing advantage and were able to obtain a small price premium as a result of the certification, although one of these tribes indicated that they might not renew their FSC certification as they were not able to justify the cost of the program. The tribe certified by SFI was less positive regarding the advantages of certification.

Among the respondents whose forests have not been certified 7% (3 tribes) indicated that they are currently undergoing a third party certification for their forests and 33% of the respondents indicated that they are considering using a third party certification program. In contrast, 42% of the respondents indicated that while they were aware of third party certification, they are not considering certifying their forests at this time while an additional 19% of respondents indicated that they were not aware of third party certification programs.

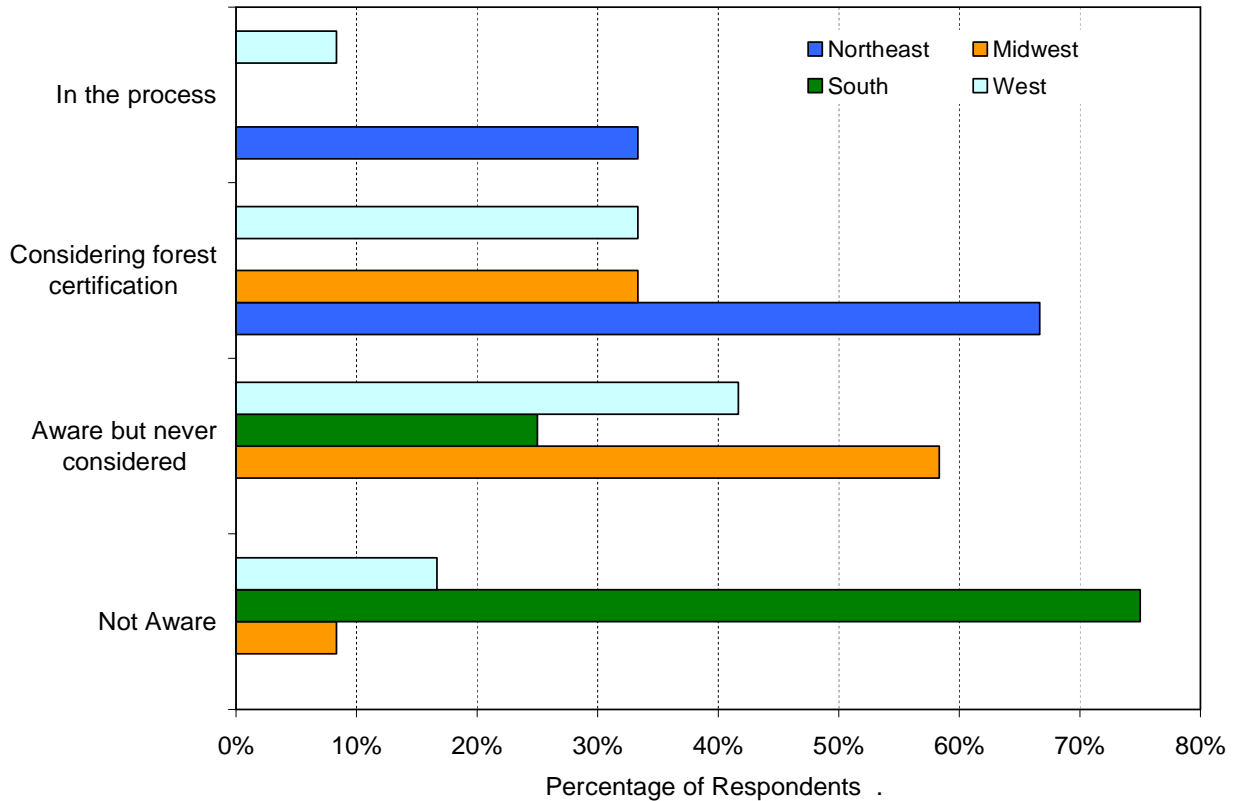


Figure 8. Tribal plans for forest certification, by region

The data presented in Figure 8 shows that respondents in the Southern region of the country were largely unaware of third party forest certification programs. In contrast, survey respondents located in the Northeastern region of the country demonstrated the highest level of interest in acquiring third party certification for their forests. The survey respondents were also asked the presumed usefulness of third party certification programs and eco-labeling in marketing their products, Figure 9. Only one respondent with a certified forest indicated that the third party certification program has been very useful in marketing their timber. In contrast, the respondents whose forests have not been certified did not have a very positive attitude towards third party certification programs and perceived potential to improve market returns for tribal timber. Only 27% of the survey respondents indicated that third party certification could play a somewhat positive role in marketing tribal timber, while the rest of the respondents indicated that they were either not aware of third party certification programs or that these programs were not considered useful in marketing tribal timber products.

When asked to estimate the price premium for certified lumber in the marketplace, most respondents (46%) indicated that they did not have any information on this, Figure 10. An additional 30% of the respondents felt that there was no price premium for certified wood. In contrast, 22% of the respondents felt that the market would pay a small (1-5%) price premium for certified wood while one respondent (whose forest was certified) indicated that a 10% price premium had been secured as a result of certification.

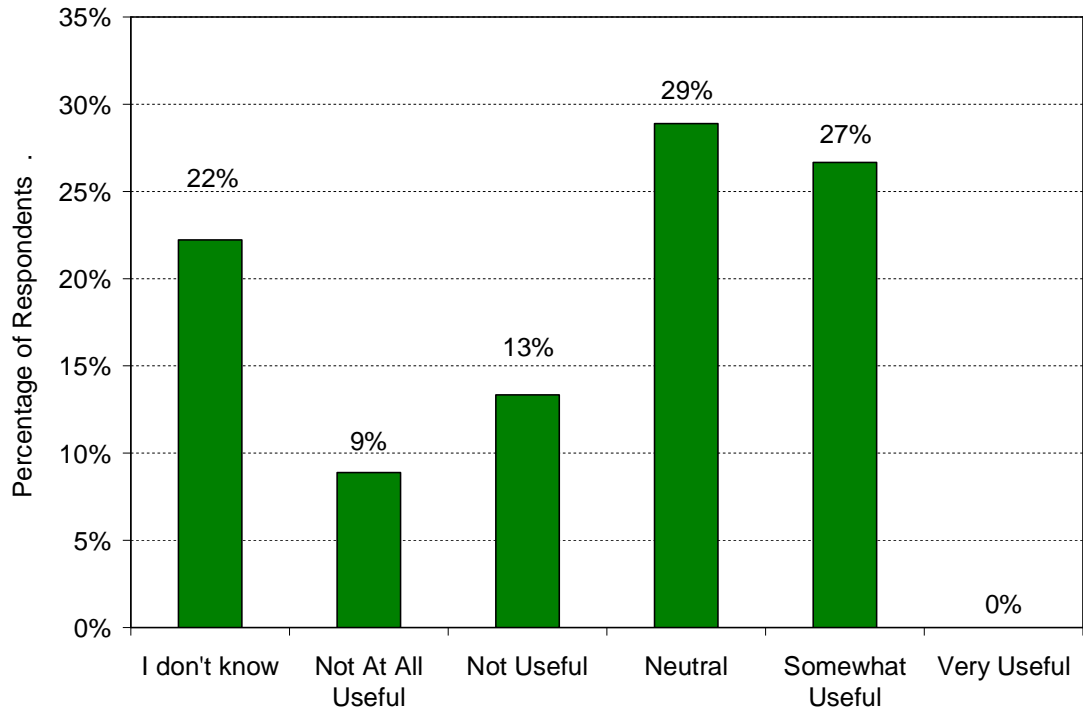


Figure 9. Respondent perceptions regarding the usefulness of sustainable forest certification.

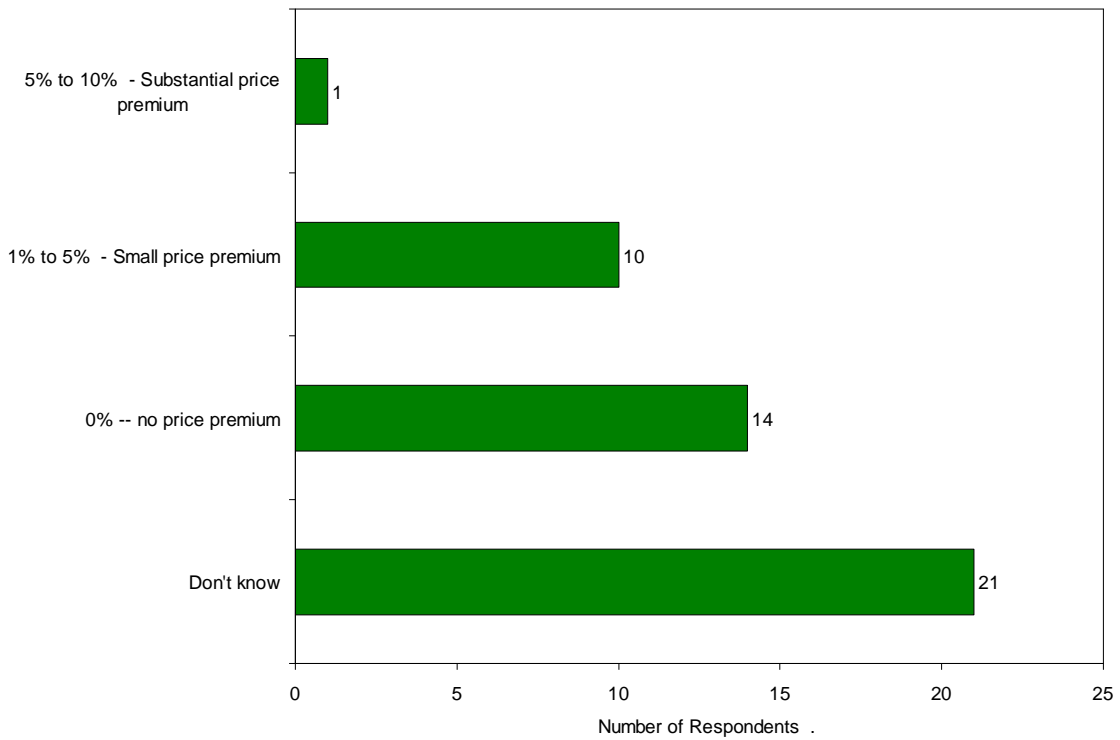


Figure 10. Respondent's perceptions of the price premium associated with certified wood.

Interest in Participating in Tribal Marketing Programs

One of the main objectives of this research was to identify tribal interest in cooperative programs that could work to increase the competitiveness of tribal forest products in the marketplace. The three marketing programs under consideration in this project included a tribal forest certification program, a TFP branding program, and a tribal cooperative marketing and sales program. It is important to note that survey respondents were given no details of how these hypothetical programs might be developed or administered. Responses are representative of interest in program concepts.

Interest in Participating in a Tribal Sustainable Forest Management Certification Program

Survey respondents were asked to indicate their interest in participating in a tribal certification program as an alternative to the existing third-party forest certification programs, Figure 11. Most of the respondents responded positively to this question with 60% indicating that they were somewhat or very interested in participating in a tribal certification program. Almost a third of the survey respondents (30%) indicated that they are very interested in such a program. Approximately a third of survey respondents indicated that they had a neutral opinion about supporting a tribal forest certification program. Less than 10% of the respondents indicated that they would not be interested in participating in a tribal forest certification program (most of these respondents have small forest holding).

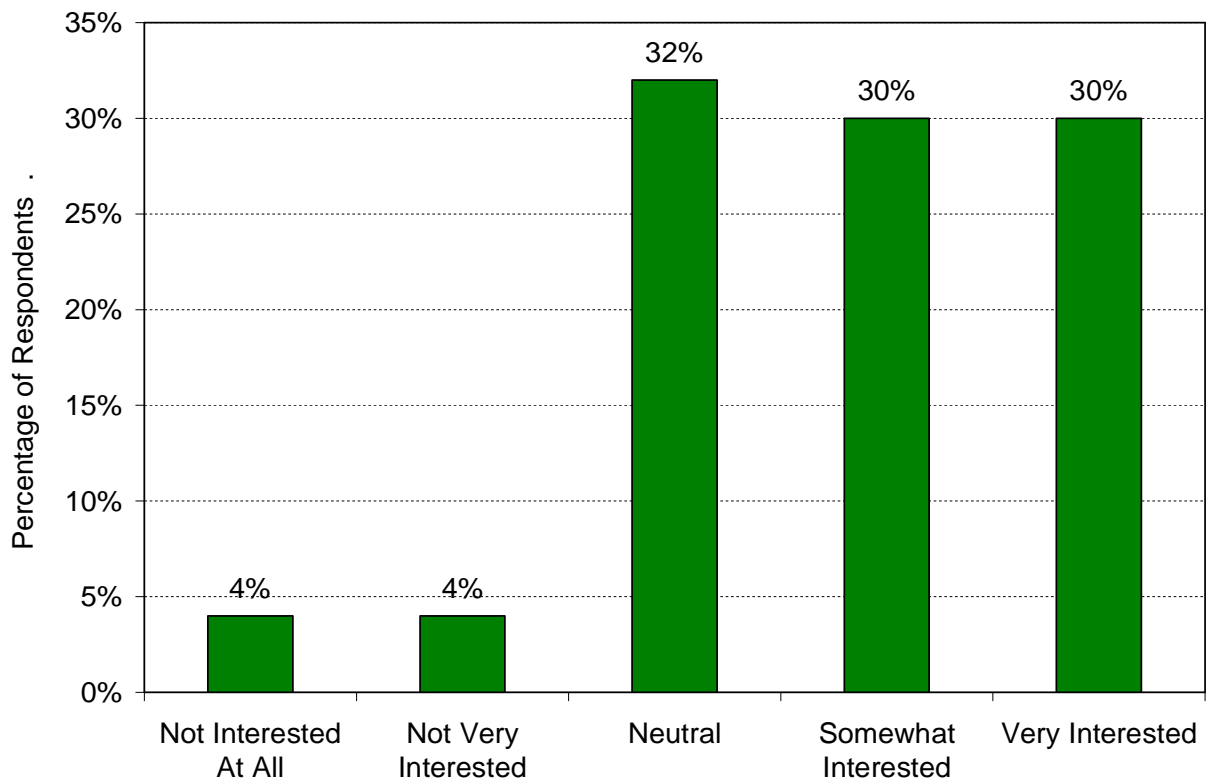


Figure 11. Respondent interest in participating in a tribal forest certification program.

Table 3. Respondent interest in participating in a tribal forest certification program, by region.

	Northeast	Midwest	South	West
Not Interested At All	0.0%	0.0%	0.0%	8.3%
Not Very Interested	0.0%	0.0%	14.3%	4.2%
Neutral	0.0%	25.0%	57.1%	25.0%
Somewhat Interested	33.3%	66.7%	28.6%	16.7%
Very Interested	66.7%	8.3%	0.0%	45.8%

Looking at the regional breakdown of the survey respondents, it's clear that the interest in participating in a tribal forest certification program varied across the regions, Table 3. While interest was quite high in the Northeast, Midwest and Western regions, it was lowest in the South. For example, the percentage of respondents who indicated that they were either very interested or somewhat interested in participating in a tribal forest certification program was 100% in the Northeast, 75% in the Midwest and 62.5% in the West. In contrast, it was just 29% in the South, although almost 60% of the respondents from the South indicated that they were neutral towards the idea. Since awareness of forest certification was earlier found to be low in the South, a regional lack of experience with forest certification may have influenced respondent interest in certification.

Interest in Participating in a Tribal Forest Products Branding Program

The respondents were also asked to express their interest in participating in a TFP branding program for forest products that would emphasize the unique social, cultural, environmental, and economic values of Native American forestry programs. The response to this question was overwhelmingly positive with 72% of the respondents expressing some interest in a TFP branding program. Fully 36% of the respondents indicated strong interest in participating in such a program while the percentage of respondents indicating that they were not interested was less than 10%.

The branding program data was also analyzed on a regional basis, Table 4. Survey respondents were more supportive of a TFP branding program than they were of a tribal certification program or a cooperative tribal marketing program. Similar to the results regarding a tribal certification program, interest was quite high in the Northeast, Midwest and Western regions. However, the percentage of favorable responses from the South was twice the rate reported for the certification program (57.2% vs. 28.6%). The percentage of respondents who indicated that they were either very interested or somewhat interested in participating in a tribal forest products branding program was 100% in the Northeast, 83.4% in the Midwest, 70.8% in the West and 57.2% in the South. Interest in a branding program was higher in every region of the country (with the exception of the Northeast region where it was 100% for both programs).

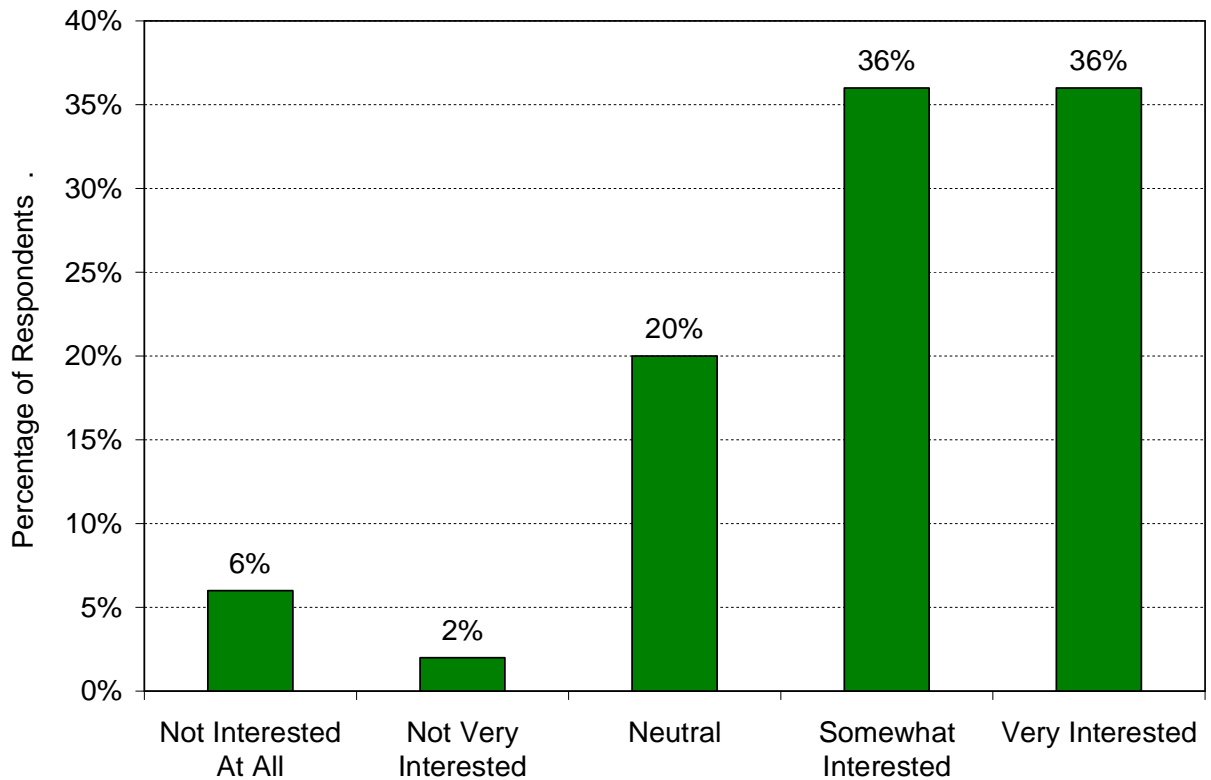


Figure 12. Respondent interest in participating in a TFP branding program.

Interest in Participating in a Tribal Cooperative Marketing Program for Forest Products

Survey respondents were asked to indicate their interest in participating in a cooperative tribal marketing and sales program for TFPs. The response to this question was also positive with 63% of all respondents indicating that they were interested in a tribal cooperative marketing program while 26% indicated that they would be very interested in participating in such a program, Figure 13. The percentage of respondents who indicated that they were not interested in participating in a tribal cooperative marketing program was low. The number of respondents who were unsure about participating in a cooperative marketing program was 30%, approximately the same as for the tribal certification program.

Table 4. Respondent interest in participating in a TFP branding program, by region.

	Northeast	Midwest	South	West
Not Interested At All	0.0%	8.3%	0.0%	8.3%
Not Very Interested	0.0%	0.0%	0.0%	4.2%
Neutral	0.0%	8.3%	42.9%	16.7%
Somewhat Interested	33.3%	66.7%	42.9%	20.8%
Very Interested	66.7%	16.7%	14.3%	50.0%

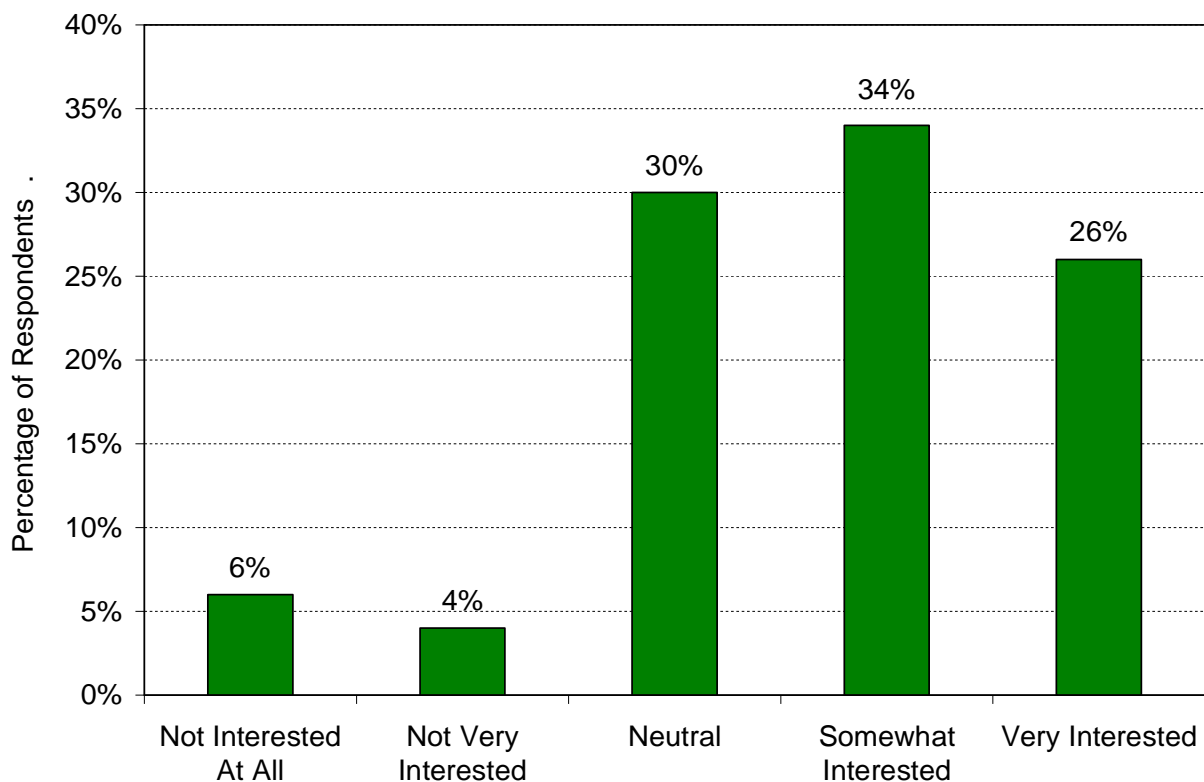


Figure 13. Respondent interest in participating in a tribal forest products marketing cooperative.

The results of the regional analysis for the cooperative marketing program data is summarized in Table 5. Survey respondents in the Northeast and Midwest were generally less supportive of a tribal cooperative marketing program than they were of a tribal certification program or branding program. An opposite trend was observed for tribes located in the Southern and Western regions where support for a cooperative marketing program was almost as strong as for a TFP branding program. The percentage of respondents who indicated that they were either very interested or somewhat interested in participating in a TFP branding program was 67% in the Northeast, 58 % in the Midwest, 57 % in the West and 67 % in the South.

Table 5. Respondent interest in participating in a TFP marketing cooperative.

	Northeast	Midwest	South	West
Not Interested At All	0.0%	8.3%	0.0%	8.3%
Not Very Interested	0.0%	8.3%	0.0%	4.2%
Neutral	33.3%	25.0%	42.9%	20.8%
Somewhat Interested	66.7%	50.0%	42.9%	25.0%
Very Interested	0.0%	8.3%	14.3%	41.7%

Comparative Interest in Potential Tribal Marketing Programs

This section presents a discussion of the comparative interest expressed by survey respondents regarding the three potential tribal marketing programs. A comparative summary of the interest ratings discussed in the previous section is presented in Figure 14. The relative scores at the low end of the scale (not very interested and not interested at all) are similar for all three of the potential marketing programs. At the higher end of the scale, survey respondents indicated strongest interest in the branding program. Finally respondents expressed the highest degree of neutrality for the certification and cooperative marketing programs but a majority indicated that they were somewhat to very interested in all three program concepts.

Since this type of figure can be a bit difficult to interpret, we developed a composite index to better display the program interest data. In developing the index, each survey response was weighted using the following scheme: not interested at all = -2, not very interested = -1, neutral = no score, somewhat interested = 1 and very interested = 2. Using this scoring system, the composite scores for each branding program were calculated and the composite index is presented in Figure 15. The composite index clearly shows the greatest support for the tribal branding program followed by the tribal certification and the tribal cooperative marketing program.

The survey data was also analyzed based on survey respondent's size of commercial forest area and location, Tables 6 and 7. The results of these analyses showed that the highest level of interest in all three of the marketing programs was expressed by the tribes with large commercial forest areas (greater than 50,000 acres), although the mean differences in the interest ratings were not significantly different, Table 6. In addition, no clear trend emerged based on the geographic location of the survey respondents.

Based on the previous discussion, the survey results clearly show that respondents expressed a high level of interest in the development of a potential tribal brand followed by a tribal forest certification program while the least interest was expressed in developing a tribal cooperative marketing program. However, it is important to note that more than half of all respondents expressed interest in all three marketing programs.

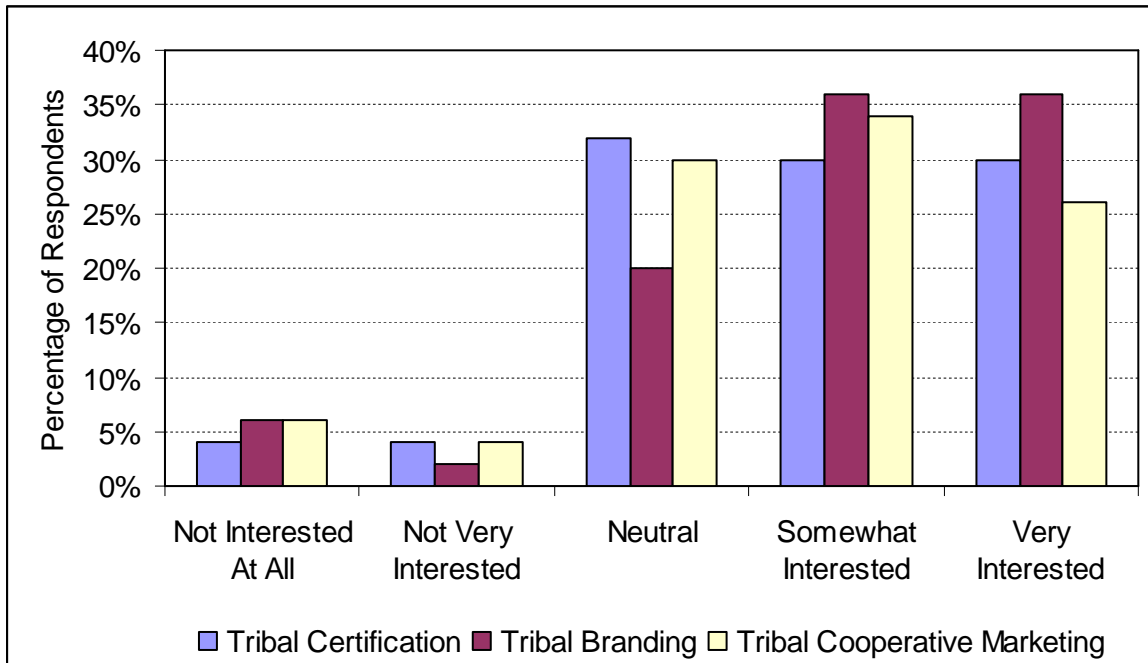


Figure 14. Comparative interest in the three potential tribal marketing programs.

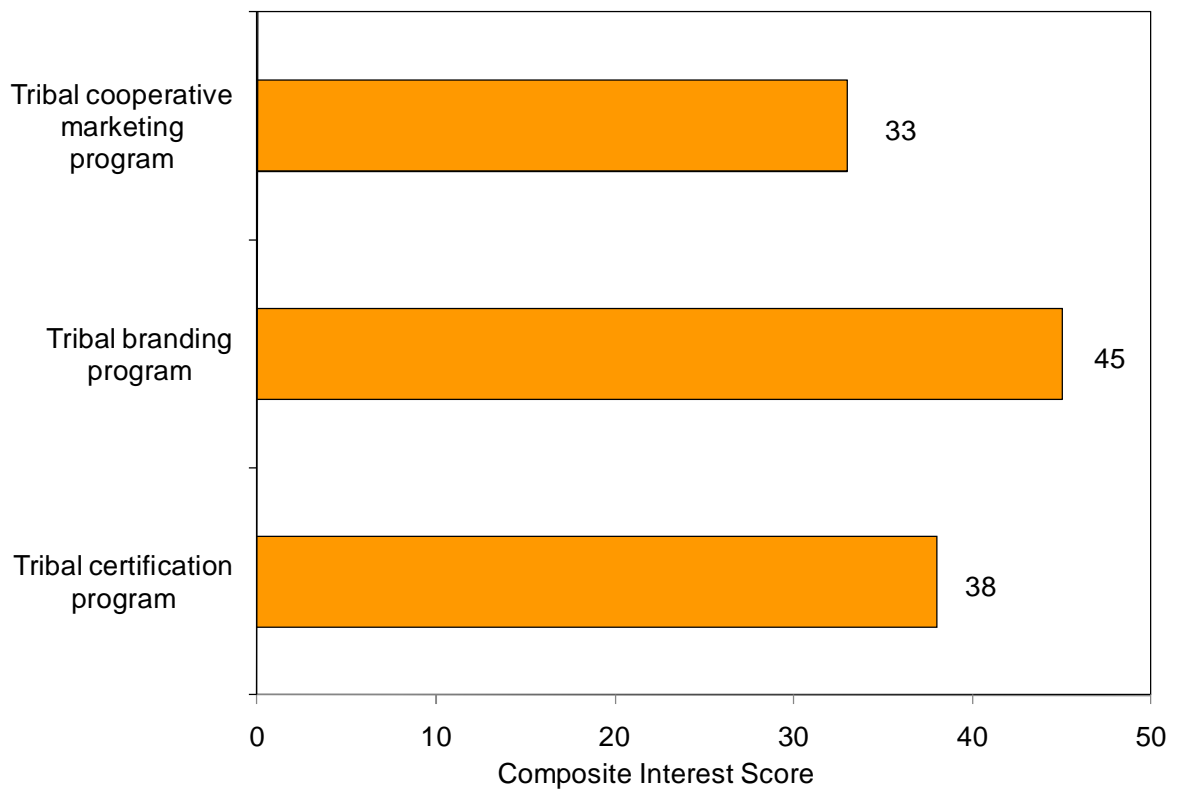


Figure 15. Composite index of tribal interest in participating in the three program options.

Table 6. Respondents interest in participating in the various marketing programs, by forest area.

	Small	Large
Interest in participating in a tribal certification program	3.72	3.85
Interest in participating in a TFP branding program	3.83	4.05
Interest in participating in a cooperative TFP marketing program	3.52	3.90

Tribes with 'Small' commercial land holding = Less than 50,000 acres of commercial forest land

Tribes with 'Large' commercial land holding = More than 50,000 acres of commercial forest land

Table7. Respondents interest in participating in the various marketing programs, by region.

	Northeast	Midwest	South	West
Interest in participating in a tribal certification program	4.67	3.83	3.25	3.81
Interest in participating in a TFP branding program	4.67	3.83	3.75	3.92
Interest in participating in a cooperative TFP marketing program	3.67	3.42	3.63	3.81

Relative Importance of Attributes in Developing a TFP brand

The respondents were asked to rate the importance of several attributes in forming the foundation for a TFP brand. The importance of each attribute was rated using a five point Likert-like scale, where a score of 1 indicated that the attribute was perceived as being “not important at all” and rating of 5 indicated that the attribute was perceived as being “very important”. The complete set of tribal attributes as well as their average importance rating is provided in Figure 16. All attributes were considered important, receiving ratings that ranged from a low of 3.9 to a high of 4.3 (received by three different attributes). The importance ratings did not vary significantly from each other, forming a relatively tight cluster around an average value of 4.1.

A breakdown of the survey data by region and size of forest area shows a couple of interesting things, Tables 8 and 9. First, while all attributes were rated as being quite important, there was considerable difference in the two highest rated attributes based on geographic location, with the Northeast and Western regions favoring the same set of attributes and the South and Midwest favoring the same attribute (shaded cells in Table 8). Similarly all of the regions (with the exception of the West) rated “government statutory regulations” as being the least important attribute. Interestingly, while the attribute “made by a tribal enterprise” was one of the lowest rated in the West and Midwest regions, it was one of the highest rated in the South and Northeast regions. The tribes with large commercial forest areas consistently rated the

attributes higher than did tribes with smaller forest areas, although these differences were not significant, Table 9.

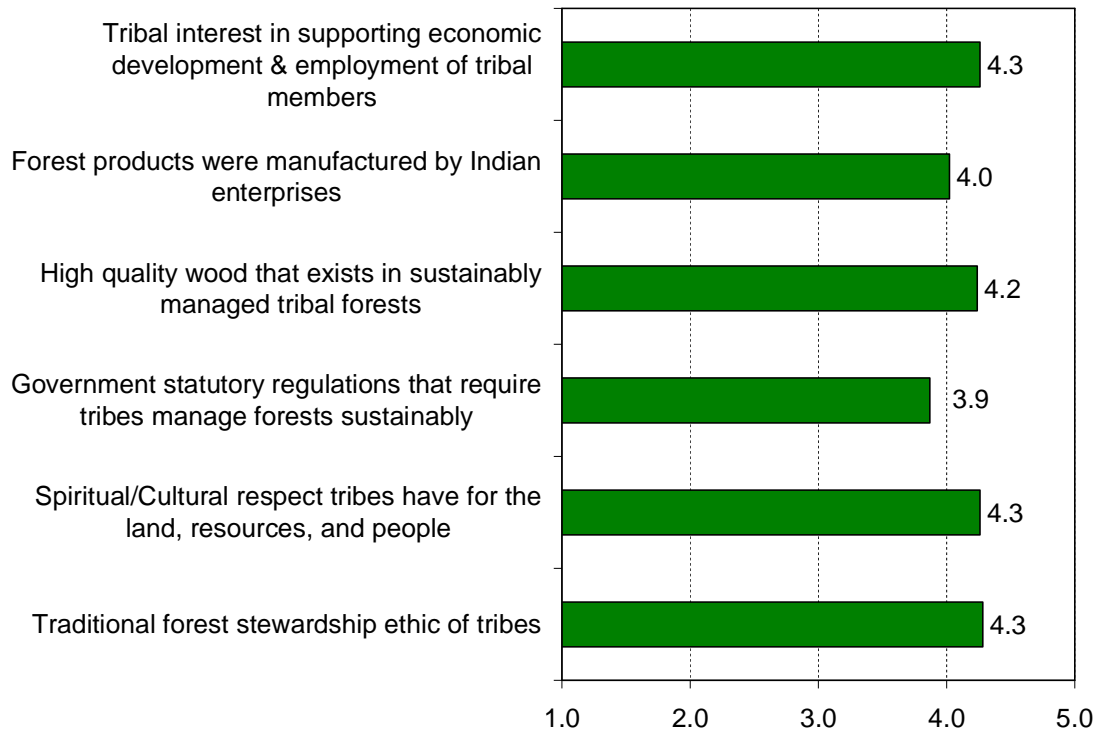


Figure 16. Respondents ranking of tribal values in forming the foundation of a TFP brand.

Table 8. Respondent ranking of tribal values that could form the foundation of a TFP branding program.

	Northeast	Midwest	South	West
Traditional forest stewardship ethic of tribes	5.0	3.92	4.6	4.3
Spiritual/Cultural respect tribes have for the land, resources, and people	4.3	4.1	4.7	4.2
Government statutory regulations that require tribes manage forests sustainably	4.0	3.4	3.9	4.1
High quality wood that exists in sustainably managed tribal forests	4.7	4.0	4.3	4.3
Forest products were manufactured by Indian enterprises	4.7	3.6*	5.0*	3.9*
Tribal interest in supporting economic development & employment of tribal members	4.3	4.1*	5.0*	4.1*

* Significant at the $p < 0.05$ level using the Pearson's Chi-Square.

Table 9. Respondents ranking of tribal values that could form the foundation of a cooperative tribal marketing program.

	Small	Large
Traditional forest stewardship ethic of tribes	4.24	4.33
Spiritual/Cultural respect tribes have for the land, resources, and people	4.24	4.27
Government statutory regulations that require tribes manage forests sustainably	3.82	4.07
High quality wood that exists in sustainably managed tribal forests	4.18	4.27
Forest products were manufactured by Indian enterprises	3.97	4.00
Tribal interest in supporting economic development & employment of tribal members	4.21	4.33

WOOD PROCESSING INDUSTRY RESULTS

Research Methodology – Sawmill Survey

The sample frame for the wood processing component of the project consisted of 16 tribes with some type of wood processing capability. By utilizing multiple delivery strategies we were able to contact all of these tribes. Two tribes declined to participate in the survey, resulting in a sample frame of 14 tribes.

The data collection for the Study was undertaken over a period of six months (from January to June, 2010). The manager of each wood processing facility was contacted by phone to explain the purpose of the survey and solicit their support in completing the survey. We subsequently received responses from 9 tribes, providing a response rate of 64.3%.

Basic Demographics

Tribes with wood processing facilities are primarily located in the Midwestern (4 tribes), Northwestern (6 tribes) and Southwestern (4 tribes) regions of the country. The majority of the processing facilities are small operations and most of them, including some larger sawmills, are currently shut down. Employment ranged from 20 workers to 160 workers, Figure 17. Two mills reported that they were currently operating and these mills employed 145 and 160 workers, the vast majority of whom were tribal members. With the exception of one small sawmill, all of the processing facilities that were surveyed reported employing tribal members for more than half of their work force. All of the mills surveyed reported that they rely on tribally sourced logs for at least 90% of their raw material supply, Figure 18.

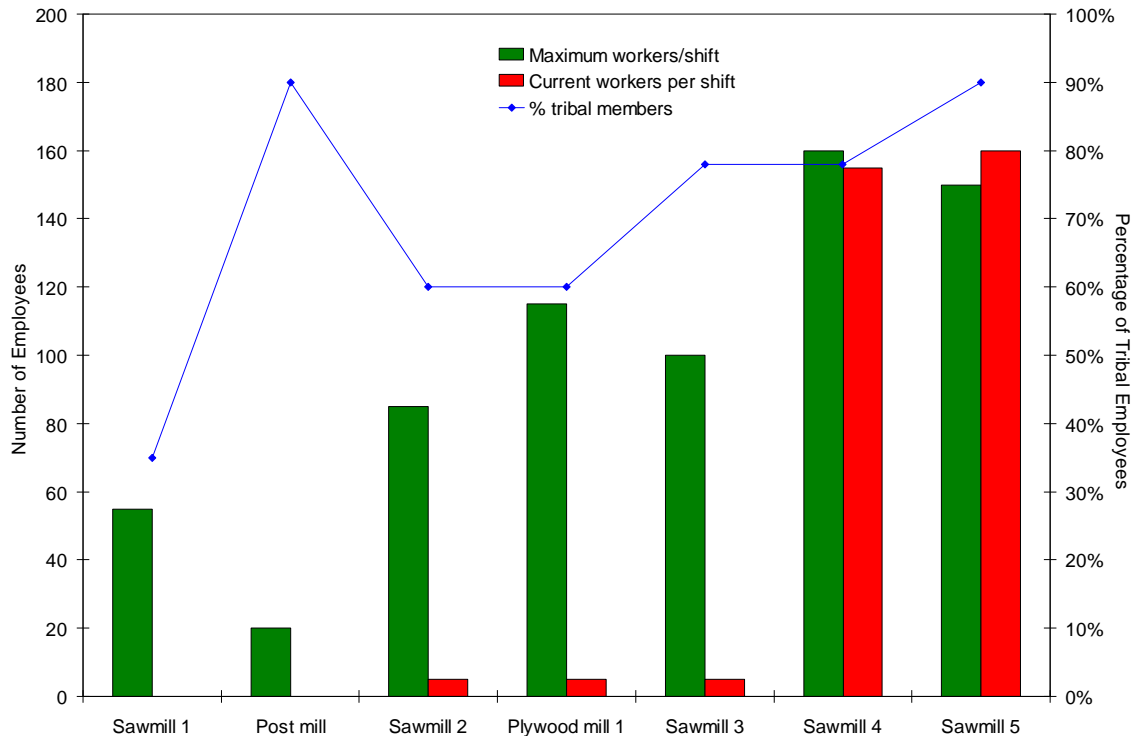


Figure 17. Summary of employment characteristics at tribal wood processing facilities.
Note: 2 facilities are shut down and the respondents did not provide demographic information.

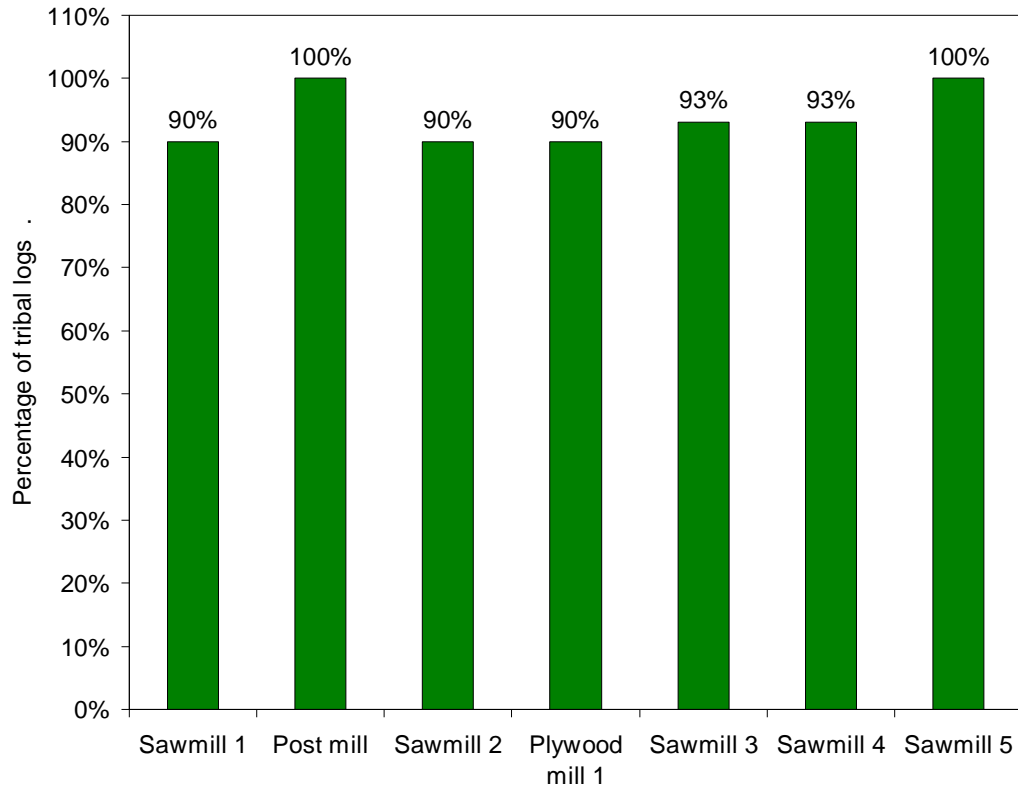


Figure 18. Importance of tribal logs within log supply of tribal mills.

Note: 2 facilities are shut down and the respondents did not provide demographic information.

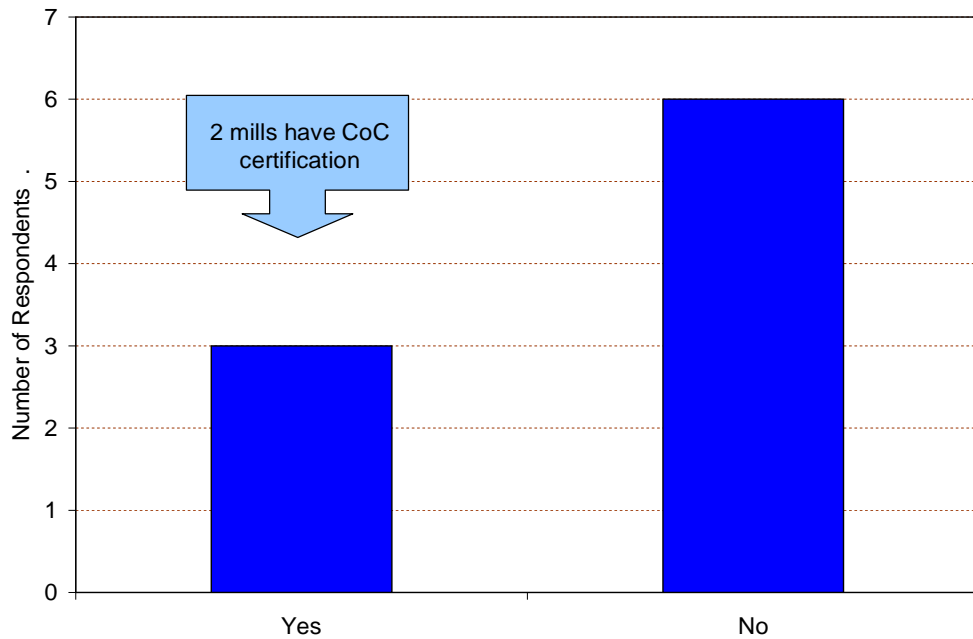


Figure 19. Tribal mills that are certified under a forest certification program and those that have Chain of Custody certification

Forest Certification

The survey was designed to determine the perceptions and attitudes of mill managers towards sustainable forest certification and chain of custody certification through one of the nationally recognized forest certification programs (e.g., Sustainable Forestry Initiative, SFI or Forest Stewardship Council, FSC). Two thirds of the survey respondents indicated that their tribes' forests did not have third party certification, while one-third of the respondents did have forest certification and two of the three tribes with forest certification also had chain of custody certification for their wood processing operation, Figure 19. When asked to provide their opinion about the usefulness of forest certification, half of the survey respondents felt that chain of custody certification was useful while a quarter felt that it was not useful and the remainder had a neutral opinion of certification, Figure 20. Overall, the average perceived usefulness of forest certification was 4.5 which suggests that respondents felt that forest certification is somewhat useful in marketing their wood products. Survey respondents were also asked if they thought that there was a market price premium available for certified wood. Four of the survey respondents indicated that they didn't think that there was a price premium while another four respondents thought that there was a price premium for certified wood, Figure 21. The perceived price premium ranged from 1%-10% with an average of 4.8%, Figure 21.

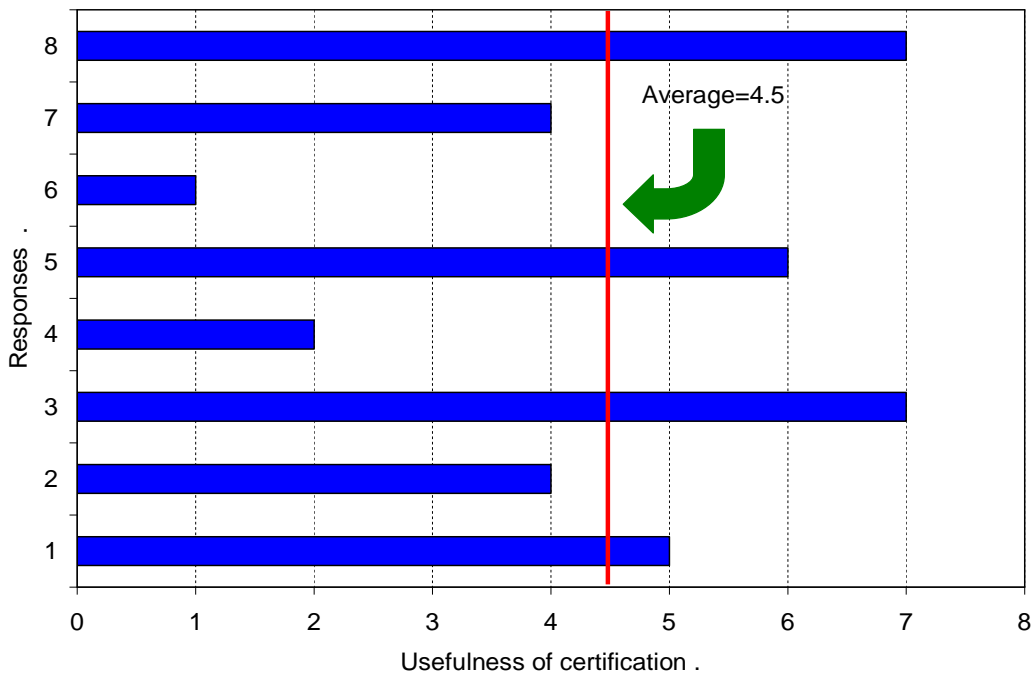


Figure 20. Manager's perceptions of the usefulness of certification in marketing their wood products (scale: 1 = not useful; 4 = neutral; 7 = very useful).

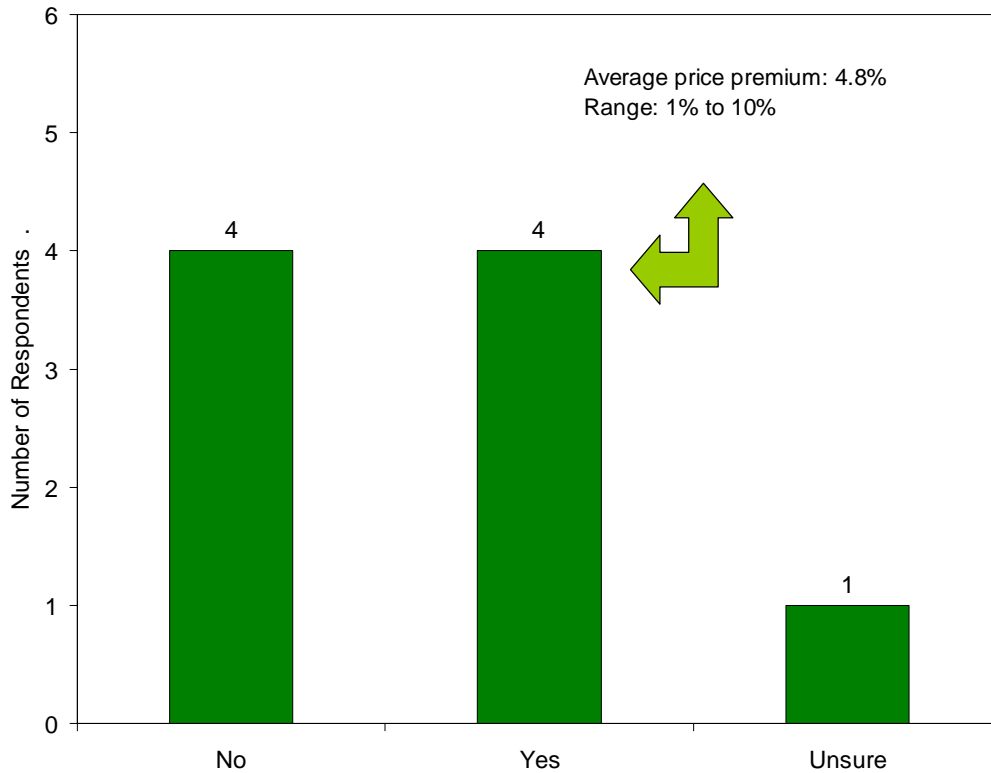


Figure 21. Manager’s perceptions of the price premiums associated with selling certified wood.

Product Markets

The vast majority of wood products sold by the tribes go into the domestic market, with very few sales being made into international markets. Respondents indicated that less than 6% of their overall products sales were exported. However, when asked if they were interested in learning more about export opportunities in international markets, the response was unanimous: all would like to learn more. Anecdotal information collected through informal interviews with mill managers and forest managers at meetings of the Intertribal Timber Council (ITC) and National Indian Timber Symposiums clearly shows that while tribal representatives are interested in engaging in foreign markets, they lack the marketing capacity to do so. Supporting tribal efforts to develop their marketing capacity to more effectively identify and exploit market opportunities (both domestic and international) is critical to diversifying their local economies and providing employment opportunities for tribal members.

Comparative Interest in Potential Tribal Marketing Programs

Mill managers expressed strong interest in participating in all three TFP marketing programs being considered, Figures 22 and 23. It is useful to note that all of the respondents reported having strong positive interest in participating in each of the marketing programs, suggesting that they saw at least some degree of merit in pursuing each of the programs. Interest was highest for the TFP branding program, with 5 of 9 respondents expressing strong interest in participating in the program, Figure 23. In contrast, respondents showed the lowest level of interest in participating in a tribal certification program.

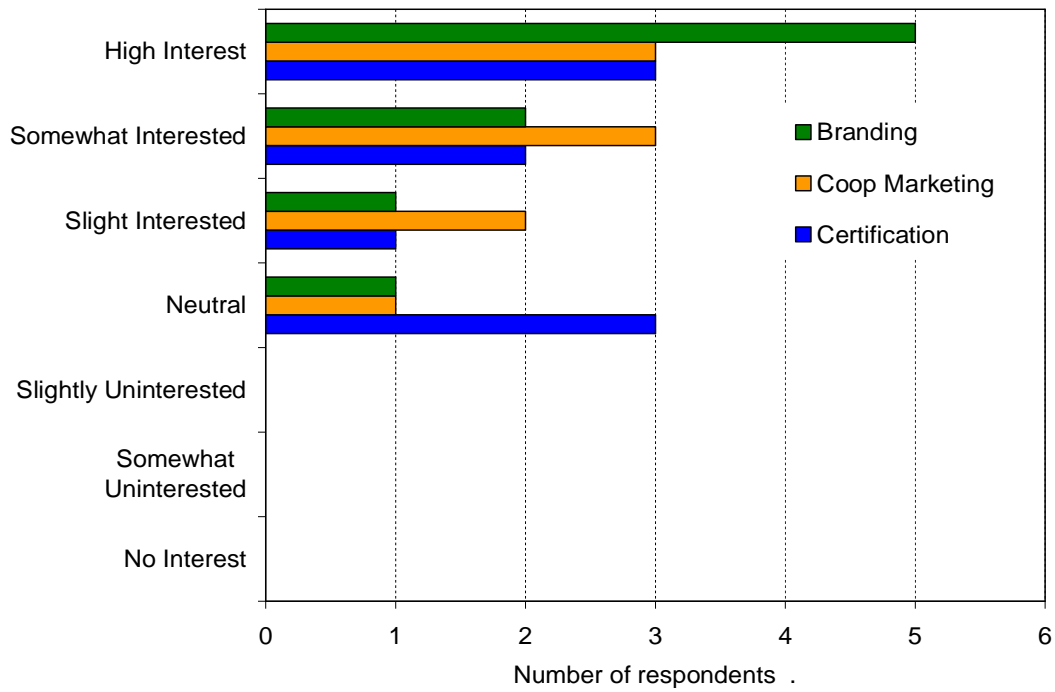


Figure 22. Distribution of interest in participating in various TFP marketing programs.

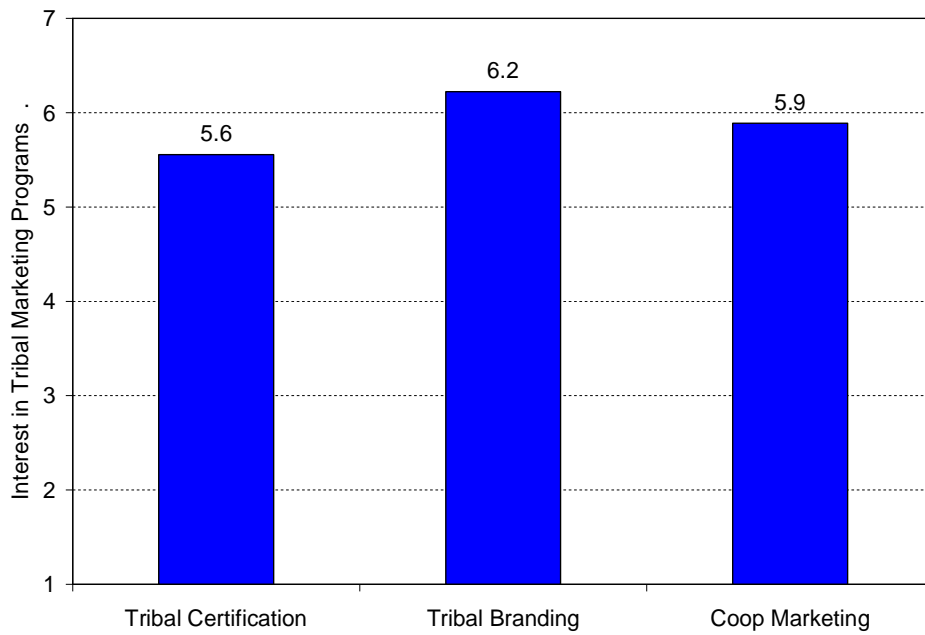


Figure 23. Mill managers average interest in participating in a range of TFP marketing programs.

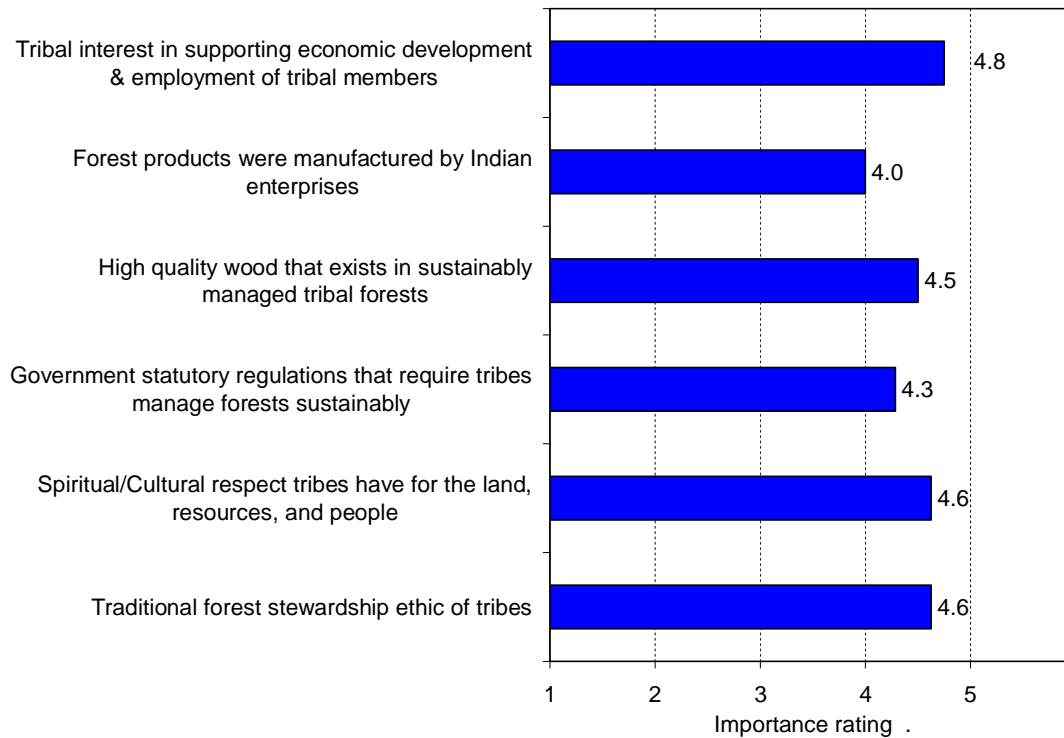


Figure 24. Mill managers importance ratings for a range of tribal branding attributes.

Relative Importance of Attributes in Developing a TFP brand

The respondents were also asked to rate the importance of several attributes in forming the foundation for a TFP brand. The importance of each attribute was rated using a five point Likert-like scale, where a score of 1 indicated that the attribute was perceived as being “not important at all” and rating of 5 indicated that the attribute was perceived as being “very important”. The complete set of tribal attributes as well as their average importance rating is provided in Figure 24. The attribute importance ratings ranged from a low of 4.0 to a high of 4.8. The results show that all of the attributes received scores that were substantially above the mid-point of the scale and that there was more variation in the mill managers responses than there was in the responses of the forestland managers. This suggests that while all of the attributes were perceived as being at least somewhat important, the most highly rated attributes were support of economic development and employment followed by respect for the land and traditional stewardship values. These same three attributes were found to be the highest rated by forest managers as well.

Tribal mill managers also expressed strong interest in participating in carbon markets, Figure 25. Five of the nine respondents indicated strong interest in participating in carbon markets, whereas only 1 respondent indicated that they were not interested in participating in carbon markets. Finally, survey respondents expressed strong interest in investing in different types of new processing technologies and value- added wood products.

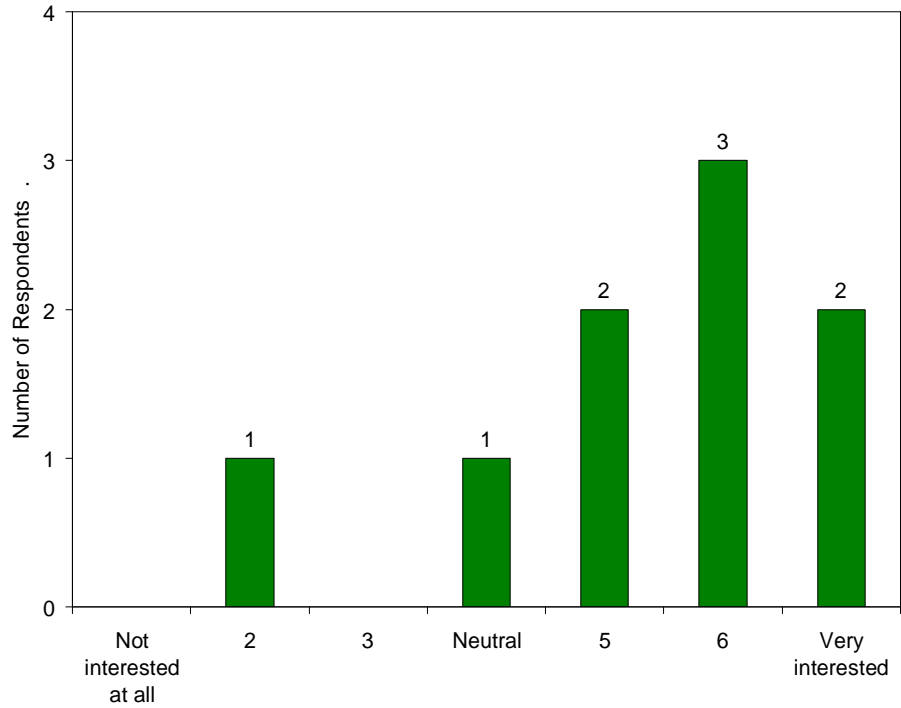


Figure 25. Mill managers interest in participating in carbon markets.

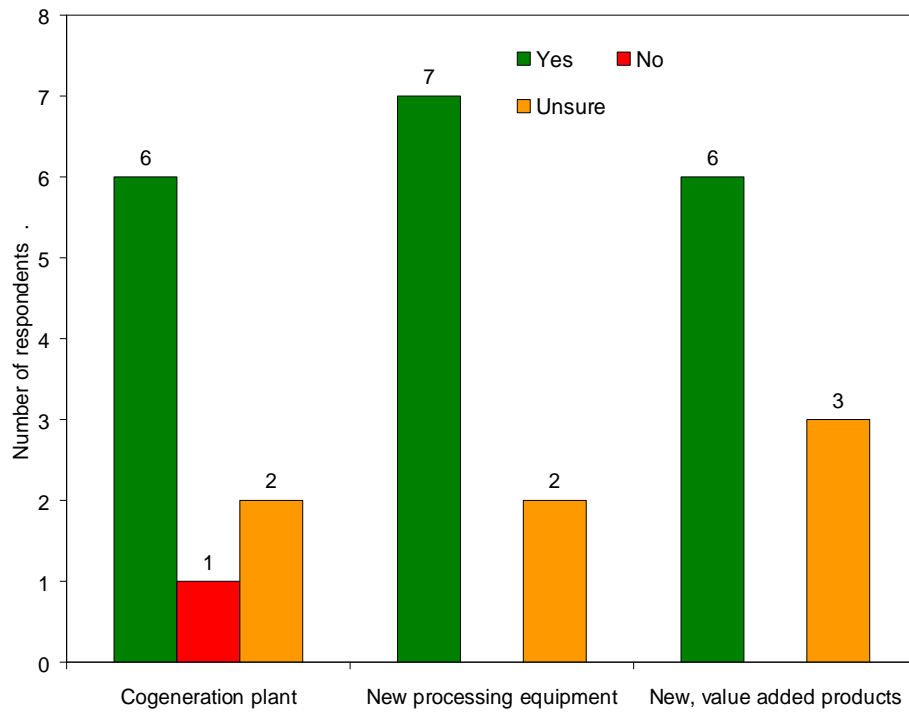


Figure 26. Mill managers interest in investing in specific types of new technology.

DISCUSSION AND CONCLUSIONS

Native American tribes have a long history of natural resource stewardship and sustainable management of forest resources. However, the current economic challenges created by global declines in wood markets are undermining the viability of tribal forest management and forest products manufacture. How might tribal forestry programs secure greater market returns for products and services provided? Given apparent public interest in certification and environmentally-responsible management of forests and the record of sustainable forest stewardship by Native Americans, it is only natural that tribes should consider how best to incorporate these values into a strategy that can provide them with a competitive advantage in the marketplace. Three potential strategies have been considered in this research: 1) development of a TFP brand for forest products, 2) development of a tribal forest certification program and 3) development of a tribal cooperative marketing program. The objective of this research project was to assess tribal interest in participating in each of these strategic marketing initiatives and also to obtain the preference of tribal forest managers regarding a specific set of tribal attributes that might form the foundation of a TFP branding program. Two surveys were conducted and are described above.

One of the research objectives was to assess tribal interest in developing an unprecedented tribal forest certification program. A tribal certification could allow tribes to take advantage of their strong reputation for sustainable forest management while reducing certification costs of outside labels and avoiding the intrusion of non-Native certifiers into tribal affairs. A series of questions were asked about several aspects of forest certification. Respondents presented a mixture of experiences and expectations with many (especially in the South) indicating little knowledge of certification options. Better understanding of the costs and benefits of certification for aiding sales into emerging “green building” markets could benefit TFP marketing programs.

Another objective of this research was to assess interest in participating in a TFP branding program. As mentioned previously, a branding program could be an effective strategy for differentiating TFPs in the marketplace. A brand can communicate persuasive information about a product to customers and can distinguish a product from the offerings of competitors. It can also be an effective tool for increasing potential customer’s awareness of a product, which can be useful in procurement markets where consideration is given to minority businesses.

To assess tribal interest, survey respondents were asked to express their interest in participating in a TFP branding program that would showcase the unique social, cultural, environmental, and economic values incorporated into Native American resource programs. The response to this question was overwhelmingly positive. Survey respondents were generally more supportive of a TFP branding program than they were of a tribal certification program or a cooperative marketing program Figure 15.

The key to a successful branding program is identification of a set of attributes which resonate with potential customers, communicate the core values of the producer, and effectively differentiates the product from other competitive offerings. Respondents indicated that the highest rated attributes were: 1) the traditional forest stewardship ethic of tribes, 2) the spiritual and cultural respect tribes have for the land, resources, and people, 3) tribal interest in supporting economic development within their community and providing employment opportunities for tribal members, and 4) the high quality wood that exists in sustainably managed tribal forests. There were differences, however, in the regional attribute importance

ratings that will need further consideration when a final list of primary brand attributes is determined.

It is the view of the project team that development a TFP brand will benefit from professional consultation with advertising professionals supported by a long-term commitment of tribal resources (including managers) to establish an enduring market presence.

The final program concept that was considered by respondents was a cooperative marketing and sales program. This type of marketing program might involve a central organization carrying out marketing operations for a consortium of tribal entities. This strategy might be effective in overcoming the lack of marketing capacity that was reported by most tribes. Of the areas of interest explored by this Study, cooperative marketing received the lowest level of support. It is interesting to note, however, that there was a substantial level of support demonstrated by the tribes located in the South. A regional or national cooperative sales program is regarded by the investigation team as the most problematic for implementation. However, the survey data, along with anecdotal information derived from discussions conducted at ITC meetings and annual symposiums over the past two years shows that tribes recognize that lack of marketing competence has hampered participation in domestic and international markets. The survey data shows that less than 6% of total tribal log and lumber sales were to international markets, yet, many tribal mill managers are interested in learning about international market opportunities. Improving marketing capabilities and learning to compete in international markets would help tribal managers diversify sales programs and provide a measure of protection against the cyclical downturns of domestic markets.

RECOMMENDATIONS

As federal, state and some city procurement policies begin to give preference to timber products sourced from sustainably managed forests and the two major green building programs in the US award points for projects that source timber products from **certified forests**, it will behoove tribal forest and mill managers to work together to stay abreast of green marketing opportunities and standards for forest certification. If tribal leaders decide to move ahead with development of a tribal certification program, it will be important that all gain common understanding of the costs and benefits of action steps forward. A national Indian workshop on the organization, costs, and potential market benefits of certification could be helpful.

Development of a TFP brand will require a long-term commitment of resources (both financial and human) to create, promote, and maintain an effective branding program. It will be important to gain understanding of consumer attitudes and perceptions as well as those of tribal peoples before settling on the final story for the brand. Given the strong support demonstrated by tribal managers for a TFP branding program, a TFP branding team should be assembled along with members of the current project team and professional advertisers, to develop a strategic plan for a TFP brand that can be presented to the appropriate tribal authorities for their consideration at a national workshop on tribal forest products marketing.

Tribal resource management is based upon a unique integration of cultural, environmental, and economic values that contribute many public benefits and ecosystem services. However, these values have not historically been recognized or rewarded in the marketplace. Many tribal forestry programs produce logs with unique qualities, such as large diameters and tight grain; attributes that are highly valued in export markets. TFPs have generally been sold as commodities into the domestic market with little differentiation for superior quality. Despite

weak domestic demand, US lumber exports to Japan, China and Vietnam were up by 11.1%, 19.4% and 2%, respectively, suggesting evidence of export opportunities for tribal forest products yet survey respondents indicate little familiarity with export marketing. In his State of the Union Address on January 27th, 2010 President Obama laid out an ambitious target of doubling US exports over the next five years. President Obama issued an Executive Order on March 11th, 2010 establishing the National Export Initiative designed in part to enhance export assistance to small and medium-sized enterprises (including tribes) by improving the technical capacity of first-time exporters and assist current exporters in identifying new export opportunities in international markets. However, a lack of marketing and managerial skills hampers tribal efforts to participate in export markets. International marketing workshops and participation in overseas trade missions could help tribal enterprises to penetrate lucrative export markets.

Additional research should be designed to assist tribes explore higher value international market opportunities in an effort to increase revenue flows to support their traditional forest management practices. An opportunity exists to couple market research with augment of tribal expertise. A strategic partnership between the School of Forest Resources (UW SFR), the Center for International Trade in Forest Products (CINTRAFOR) and the Forestry Department of the Salish-Kootenai College (SKC) has been launched to recruit qualified Native American undergraduate students into the international marketing Master's degree program at the UW SFR. Dr. Eastin, UW faculty and Director of CINTRAFOR will visit SKC in spring 2011 to deliver a series of trade and marketing related seminars and begin student recruit.

It is the view of the project team that a TFP cooperative marketing and sales program would be the most difficult to implement of the three market concept options. Respondents, while, favorable to this concept indicated less certainty of interest than that expressed for the TFP brand. More discussion amongst tribal leaders is recommended in consideration of a cooperative sales arrangement.

Surveys of tribal forest and mill managers indicate strong interest in the pursuit of cooperative approaches to TFP marketing. If guidance from the leadership suggests next steps, logical parallel studies to this investigation would be market tests and surveys to gauge the receptiveness of domestic and international markets to TFPs. Continued discussion and self-education as described above will also be helpful.

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Module 2

Market Receptiveness to TFPs

Export Opportunities



Sealaska Timber Corporation, Alaska's largest timber supplier and North America's seventh largest shipper of timber products, takes great pride in responsible forest management practices, consistent quality control and reliability of delivery. It is a wholly owned subsidiary of Sealaska, a Native Corporation created under the Alaska Native Claims Settlement Act (ANSCA) with over 20,000 tribal member shareholders. Collectively, ANSCA Regional and Village Corporations own and manage 44 million acres of fee-titled land, much of which is forested.

Topic: MODULE 2

Market Receptiveness to TFPs

Investigators: Jim Petersen

Task: Gauge the level of market interest in TFPs, identify opportunities to distinguish TFPs in the marketplace, and describe features that could add value to tribal wood products.

Key Terms & Concepts:

PRODUCT BRANDING: is an identifying symbol, words, or mark that distinguishes a product or company from its competitors. Brands are often based on a specific mix of product and product attributes that differentiate a product and provide it with a competitive advantage over similar product offerings. Usually brands are registered (trademarked) with a regulatory authority and so cannot be used freely by other parties.

FOREST CERTIFICATION: is a market-based, non-regulatory forest conservation tool designed to recognize and promote environmentally-responsible forestry and sustainability of forest resources. Certification labels are thought to reward responsible environmental performance with market benefit and may be required for participation in some product markets.

THE MARKETING MIX: is the set of controllable marketing variables that a firm blends to produce the response desired from the target market.

THE 4 P's: Product, Price, Place, and Promotion, are classic characterizations of the "marketing mix" that businesses aim to control subject to internal and external constraints in the marketplace. The goal is:

"The right product, at the right price, in the right place, at the right time, with the right story"

Methodology: Exploratory interviews of purchasers of Indian logs, lumber wholesalers and retailers, and wood products association representatives were conducted by mail and phone to gain a sense of awareness of Indian forestry and wood products within the wood industry and to test responsiveness to TFP brand development and promotion.

Results: Although the respondent sample was limited, key businesses and associations within the wood products industry were successfully interviewed, see partial list of respondents in Appendix. Some respondents completed survey questions (see Figures 1 & 2 in Appendix for graphic display of results) but many limited their responses to oral comment. Summarized interpretations of oral and written comments are provided below.

There was common agreement amongst all respondents that the most critical elements for successful marketing in the wood products industry are quality, price, and reliability, Figure 1. Respondents indicated that these imperatives extend to all businesses (tribal or otherwise) that sell commercial products. Some respondents that had experience purchasing TFPs noted that consistent quality, price, and reliability have been challenging performance attributes for some enterprises.

There were mixed reviews about the value of the Indian story. Some respondents, including large volume purchasers, felt there could be long-term benefit from promotion of a TFP brand; others were skeptical. Respondents fit into three general groups: 1) those that were negative about a TFP brand, offered oral comment when contacted, but did not fill out the survey form; 2) those that did not believe they were well enough informed concerning Indian forestry or wood products to complete the survey; and 3) those that saw potential in promotion of a TFP brand and completed the written survey. Figures, provided in the Appendix, provide graphic display of what the respondents want if they are to purchase TFPs (Figure 1) and what respondents think that their customers would most appreciate from TFPs (Figure 2). While quality remains the attribute of greatest importance for both survey questions, the perceived potential importance of other attributes associated with a TFP brand is interesting (Figure 2). After product quality, the next four most important attributes of Indian wood all have to do with the inherent connection between stewardship (attribute importance nos. 2,4,5) and consumer assurance that the product is green (no. 3). These results are consistent with other written and oral responses indicating that log and lumber traders generally believe (and expect that the public also believes) that Indians do a good job taking care of forests.

However, market reward for tribal environmental responsibility may not be readily forthcoming. There was general agreement amongst respondents that price premiums were unlikely to be generated by promotion of the Indian story.

Discussion: As mentioned above and shown in Figure 1, there was agreement amongst respondents that the most critical elements for success of a wood products marketing program were quality, price, and reliability. Reliability was described as maintaining consistent market participation and product deliveries through good times and bad. Since some respondents are purchasers of TFPs, this emphasis on quality/price/reliability might be construed as self-serving. However, this theme is consistent with a "marketing mix," first conceptualized by Harvard professors Borden and Culliton in the 1940's, in which all parts are essential for successful enterprise (Borden 1964, Culliton 1948). By the 1970's, the concept of a marketing mix led McCarthy (1978) to the historic classification of what we know today as the 4 P's: Product, Price, Place, Promotion, Figure 3. This characterization of the market mix, broadly shared by business educators and practitioners alike, stipulates that deficit performance in regards any realm of the 4 P's can not be offset by expanded efforts in other realms.

Conclusion: A promotional program for a TFP brand would be an expensive failure if participating suppliers are unable to live up to market expectations for product quality and quantity, delivered on time at an agreed upon price. In the case of a cooperative sales program, the market success of all participants could hinge upon the performance of the least reliable provider.

Although some wood product marketers, especially log purchasers, had experience with Indian timber businesses, most were unfamiliar with Indian forest practices and the Intertribal Timber Council (ITC). This finding suggests both need for and potential benefit from efforts to educate the forest industry about Indian forest management practices and representative organizations. Unfamiliarity with the ITC is not surprising given that ITC does not produce or

sell forest products and that ITC's organizational philosophy has always been tribes first (to inform and encourage dialogue so tribes can make their own decisions). On the other hand, this finding provides important alert that if leadership chooses to pursue ITC-sponsored or facilitated branding, marketing, or certification programs then the current obscurity of the organization will need be overcome and that ITC operational culture will need evolve accordingly.

Respondents and interviewees were generally not optimistic about a TFP brand. The consensus was that contemporary wood markets are tough and unforgiving arenas for trade where price, quality, and consistent performance dominate all other considerations. Missteps in this regard are punished by discounted valuations and sales exclusions that are unlikely to be overcome by brand promotions. Several respondents suggested that TFP enterprises could better benefit from exclusive long-term supply agreements with selected purchasers or sales representatives than from investments in promoting a TFP brand.

Respondents linked discussion of a TFP brand with experiences in the marketing of certified products. The general failure of green market premiums to materialize for certified products after many years of promotion was cited as an example of why skepticism about premiums for tribal products is justified.

However, a number of respondents did suggest that although markets may not understand green label differences (FSC versus SFI for example) and have not reliably produced premiums for certified products, certification and chain of custody are slowly becoming prerequisites for selling wood products into important domestic and export markets. The relationship between forest certification and government imposed green building standards was cited as one example. More investigation is needed to assess tribal potential for expanded niche marketing to certified and other markets versus simpler sales into less discriminating commodity markets.

There did appear to be appreciation among respondents that promotion of a TFP brand leading to greater public appreciation of Indian stewardship could have benefits beyond a price premium for wood products. The perceived connection between branding and certification for access to green markets suggests opportunities for TFPs to participate in social conscience markets. One representative of a major lumber distribution company offered to meet with leaders of the ITC to explore ways that his company might help to elevate the visibility of Indian forestry and forest products.

TRIBAL DECISIONS NEEDED:

- (1) Should representatives from the ITC meet with corporate leadership of major lumber outlets?*
- (2) Should further research be pursued to investigate the scope and potential for selling TFPs into niche markets?*
- (3) Should an initiative be undertaken to expand public awareness of Indian Forestry and provide assistance to tribes in telling their own stories?*
- (4) Should ITC develop a framework and process to evaluate costs and benefits of alternative uses of logs (e.g., operating their own processing facilities, use of brokers rather than in-house marketing expertise, etc)?*

Issue-specific discussions regarding these areas of interest and others pertinent to this investigation are provided in further detail by the full report and the other Module Topic Sheets.

Appendix: Partial list of respondents and interviewees:

Alpine Lumber, BMC Select, Bright Wood, Cooley Forest Products, Dodson Lumber, Fort Apache Timber Company, Hampton Affiliates, Hebert Lumber Company, Home Depot Horizon Engineering Service Company, Lowe's, North American Lumber Wholesalers Rough & Ready Lumber Company, Sagebrush Lumber Sales, Starfire Lumber Company Tierra Group, Vanport, Wesley Richard, Inc., Western Building Materials Association, W.H. Moore Cash Lumber, 84 Lumber



Figure 1. Factors that influence successful sales of wood products; rated in order of importance as identified by the average of purchaser responses.

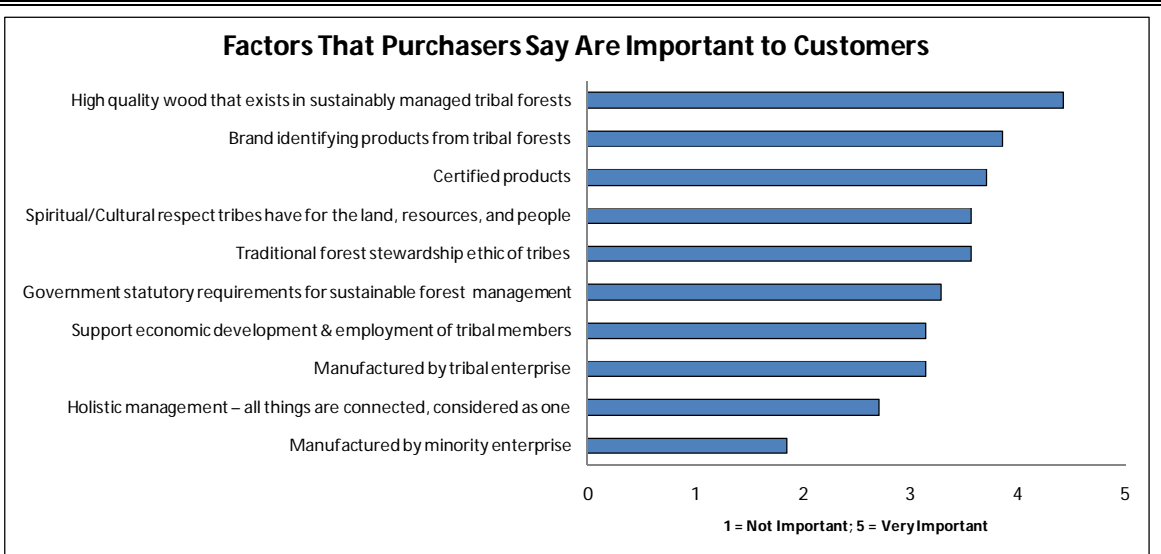


Figure 2. Factors relating to a TFP brand that purchasers felt important to customers; rated in order of importance as identified by the average of purchaser responses.



Figure 3. The Four P's of Marketing (adapted from Principles of Marketing - Kotler and Armstrong. 1989. Prentice Hall.).

Market Receptiveness to TFPs

James Petersen

“You told me I was poor and needed money, but I am not poor. What is valuable to a person is land, the Earth, water, trees.” - Chief Isaac of the Kootenais

The Branding and Marketing Team conducted an expansive survey of lumber wholesalers and retailers serving the homebuilding industry in the United States, to gain a sense of awareness of tribal forestry and tribal wood products. We were specifically interested in gauging market receptivity to a TFP brand supported by a marketing campaign designed to differentiate tribal forestry and wood products from those of competing brands.

The opinion survey, conducted in August and September of 2010, was directed by team member, Jim Petersen, Executive Director of the non-profit Evergreen Foundation, with assistance from Wesley Rickard Inc., a Gig Harbor, Washington forestry consulting firm with a long history of involvement in various tribal projects.

The survey reveals widespread interest in the perceived value/uniqueness of the tribal forestry story, but almost *no awareness* of the many ways in which Indian forestry differentiates itself from forestry as it is practiced by other private landowners in the U.S. Moreover, there is little awareness of the *presence* of tribal forest products in wholesale and retail markets. Worse, many companies that have been processing and distributing tribal wood products for years now consider tribes to be an unreliable if not untrustworthy source of supply.

We were repeatedly told that tribes *must learn to compete* in unforgiving and increasing global markets where one misstep can cost a supplier – in this case, tribes that sell logs on the open market or process logs in sawmills they own - their place in the market, if not their reputation as reliable suppliers of logs or lumber.

Brutal and unforgiving lumber markets see little or no competitive advantage in tribes' minority “Native American” status. Whether this undermines the whole notion of a national or regional TFP brand isn't known yet. But among mills that process tribal logs or distributors who market tribal lumber there is little sympathy for the fact that tribes have struggled mightily during the current economic crisis. What matters most among most of those we surveyed is tribe's *continuing presence* [visibility] in the marketplace and the *quality, availability and price* of tribal logs and wood products.

We discuss these conclusions in some detail in this report.

The survey [attached] was e-mailed to several well placed wholesale and retail associations. Among them: the North American Wholesale Lumber Association, Rolling Meadows, Illinois, the Western Building Materials Association, Olympia, Washington, and the Mountain States Lumber and Building Materials Association, Denver, Colorado. These associations, in turn, e-mailed the survey to their key members. In all, more than 500 surveys were distributed.

Participation in the survey was poor. Many wholesalers and retailers – while interested in *the idea* of a TFP brand supported by a marketing campaign- did not believe they were well enough informed concerning tribal forestry or wood products to even complete the survey.

Such was the case with the members of the Western Building Materials Association, whose members are mostly “mom and pop” retail lumber yards in Oregon and Washington. Casey

Voorheis, the association's executive director wrote that "from a retailer-contractor dealer's perspective there really was not much interest [in the survey] due to a lack of relevance to their businesses.

We asked Voorheis and his leadership to review the "Indian story," a brief vignette written by Gary Morishima and Jim Petersen that differentiates Indian forestry from forestry as it is practiced by other private landowners throughout the United States. Although the vignette made no reference to third-party forest certification, Voorheis apparently thought the tone of the piece veered close enough to certification that he wanted to share his perceptions with us.

"Essentially, the certified lumber movement has not been in as much demand as one would expect," he wrote in an e-mail. "While we do have a handful of dealers that have attained an FSC [Forest Stewardship Council] chain of custody certification, their [sales increases] have been negligible."

Voorheis went on to say that he knew of several members that had been so disappointed with subsequent sales results that they had discontinued their certificates. Very simply, FSC chain of custody certification had not delivered any new customers to their stores.

Although we were disappointed with the number of responses the survey garnered, we found fertile ground in a series of largely unstructured interviews we conducted at several levels: sawmill owners that buy tribal logs for processing and marketing, association executives familiar with tribal forestry and wood products and major wholesalers and retailers including Hampton Affiliates, Portland, Oregon, Home Depot, 84 Lumber and, especially, Lowe's, which has invited ITC to make a formal presentation to its Supplier Diversity Group, a Lowe's department charged with making sure that vendors of all races, colors and creeds have equal access to the company's enormous purchasing power and its vast, 1,700-store distribution system.

The story of how Lowe's came to offer its assistance to tribes is instructive at several levels. It took Jim Petersen more than a week to find Mr. Honeycutt, in part because he did not know his *name*, a prerequisite for making personal contact in the Lowe's corporate structure. Such are the rules in the company's nearly impenetrable bureaucracy – a bureaucracy that clearly places a premium on the persistence of those who finally crack through its highly automated calling and call forwarding systems.

It was only after the Lowe's public relations department agreed to help [after reading the survey and vignette] that Petersen was referred specifically to Mr. Honeycutt who, it turns out, has a son entering forestry school at North Carolina State University this fall. This seemingly inconsequential bit of information helped Petersen quickly establish rapport with Mr. Honeycutt, who agreed to review the survey materials and discuss their merit with Lowe's lumber purchasing department.

Nearly a month passed before Mr. Honeycutt finally called to discuss the results of his discussions with Petersen. "Rather than simply respond to your survey, which our lumber guys aren't very enthusiastic about, I want to propose that we in the diversity department meet with you to discuss our enthusiasm for tribal forestry, which we perceive from your e-mails to be both green and sustainable."

Unlike many less sophisticated survey respondents whose opinions appear in this report, Mr. Honeycutt quickly grasped the meaning of the vignette and its significance to Lowe's' lumber

marketing strategy, which leans heavily on sustainability and third party forest certification themes.

“Stereotypically, you would think that Native Americans are better at caring for the environment,” he told Petersen in a long telephone conversation on Sept. 7.

“It’s a helluva brand,” he continued, not realizing that, as yet, there is no tribal brand beyond his perception that tribes somehow know how to manage nature better than others. “There is great power and leverage here. We just have to develop it.”

Mr. Honeycutt then offered to “socialize” tribal forestry within the Lowe’s organization – meaning, among other things, that he and his colleagues in the Diversity Group would help ITC prepare a business plan it can – with Honeycutt’s endorsement – take before the group that makes major lumber buying decisions for the entire company. Apparently only those with Mr. Honeycutt’s blessing ever get the opportunity to make their case before the buying group.

“You will need to bring us an idea, a vision, a plan,” he explained. “Not all the tactical pieces that go with such a plan, but a vision and enough of a plan to excite the purchasing guys. We will help you develop it. Big things will start to happen if the purchasing guys get excited.”

Mr. Honeycutt did not say precisely what “big things” would begin to happen. And in fact, he has no control whatsoever over lumber purchasing decisions. But he did speak in terms of creating a scenario in which Lowe’s could quickly and efficiently place tribal lumber in most if not all of its stores. Just what sort of branding, marketing and merchandizing strategy would be needed to support this remains to be seen, but such a scenario argues for ITC creating a sales facility that would make it possible for Lowe’s to order enormous quantities of lumber with a minimum of effort. Such a scenario also argues for tribes becoming a more reliable source of lumber than the marketplace currently perceives.

Mr. Honeycutt cautioned against any belief that Lowe’s can “solve the problem” tribes face with their need to raise marketplace visibility. He thus expects that ITC will bring a vision to the table that Lowe’s lumber buyers can get behind.

There is no doubt that Lowe’s is in a position to help tribes in the same manner it has helped other groups that fit within its diversity criteria. Petersen’s sense – which he first expressed at ITC’s annual meeting in Lewiston, Idaho in 2009 – is that the tribal story harbors a mystique that is unmatched among the nation’s timberland owners. He believes Mr. Honeycutt sees the same untapped potential, which is why he has offered the services of his department.

Lowe’s expressed willingness to assist tribes raises two questions that must be considered, if not by ITC then by tribes individually. Among them:

- Do tribes want to enter into an exclusive supply agreement with any supplier, including Lowe’s, the nation’s second largest lumber retailer?
- Are tribes able to support such an agreement with a steady and predictable supply of high quality lumber, delivered on time?

Obviously, these questions are beyond the scope of this branding and marketing Study, though our team would be remiss if we did not point out that Lowe’s offer to help seems like an invitation that will be difficult to dismiss.

Nevertheless, these questions – and others – cannot be honestly answered without there first being some understanding – and acceptance – of the perspectives and opinions of those we interviewed in detail during the course of this survey. These opinions and perspectives are summarized below. Of those we interviewed, many agreed to be identified. Fearing retaliation, others refused to be identified with their views.

Paul Beck, Resource Manager, Herbert Lumber Company, Riddle, Oregon

Herbert Lumber Company is a long-time purchaser of tribal logs, principally from the Hoopa and Yurok tribes in northern California. Paul Beck, the company's resource manager – and a long-time friend of Jim Petersen – did not want to complete the survey, but he did offer his own quite remarkable insights, insisting that we include his response in his own words

Jim,

You probably know I do not like coloring inside the lines and a scale system of 1 to 5 doesn't really allow for much dialog.

I majored in cultural anthropology and specifically, I studied the history and cultures of the North American Indians. I have tremendous respect, appreciation, and affection for the cultures of my native trading partners. I strongly urge the ITFC to tell the story of Tribal Forestry but not to promote it as better. I count among my dear friends Nolan Colegrove (Hoopa), Roland Raymond (Yurok), Darren Jarnaghan (Hoopa), Tim Vredenburg (Coquille), and Claude Smith (Warm Spring) tribal land managers all. I know and have tremendous respect for the challenges they face in balancing the traditional needs/management with the modern ones.

I think that is a story worth telling. Their tradition is old but their story is not unique. Native Americans managed the land of North America for ten thousand years. Quite simply, they did vegetative manipulation for a desired cultural benefit. The tool of choice was fire. They burnt intentionally and they burned accidentally. They burnt extensively and they burnt often. If the browse for game was bad they burnt it. If the huckleberries needed sunlight, they burnt it. If the travel ways became impassable with brush they burnt it. They practiced forestry with the only tool they had: fire. Modern forest managers could and should be allowed to manage for the same outcomes and more, especially given that we have so many more choices of tools beyond fire.

I encourage you to tell the story of Indian Forestry because it is our story as well. We, in the forest dependent communities of all cultures seek to do vegetative manipulation for a desired cultural outcome. We want to practice forestry. We want our professional land managers free to practice their craft of vegetative manipulation for a culturally desired outcome. We want our communities to not just survive. We want our communities to thrive. Our culture would benefit by their culture telling that story. The benefit would far outweigh the benefit of any branding scheme that says "our cultural goals are better than someone else's." I would cry foul if non-native land managers went down that path. I would hope my friends would do the same for me.

The sovereign nations of the Hoopa, the Coquille, and the Yurok do not have the land base required to be the sole source for any mill, be it operated by the tribe or others. Few tribal entities do. Tribal forester's biggest concern should be that there be a sufficient log supply of non-tribal timber to supply mills so that they might have more than one marketing option and that there is healthy competition for their forest products.

Sadly this is not the case in many areas today. To my knowledge there remain no mills in Arizona, Wyoming, Colorado, or Southern Idaho. Areas of California, Washington, South Dakota, and even Oregon are without choices as to where one can sell logs. This lack of infrastructure provides no one with a premium.

Indian Forestry does not need to promote itself as better. Quite honestly and with all due respect and deference to my dear friends, it isn't. It simply fulfills cultural needs that are different. I am proud of those differences. I am equally proud of the similarities. Surely the members of ITFC realize that even among Native Americans, each Nation is unique in its culture and therefore unique in its forestry program.

Surely one Indian Nations culture and forestry practices are not superior to another. Tribal Foresters need to promote all good forestry practices. They need to promote the necessity and the good of professional foresters fulfilling cultural needs for all cultures. They further need to promote non-tribal forestry if they are going to have mills to sell to. That should be the greater concern by far.

Beyond that they should do everything they can to be consistent in log sales, offering, awarding and operating a sustainable volume every year. They need to act as equal partners in the promoting of all forestry and sustaining infrastructure. By maintaining infrastructure and nurturing competition the desired premium will be had.

Regards,

Paul

Lynn Herbert, Owner, Herbert Lumber Company, Riddle, Oregon

Jim,

You asked if we would complete your survey for Native American log usage and marketing. I had hoped that Paul would have sent you his information that I asked him to prepare for you. I will see if I can track him down he is off this week but probably has his computer with him and can forward the information and opinions he put together.

My hesitancy to give you the specific information you asked for is simply this. The people we purchase timber from are inconsistent sellers and we have a problem developing a market for a log that is here today and gone tomorrow. We want to be in the market every day and have customers that can count on and depend on our consistency, quality and quantity in the market.

You asked to survey our customers. That is fairly private information to a small business. So we respectfully refuse to provide that.

Today I understand one of the potential but inconsistent log sources is again thinking about building a saw mill on its own reservation. This is a constant threat to us as log purchaser in the marketplace. My perspective on this reoccurring threat is that if I were to develop a market only to have it taken away from me by the constant threat of direct competition to my customers at the same time taking away my resource why would I take the risk of developing such a market?

I am quite willing to define my role as a manufacturer. I have some ability to market and manufacture products and deliver them to market. My needs are well defined so far and the type quality and quantity of logs that I need for my resource. We are quite willing to entertain proposals that are mutually beneficial from our suppliers and from our customers. These programs need to have a long horizon time for them to attract my attention and interest. At a minimum we need to thing on a five year horizon, ten or fifteen is even better.

We cannot over emphasize the importance of consistency and commitment to market. Are you goals to only sell at market peaks? If you are a great market timer this will maximize value and probably also maximize unemployment. So you have to add the question what kind of society do you want to live in. One of good time Charlie's only? We have chosen another path at Herbert Lumber. We are trying to live and work as a

community and be there in good times and be there in recession times. We wish to remain in the market all the time.

Hope this helps,

LH

Rough and Ready Lumber Company and Starfire Lumber Company

Mr. Herbert's perspective was echoed by representatives of two other tribal log purchasers in western Oregon – Rough & Ready Lumber Company at Cave Junction and Starfire Lumber Company in Eugene. Starfire President, Robbie Robinson, told us that while he was "not opposed to doing business with tribes," he found tribal politics to be both unpredictable and very difficult to deal with – a sentiment shared by Linc and Jennifer Philippi, who share ownership and management responsibilities at Rough & Ready.

"Be more dependable," was Ms Philippi's terse response when asked what tribes could do to bolster their reputation with log buyers. "Their wood is very good, but we are never sure when or if to bid. Contract administration is a nightmare. You never know when the rules will change midstream. We've reached the point where we think twice about bidding – and we're the closest mill to their forests."

Ms. Philippi's husband, Linc, offered a similar view. "Tribes have a limited but very valuable resource. We love their wood, but their approach is all wrong. They aren't thinking about their customers – the mills that buy their logs. The market doesn't care about what goes on inside tribes. It cares about log quality and consistency of supply. If tribes want to be in the market with their wood, then they have to do business the same way other logs suppliers do it, and that means a deal is a deal and the rules don't change in the middle of the game."

Mr. Robinson agreed. "The log and lumber businesses are very competitive today, maybe more so than at any time in history. You get one bite at the apple and if you screw up, forget it. Quality, commitment and on-time delivery are critically important. Tribes need to adjust their attitudes and forget the nepotism. And they need well-trained professionals in their management ranks, and those professionals need to be insulated from tribal politics.

Messrs Herbert, Philippi and Robinson were in complete agreement on the futility of tribes attempting to run antiquated mills that seem to exist only to provide jobs for members. "If you can't afford to own and *consistently* operate a state-of-the-art sawmill, you ought to get out of the business and sell your logs on the open market, then reinvest your profits in our land. You'll be money ahead in the end," Mr. Robinson observed."

Although Mr. Robinson was critical of tribal decision-making, he is clearly in sympathy with the enormous challenges facing tribes that are trying to improve their forests and their wood processing facilities. He recalled an incident in which he had offered to purchase 100,000 board feet of peeler fir logs worth at least \$1,000 per thousand board feet, only to subsequently learn that the tribe had cut them up into studs at a loss of \$700 per thousand.

"I know why they did it," he lamented. "They wanted to employ their own workers and they were willing to lose \$70,000 in the process. That kind of decision-making won't cut it in today's markets. Minus cultural change that recognizes today's realities, tribes will not be able to compete against their non-tribal counterparts. I'd be happy to help any way I can, and I'm sure others would too, but a major internal course correction is needed first."

Chris Ketchum, Vanport

Chris Ketchum, Vanport, Portland, offers a very different perspective, but shares Mr. Robinson's concern for what happens when tribes try to run unprofitable mills. Vanport leases the Warm Springs Tribe's mill in Central Oregon and hopes to eventually structure a similar agreement with the Colville tribe. Its Warm Springs lease runs into 2014.

Mr. Ketchum brings years of experience to his job at Vanport. At one time, he was general manager of the Yakama operation at White Swan, Washington. He reports that Warm Springs was cutting mostly low-grade ponderosa before Vanport took over the operation in 2008. Now most of the mill's production is high grade ponderosa which Vanport sells in Japan. Lesser grades go to Vietnam and China.

"We are the No. 1 supplier of tight-ring, east side ponderosa sold in Japan," Mr. Ketchum reported. "The Japanese like the texture of Warm Springs ponderosa, so they ask for it first. It's a very profitable niche market for us, but the supply of big old pine is declining in both Oregon and Washington. Export quality Douglas-fir is replacing it.

We asked Mr. Ketchum for his opinion concerning the branding discussion that has been underway at ITC for some time. "I don't see how you can brand as many timber types as tribes own under one label or umbrella. There is a tendency to forget that tribes compete with one another on many fronts. We often overlook the fact that reservation communities are no different than off-reservation. Politics are part of life."

"And then there is the certification question," Ketchum continued. "I know it is a controversial topic among ITC member tribes. Some, including Warm Springs, have pursued it because they see a market advantage. Others have rejected it because they see it as being too intrusive and too expensive with little upside."

We also asked Mr. Ketchum what he thought about the ongoing discussion concerning a system in which the federal government – perhaps the U.S. Department of the Interior – would be the certifying agent.

"I suppose you could get the federal government to come up with some sort of system that accounts for tribal forestry nuances and would acknowledge that tribes meet or exceed all federal standards, but you have to wonder how it would look against FSC, which has become its own very successful brand," Ketchum said. "But with so many competing for federal dollars, you have to ask where you get the money to support such a system."

Ketchum believes the tribal forestry story has "good legs under it," and he encouraged its telling in as many media venues as possible – as did many others – but he doubts that the story can, by itself, foster an FSC-type niche market for tribal wood products.

"It will take money and lots of it to build a brand based solely on a story," he observed. "I fear you will spend a disproportionately large sum of money supporting a brand that does not have enough board-foot volume behind it to be cost effective. But I still love the story and see value in its constant telling and retelling. Who knows, it may yield some unexpected benefit that transforms all the negatives into positives."

Mike Phillips, Hampton Lumber Sales.

Mike Phillips, President of Portland-based Hampton Lumber Sales, a division of Hampton Affiliates, buys some 3.2 billion board feet of lumber annually – about 1.9 billion feet from seven

Hampton mills in Oregon, Washington and British Columbia and another 1.3 billion feet from other western mills, including the Yakama [Washington] and Warm Springs [Oregon] tribal mills. Purchases from Warm Springs have declined significantly since Vanport leased the facility. Hampton is a major supplier to both Home Depot and Lowe's.

Mr. Phillips shares Mr. Ketchum's view that the tribal story may have value in yet well defined consumer markets, but he is adamant about the fact that no qualities – not even the tribal story – are more important than lumber quality, price, service and reliability. "You cannot market a brand successfully until these attributes are well established," he insists. "Your positive or negative reputation precedes you in the marketplace. A branding program that is not backed by a rock-solid reputation for quality, price, service and reliability is doomed from the start because the trust relationship that is the market's stock in trade has not been established."

Assuming a rock-solid reputation, Mr. Phillips believes the tribal story – if constantly told – will have some appeal in carefully cultivated domestic markets in which tribes have carefully matched their products, including wood species, with what the market needs, but he was less enthusiastic about international markets, which he says are driven almost exclusively by price and reliability. "The Chinese," he said, "are huge lumber buyers but they could not care less about the tribal story. Different culture."

Mr. Phillips sees third-party forest certification as "a sales tool," in increasingly "green" consumer markets, but he cautions against a belief that it can bring higher prices for lumber. "The marketplace assumes that all forests in North America are sustainably managed today, so the certification system used is less important than the fact that someone has independently certified the landowner's sustainability claims."

When asked if he thought the tribal story implied any sort of intrinsic sustainability, Mr. Phillips said, "Yes, I think it does. We sort of intuitively assume or believe that Indians know more about nature and how things are connected. If tribes can differentiate their brand of forestry from that of other landowners – without unfairly disparaging their competitors – I think their story and its core values can gain some traction in the marketplace, but if you haven't first improved quality, price, reliability and service it won't work."

Despite his belief that the tribal forestry story has market potential, Mr. Phillips shares Mr. Ketchum's belief that costs of developing and marketing a national brand may be too great given the comparatively small amount of wood [logs and lumber] that tribes produce annually. "Lumber is, by and large, a price-driven commodity. Profit margins can be very small, especially in down markets, which is why the most successful mills are those that are constantly retooling their processing facilities. They understand that their very survival – their ability to hold their place in brutally competitive and capital intensive markets - depends on investments in technologies that increase log recovery, drive down labor costs and improve product quality.

"Tribes need to emphasize what they do best – what makes them unique in the marketplace – and forget the rest of it," Phillips concluded. "I can't name a single tribe that I believe has the ability to compete head to head against the best mills in the market. Not today, and not until quality, price, service and reliability are improved significantly."

Kenneth Rhodes, BMC Select

Although Mr. Phillips' believes quality, price, reliability and service are more important than forest certification – which he says the marketplace automatically assumes today - many others

view third party certification as essential in increasingly “green” markets. Among them: Kenneth Rhodes, who is responsible for “green” initiatives, including certification, at BMC Select, a Boise, Idaho lumber distributor that traces its roots to the old Cascade Lumber Company, founded in 1902 in Yakima, Washington.

Today, BMC Select, which recently emerged from bankruptcy, does business with several of the West’s largest homebuilders including KB Homes, D.R. Horton, Ryland and Pulte, the nation’s largest homebuilder following its 2009 acquisition of Centex. Its subsidiaries include Del Webb, a pioneer in the construction of retirement communities in the Southwest.

“We are very strong supporters of third party forest certification,” Mr. Rhodes said, adding that the decision to embrace certification was not forced on BMC as some believe it was at Lowe’s and Home Depot. “We think it is the responsible thing to do in today’s world. Whatever we can do to encourage responsible forest stewardship we will do as a matter of company policy.”

BMC’s website includes endorsements for FSC, the Sustainable Forestry Initiative [SFI] the Canadian Standards Association [CSA], the international Standards Organization [ISO 14001], Pan-European Forest Certification [PEFC], the U.S. Green Building Council LEED, National Association of Homebuilders [NAHB] Green Home Building Guidelines and the Green Building Initiative.

Rhodes advice to tribes is straightforward, if not exceptionally candid. “Come to grips with idea that government-sponsored green building standards are here to stay,” he says. “LEEDS will be huge. You won’t be able to do business with any government entity if you don’t have the right credentials. This is *the reason* why the nation’s major corporations, including its homebuilders, are moving quickly in this direction. If you cannot document what you are doing to minimize your environmental footprint you’ll be on the outside looking in.”

We had originally hoped to get the West’s major homebuilders to complete our survey, but none seemed to know much of anything about the sources of their wood. Pulte’s San Francisco office referred us to BMC Select.

Ron Jarvis, Home Depot

We heard a very different but equally frank perspective from Ron Jarvis, Chief Sustainability Office at Home Depot, the nation’s No. 1 lumber retailer. Mr. Jarvis has traveled the world looking at forest certification systems and was heavily involved in the 2002 Meridian Project, a major investigation of certification systems funded by the country’s largest lumber retailers including Home Depot and Lowe’s. Meridian ended up blessing all the world’s leading certification systems, including FSC, CSA, ISO and SFI.

Mr. Jarvis reported that he has “no familiarity” with tribal forestry, though he suspects it is on par with other forestry programs in North America. In fact, he went so far as to say he believes all forests in North America are being sustainably managed, even those that aren’t certified by any third parties. Such is the press of state and federal forest regulations which sometimes exceed FSC and SFI standards.

Mr. Jarvis also conceded that Home Depot favors politically popular FSC for its reportedly more stringent chain of custody. Nevertheless, the retailing giant purchases about 80 percent of its wood from SFI-certified forests – a reality rooted in the fact that the nation’s industrial timberland owners favor SFI, which they created more than a decade ago in response to FSC’s

very public effort to force landowners to accept their standards, which many landowners saw as too loosely written to reflect regional silvicultural and ecological differences.

We asked Mr. Jarvis for his candid assessment of the tribal branding and marketing discussion. He answered with a question of his own. "Would we expect tribes to label and market their wood? It's surely a great story, but is it enough of a story to be a market indicator? Is it a good enough story to generate a price premium in the market? I don't think so, and I'll tell you why. SFI has spent millions boosting its brand in the hope that consumers will pay more. They won't."

Mr. Jarvis revealed that he had test marketed the FSC story in several Oregon stores. He then FSC and non-FSC wood side by side in displays in several stores and asked customers to pay 25 percent more for the FSC label. They refused. He cut the price again and again, but it wasn't until the premium was a mere two percent that customers bought the FSC package.

"Customers speak with their wallets," Mr. Jarvis explained. "Until the price difference between FSC and non-FSC wood was negligible, they wouldn't budge. So my advice to tribes is to forget certification and try to create market niches based on the tribal forestry story."

We have asked Mr. Jarvis if Home Depot has a Supplier Diversity group similar to Mr. Honeycutt's group at Lowe's. He has yet to respond, but earlier he did generously offer to meet with ITC's directors and membership to discuss the whole branding and marketing question.

Mitch Wagner, 84 Lumber Company

Mitch Wagner, Director of Purchasing for Pennsylvania-based 84 Lumber, a 280-store network that spans 35 states, indicated that of the 280 stores, 45 are FSC chain-of-custody certified. The pragmatic Mr. Wagner says, "The certificate lets us go after LEED projects that are attractive to us. But elsewhere in the marketplace, it all boils down to price, service and product availability."

Mr. Wagner shares Mr. Jarvis' view that, while the tribal forestry story is "a wonderful story," there "isn't much bang for the buck" in either certification or a TFP brand designed to extract a price premium. "I think it would be more expensive than its worth. The only brand that extracts a premium from the marketplace is FSC, which is viewed as being greener than SFI. SFI says its standard is just as green, and I'm not sure what the difference is between the two, but I can tell you that FSC gets a premium that SFI has never been able to get."

Like Home Depot, 84 Lumber does not buy any wood directly from tribes, but Mr. Wagner suspects some tribal wood comes to his stores from the 60 to 70 western sawmills from which 84 buys mill-direct, though he has no idea which tribes participate.

Gary Vitale, President, North American Lumber Wholesalers Assn.

Gary Vitale is president of the 650-member North American Lumber Wholesalers, a Rolling Meadows, Illinois association that represents the interests of some 650 lumber wholesalers and wholesaler-producers in the U.S. and Canada. He brings 25 years of experience in lumber distribution to his post.

Mr. Vitale was kind enough to distribute our branding and marketing survey to about 200 of his members. To date, not one of them has sent their completed survey to us, a fact we find disappointing but not surprising. Save for two long-time southwest lumber distributors we interviewed, we could not find a distributor who acknowledged a special connection to tribes or their wood. They are simply suppliers of wood – and not very reliable ones at that.

We interviewed Mr. Vitale at length in the hope of gaining some insight into what his members are thinking. He echoed *everything* we'd heard from western distributors about the importance of quality, price, service and reliability.

"Lumber distributors place a premium on shipping product on time," Mr. Vitale said. "If you screw up shipments – time-wise or quality-wise –you can spend years and a lot of money rebuilding your reputation. The marketplace has become so competitive that there is little forgiveness in it. You have to remember that our members compete against distributors from all over the world that are trying to build positions in North American markets. The Europeans have been particularly aggressive. They've very tough competitors on both price and quality."

Mr. Vitale also believes it may be too late for tribes to capture any market share with their forestry story. "Forest certification has become so ubiquitous in the market that buyers assume it is the standard – and it is in North America and Europe – which may make it difficult for tribes to one-up other landowners with their story. But that doesn't mean that the story shouldn't be told or that the marketplace might not perceive some uniqueness that I don't see. One thing is certain: if the story isn't told, no one will ever know it or have a chance to consider its value."

Wesley Rickard, Wesley Rickard, Inc.

It seems unlikely that anyone in North America knows the tribal forestry story better than Wes Rickard, a Gig Harbor, Washington forestry consultant whose client list reads like a "Who's Who in Forestry in North America." Over the 40-plus years that he's been in business, he has represented 23 tribes in landmark cases. Among them: Jicarilla, Nez Perce, Blackfeet, Salish and Kootenai, Warm Springs, Menominee, Minnesota Chippewa, Red Lake Chippewa and several Alaska tribes.

Mr. Rickard, now 78, has a background in industrial forestry that has left him skeptical about the veracity of any claims that tribal forestry is somehow better than, say, forestry as practiced by Weyerhaeuser [for whom he worked for several years] or any other landowner confronted by increasingly Byzantine federal and state regulatory processes.

"Log and lumber quality are huge issues today," Mr. Rickard says. "In fact, I'd argue that quality is the only issue. When I go to a lumber yard, I insist on handpicking the boards I want to buy. Many open-market log buyers take the same approach. If you can't stand behind your quality – and mean it – the market will find you out and you will lose out to competitors whose quality is better than yours."

Although Mr. Rickard has great sympathy for the plight of tribes that are tethered to unreliable federal purse strings, he wonders aloud if anyone will really care about the Indian forestry story. "Why should price-conscious consumers care anymore about tribes than they care about any other suppliers; and why on earth would they pay a premium for tribal logs or lumber just because Indians have been disadvantaged?"

Nevertheless, Mr. Rickard believes the tribal forestry story needs to be told again and again "if for no other reason than the fact that their competitors are telling their stories in the marketplace. The market understands anything but silence."

Perspectives on the impact of infrastructure collapse in the Southwest

Throughout the course of our investigation, survey respondents who buy tribal logs and lumber told us repeatedly that tribes must maintain their presence in log and lumber markets - even in

poor markets - or suffer the consequences, which include the loss of their reputations as reliable suppliers.

A few tribes have kept their mills running, but for others the task has been daunting. Apart from the nation's deep recession, which hit tribes much harder than the rest of the country, no factor has borne down harder on tribal wood product businesses than the lack of sufficient milling infrastructure to sustain efficient and cost effective markets for logs, wood residues and lumber. No where is this problem more vexing than in Arizona and New Mexico where the biggest wood products businesses – Kaibab Forest Products and Southwest Forest Industries – began closing their mills when the federal timber sale program went into steep decline in the early 1990s.

Not counting mobile milling operations – Wood Misers and the like – only three sawmills remain in the entire Southwest: the Fort Apache Timber Company mill at White River, Arizona, which gets its wood from White Mountain Apache timberlands, the W.H. Moore Cash Lumber Company at Espanola, which buys wood mainly from the Jicarilla tribe, and the Mescalero tribe's retrofitted mill at Mescalero, which is expected to reopen this fall and will take wood from tribal lands.

Rumors persist that major investment capital may soon flow into an oriented strand board plant in Arizona, but thus far nothing has happened. There were also rumors that a pulp mill would be built near Albuquerque, but the plans were withdrawn after it became apparent that sufficient water was not available. The old Precision Pine mill at Heber, Arizona is being retrofitted by its new owner, Cooley Forest Products, a Phoenix lumber wholesaler and retailer since the end of the Second World War. The company is rebuilding the old Precision mill with a grant from the Forest Service.

Few know the wood supply equation in the Southwest better than Marlin Johnson. Mr. Johnson worked for the Forest Service for nearly 40 years. After his recent retirement he hung out his consulting shingle and has been working with several investors who are eyeing the region's overstocked federally-owned pine forests. With Mr. Johnson's help, Cooley Forest Products and a second investor, Herman Houck, Billings, Montana, are putting together a proposal for a 300,000 acre stewardship project in the White Mountains. The trio expects to make its pitch to the Forest Service this fall.

Mr. Johnson's tireless effort to jumpstart the wood processing sector in the Southwest is instructive. He's given up on doing anything in New Mexico, in part because the Forest Service has apparently chosen to invest its limited resources in Arizona, but also because he was unable to develop sufficient tribal interest in his proposals. He had hoped to site a mill near the Navajo Reservation, but investors balked at the tribe's insistence that the mill be built on tribal land. He had also hoped to site a small diameter mill near the Jicarilla Reservation, but the tribe would not commit sufficient timber for a long enough time frame, so the proposal was shelved. Currently, the tribe has a 4.8 million board foot contract with W.H. Moore Cash Lumber. Company owner Bill Moore runs a circle saw at Espanola and produces poles, posts and beams for the region's Adobe-style homebuilders.

"I'm no genius," he said when asked how he's managed to be the last operating sawmill in New Mexico. "I just stay at it, pay attention, don't get myself overextended and cut only what the market will buy. It's pretty simple."

Elsewhere in the Southwest, the situation is anything but simple. Fort Apache Timber Company at White River, Arizona has operated intermittently this year, but the tribal enterprise's new mill

manager, Wilke Gregg, reports the mill is old and inefficient and that upgrades are desperately needed. Tribal leaders have been reluctant to modernize the aging and labor-intensive facility because its main purpose has been to provide employment for tribal members.

The White Mountain tribe also operated a small diameter mill at Cibecue but it was closed after the disastrous 2002 Rodeo-Chediski Fire, which burned about 280,000 acres of tribal timber and rangeland. Although the tribe never disclosed its exact losses, sufficient ponderosa pine was salvaged after the fire to flood the pine lumber market, causing prices to fall dramatically. It seems unlikely that the tribe made any money from the salvage operation because – in the absence of sufficient milling infrastructure in Arizona – most of the large pine that was salvaged was helicopter logged by Columbia Helicopters and railed to Sierra Pacific mills in California for processing.

The tribe veered close to FSC's third party forest certification a few years ago, then back away on the advice of its legal counsel and because the cost of annual renewal was apparently more than the tribe could afford. Now Mr. Gregg laments that because the sustainability of the tribe's widely admired forestry program has not been independently certified, Fort Apache's overtures to Home Depot and Lowe's have been rejected – a fact that argues for a government-sponsored certification system that recognizes and verifies the sustainability of tribal forestry.

The Bureau of Indian affairs reports that Fort Apache was cutting about 40 million board feet annually before the economy soured. Last year, the mill only cut eight million, but tribal leaders apparently kept the mill's nearly 400 employees on the payroll, subsidizing their wages with funds from the tribe's casino operation. It's hard to argue against the tribe's decision given the fact that most family-owned mills in the West also operate at losses during hard times because they do not want to lose their skilled workers *or lose their place in very competitive global lumber markets.*

On condition of anonymity, one observer familiar with the Mescalero tribe's mills at Mescalero and Alamogordo told us both facilities were running technology that was too old to be competitive. "You can't run a for-profit business and give away the farm in high labor costs. You either modernize with labor saving technologies or you eventually run your business into the ground."

But now the tribe is retooling its Mescalero mill with a federal grant and hopes to reopen in October – amid terrible lumber markets. "Will it work," our anonymous source asked rhetorically. "I don't know. It's a long way to market and the mill has no market for its residuals, which would be a profit center if there was a nearby buyer."

Despite the fact that the Southwest's four tribes – White Mountain, Mescalero, Jicarilla and Navajo – have had great difficulty sustaining their operations – those who have been long time buyers of their products remain very loyal, but very frustrated over their on again, off again operations.

"If tribes want to raise their visibility they need to cut some wood first," said Randy Johnson, who runs Albuquerque-based Sagebrush Lumber Sales and has been selling lumber since 1971. "We are the biggest buyers of Fort Apache and Mescalero lumber. We love the quality and we'd do our best to help promote a tribal label or brand, but first production needs to increase dramatically."

Mr. Johnson reports that “during the good years” when the Mescalero, Jicarilla, White Mountain and Navajo mills were running full tile, he was buying 60-70 truckloads of tribal lumber *daily*. “Now it’s slowed to a trickle and we’ve been forced to replace the loss with wood we buy in Canada,” he said. “I’d rather buy from my Indian friends, but what can you do?”

Bob Dodson, Dodson Lumber in Roswell, New Mexico reports a similar relationship with tribes in the Southwest. He has been selling Fort Apache lumber since 1973 and was a big admirer of Hal Butler, who ran the mill for many years. “The tribe thought so much of him that they made him one of their own,” Mr. Dodson recalls. “He was a genius. The mill was turning out about 12 million board feet a month and it was very, very profitable.”

Mr. Dodson feels such a sense of loyalty to the Fort Apache mill that he is now working with sales manager, Roscoe Pusher, put together a new sales plan. In the past, he’s also bought wood from Mescalero, Yakama and Warm Springs. He is very supportive of ITC’s ideas concerning the need for some sort of a branding and marketing strategy, which he believes would add value to the product, though he was candid enough to admit that he thought the vignette that Jim Petersen and Gary Morishima wrote was, in his words, “a little hokey.” In his opinion, product quality and reliability of service are the traits that will bring tribes the repeat business they need. He also thought a brand would fail quickly if service and quality were not consistent with the brand image.

It is clear that tribes have a major visibility problem. Neither Mr. Dodson nor Shane Seibel, Assistant General Manager of the Tierra Group, a Southern Ute Tribe homebuilder in Durango, Colorado, had ever heard of the ITC. Another distributor we interviewed asked if it was a branch of the federal government.

Tierra buys its lumber from Alpine Lumber, a Denver-based distributor that buys limber – mostly mill-direct – all over the West. Mr. Seibel refuses to pay more for it than market price. The truth is he may not be getting any tribal lumber at all. Bill Bader, who runs Alpine’s FSC-certified yard at Durango, reports that he’s never looked for tribal wood. His boss, David McKinney, who is Alpine’s purchasing manager in Denver, said he “wasn’t sure” if Alpine was currently buying any tribal wood, but he recalled that they were buying some Warm Springs pine before Vanport took over the operation. Mr. Bader also recalled that Alpine bought ponderosa from the Navajos “year ago” when they were still running their mill.

Although Mr. Seibel would like to buy tribal wood, he won’t if it doesn’t meet his standards – and he rates price, availability, reliability and quality far above all other factors, including his desire to buy tribal wood. On the other hand, he likes the idea of a TFP brand that emphasizes forest stewardship, cultural values, sustainability and Indian forestry’s more holistic approach.

We tried in vain to reach the nation’s largest window manufacturers – Anderson, Pella and Marvin – but our numerous calls were never returned. The closest we got was Kevin Stovall, who owns Bight Wood, a Madras, Oregon secondary manufacturer that sells pine millwork to Anderson. Most of the lumber he buys for remanufacture comes from Boise Cascade, which is FSC-certified, but he also gets some lumber from Warm Springs, which is also FSC certified. When it is available, he also buys from the Yakama, Colville, White Mountain and Salish Kootenai tribes. But S-K does not own a mill, so he is probably buying from Stoltze Lumber Company at Columbia Falls, Montana, a major purchaser of Salish-Kootenai logs.

Mr. Stovall is very sympathetic to the plight of tribes that are trying to run their outdated mills in a world now populated by state-of-the-art facilities capable of cutting two to three times as

much log volume [overrun] from each log as the log scale would indicate. He was a member of a committee that evaluated the Warm Springs mill before it was leased to Vanport. In fact, leasing was the committee's recommendation.

"It would have taken at least \$10 million to modernize the mill and the tribe didn't have the money," Mr. Stovall said. "It's very difficult for a small sovereign nation to borrow money. Even then, the modernization process is constant. If your mill isn't throwing off enough extra cash to pay the bill, you can't compete."

The "Indian Oprah" tells it like it is – or should be

Although she does not buy logs or lumber, we got an earful concerning tribal attitudes from Margo Gray-Proctor, president of Horizon Engineering Service Company in Tulsa, Oklahoma. Ms. Proctor, a frequent public speaker, is often referred to as the "Indian Oprah," a tip of the hat to her award winning entrepreneurial skills and her commitment to her Osage culture. We called Ms Gray-Proctor for a reality check after hearing so many survey respondents express disappointment in tribal wood businesses.

"Tribes are no different than off-reservation communities," she observed. "Some have good leadership, good listening skills and surround themselves with talented people. They are results oriented. Others are consumed by negative energy that prevents them from acting in their own best interests."

Ms. Gray-Proctor does not believe that the size of a tribe or its wealth matter all that much on the path to success. What matters, she says, is creativity and vision. Where you find negative energy you find tribes that get in their own way. They won't even support their own tribal businesses because they're jealous of people who make a good living. It's ridiculous that we don't even recognize our own buying power."

What's the 'take home' message from the branding and marketing survey?

Quality, price, service and reliability are the standards in globally competitive lumber markets, especially in the current economic malaise – a time that seems certain to cull out the weakest and most unreliable suppliers of logs and lumber.

The marketplace is unforgiving, and is thus unwilling to cut tribes much slack for their inability to be more reliable suppliers of quality logs and lumber.

If tribes aren't present [visible] in the market – no matter how poor the market is – they will lose their places and will have difficulty regaining lost market share.

Although tribes have lost visibility in the marketplace, the fact that they have owned and managed their lands for eons [sustainability writ large] is an enormous asset and a story well worth trumpeting. This is especially true at a time when most industrial timberland ownerships are managed for short term gain without much thought to the future.

Forest certification is becoming a necessary evil in the marketplace – a costly requirement imposed by major lumber retailers, like Lowe's and Home Depot, who face constant scrutiny from "green" groups that monitor forest operations in North America.

Lumber distributors that sell to the so-called "big boxes" [Lowe's, Home Depot and 84 Lumber] have become increasingly sensitive to the need for chain of custody certificates that stipulate that the lumber they are selling comes from sustainably managed forests.

The tribal forestry story probably has legs, perhaps great legs, *but is cannot replace a well-earned and well-defended reputation for quality, price, service and reliability.*

Interviewees seemed to intuitively grasp the idea that core environmental values held by Indians mean that they are managing their forests sustainably, but they also spoke of the need for tribes to tell the story in consumer and news media markets where “green” themes play so well.

Even if tribes decide not to pursue a branding and marketing strategy, it is essential that the federal government fund a long-term campaign designed to tell the Indian forestry story in as many venues as possible. And it is clear that media markets are hungry for this unique and fascinating story which draws so much power from the fact that Indians have been successfully and sustainably managing their forests and rangelands, without interruption, for thousands of years, especially elements that focus on green themes, the Indian connection to land, unique products harvested from tribal forests and rangelands and sustainability, specifically the fact that tribes have been managing their lands for thousands of years.

Tabulated survey results

We have thus far received only 7 survey responses, despite sending out hundreds. We continue to work with wholesale and retailers to boost these numbers. Even so, the consistency of rankings is instructive.

Price	4,5,5,5,5,4
Availability	4,4,4,5,4,4,3
Reliability of supply	5,4,4,5,5,4,5
Species	5,4,3,5,3,3,5
Wood quality	4,5,5,5,5,4
Local product	2,1,3,3,3,3,1
Minority supplier	2,3,1,3,1,2,1
Long term relationships	5,4,4,5,1,4,3
Certification of sustainability	2,4,1,5,1,3,4
Tribal stewardship ethic	2,5,1,4,5,5,3
Spiritual/cultural respect	2,5,1,4,5,5,3
Government statutory requirements	2,4,1,5,5,4,2
Quality wood from sustainably managed forests	5,5,3,5,5,4,4
Manufactured by minority enterprise	2,4,1,3,3,3,3
Manufactured by tribal enterprise	2,4,1,3,5,4,3
Support tribal economic development, jobs	2,4,1,4,5,4,2
Holistic management	2,5,1,3,3,4,1
Certified products	2,4,2,5,5,4,4
Brand identifying products from tribal forests	2,4,4,5,5,5,2

Export Markets

Wade Zammit and Dennis Gray Jr.

1) Overview of traditional Export Customers

Bulk and large inventory sales

Bulk and large inventory sales to Asian Markets are derived from softwoods only. The following countries make up the primary markets for Asia and logs into these countries are sold using primarily Scribner log rules.

Japan

Japan is still the strongest importer of higher quality and value wood from the PNW. Much of the volume imported by Japan is used for the manufacture of high quality finished lumber used in housing construction. Hemlock is very price sensitive in Japan and can easily be substituted by lumber from Europe and logs and lumber from Russia. The markets preference is greatly determined on price alone. There are still a few sawmills cutting low end lumber which is primarily used in rough construction and for the crating and packaging of other manufactured products.

Korea

There are three main markets in Korea: Construction, packaging and cutting for Japan. The construction and packaging markets basically are the same type of log. This market is supplied by low grade old growth from Alaska and second growth from around the globe. The largest is Radiata Pine from New Zealand, followed by Russian logs, logs from the PNW and some from Europe. While Chile does not export round logs to Korea, they are a very large supplier of lumber used in the manufacture of packaging and crating. The third market, lumber export to Japan, is supplied mainly from old growth logs from Alaska and Canada as well as a small portion of Douglas Fir from the PNW.

China

The log usage and markets in China do not differ that much from that of Korea, except we see it on a lot larger scale. Large quantities of low grade, low value logs being used for construction lumber and for packaging. However more of the lumber is used for the manufacture of products that are exported to the rest of the world. Door manufacturing is a huge industry in China. Also in China, there is a market for some higher value logs that are primarily cut into lumber for export to Japan.

2) Niche and or containerized Markets

Over the past several years, there has been a huge increase in the amount of logs being shipped into Korea and China by container. This is primarily due to the fact that container shipping was cheaper than bulk shipping. Just recently have we started to see a reverse of that trend and, while bulk rates are currently high, bulk is again becoming the shipping method of choice.

The other area where containers are used is for shipping small volumes into new or small markets where the volume does not justify making a bulk ship port call. We use container to ship small amounts into Taiwan and Pakistan.

Hardwoods are sold into the Asian and European markets by container due to the small volumes generated and the specialty mills that receive them. Hardwoods are sold using different log rules and we do not participate in those types of sales into Asia. Hardwood species generally can support far more logistical costs to make export opportunities attractive than softwood species can. We have close associates who specialize in hardwood exports if you wish some assistance in this area.

3) Operational Concerns

Cutting for Export Markets – When cutting second growth, close to all of the preferred and required bucking can be done in the woods. When you are in old growth with high defect, it usually takes a concentrated effort in both the woods and sort yard to manufacture a log for the highest value. There is no such a thing as “producer vs purchaser” in cutting for value. You cut for the purchaser. Producing logs is no different than any manufacturing process. You look for ways to maximize your profits and still meet the needs of the customer. The highest value you are going to get for any log is when that log is manufactured to the customer specifications. You may think you are getting a higher value when you try to get a log into the next higher sort by cutting for diameter or grade. What you are doing is cutting a shorter log than the customer wants and he is going to end up paying less for the short log of a higher quality than a customer would for a long log of a lower grade. Remember, the price of the log is determined both by quality and quantity of the lumber recovered.

Harvesting activities and costs – Must have a total harvest rate that fits production costs from around the world or have better quality to offset production costs. I.E – Lower quality wood can fit if the harvesting costs are lower via mechanized harvesting. Higher quality wood can have higher harvesting cost via manual harvest methods or helicopter programs.

Typical Export Log Process:

A first time exporter would want to engage a log trading firm to secure customers and handle transactions on their behalf. This would be a necessary step in order for the timber owner to get acquainted with customers and their needs for log quality.

Most of our transactions are negotiated on a quarterly basis with our large customers that are then the benchmark for which we handle the rest of our pricing structure within the region. Customers drive our production and have expectations of us maintaining shipments around the ship schedules for the year.

- a) Stump to sort yard activity very similar to any harvesting operation except attention to length structure of the harvest most likely will differ from domestic customer specs. A sort-length sheet is a good guide and this is particularly important where on site processing is taking place.
- b) Sort Yard – Sorts are compiled to export for either orders pre-sold (best case) or to be sold and put up in lots. Logs are scaled
- c) Phyto standards are different for each of the main importers in Asia.

Japan does not require inspection or treatment of logs prior to importing to Japan as that process is handled internally by log customers.

Korea requires hemlock logs to secure a phyto-sanitary certificate to be issued prior to importation. All logs require treatment but not prior to landing. Korean customers arrange for their own logs to be fumigated in Korea and pay for that service themselves.

China requires all importers to debark or fumigate their logs prior to shipping. All logs must have a phyto-sanitary certificate issued prior to arrival in China.

Debarking is an expensive undertaking and would need an extensive log export program to underwrite the costs to install and operate that service. A group would need to engage an export company to debark their volumes for the China market.

- d) Container shipments require either loading at the sort yard or another staging area including one close to the port. Container shipments are closely coordinated to ensure prompt loading to reduce idle time and timing to the ships are usually very specific time windows for port delivery.
- e) Log Inventory – if presold, sales precede shipments and inventory as wood is harvested and sorted to predetermined shipping schedules. Container shipments can be weekly and facilitate quicker turns but loading time is higher/unit. Bulk shipments require a building of inventory to at least 1.0-1.5MMBF to meet some critical mass for bringing in a bulk ship and timing is less frequent.

4) Customer Support

Ship loading activities – Containerized vs. bulk carrier, chartering ship space vs. chartering entire ships for orders.

When selling logs into Asian Markets a producer can use a variety of means to get the product to the customer. The volume sold will determine the mode of delivery. If the volumes are extremely small and in far flung ports, then container shipping would be the preferred method. This method is the highest cost due to the number of times the logs need to be handled and the small quantities. Typical container sales average in the 4mbf to 8mbf volume range, depending on the log sort.

If the volumes are less than a ship load then it makes sense to charter ship space from an established log shipper. This less than a ship load rate realizes savings for the seller and can be split into five different ports of call. Each port can also have numerous customers as well. The greater the number of port calls, the higher the shipping cost. Ideally you would want to have one port call to keep shipping fees as low as possible.

To charter an entire ship, a volume of 4.5 to 5 mmbf would be needed. This larger volume would give the best shipping rates and flexibility for the producer.

Standard Financial Practices – Letters of Credit

- a) Most business is conducted by LC and logs are paid upon loading containers onto the vessel. All sales are conducted in US dollars and executed in the US prior to shipping. Exchange rates impact sales prices but do not come into play during the transaction of the log sales.

b) Timing for payment vs a domestic sale?

Export payment can be delayed while accumulating volume and awaiting shipping times. All sales are paid by letter of credit in US dollars before actually being shipped to overseas customers. Payment could be delayed by up to three months while waiting for the logistics to line up for the movement of the freight. While domestic sales to local mills typically have short turns for cash in comparison.

c) Third Party Certification for export

In practical terms, Asian importers do not worry about FSC or third party certification for their log purchases. It is not a consideration in the region and does not bring any additional premiums by having that qualification for the log supply.

We do as a course of business supply a certificate of origin from local Chambers of Commerce to our customers. This ensures our production originated from that area. Japan does require us to write an annual letter stating ownership for our products.

FSC and third party certification is only an issue when dealing with domestic sawmills in the US.

For further help or information in regards to exporting softwoods to Asia please contact the following individuals at Sealaska Timber Corporation:

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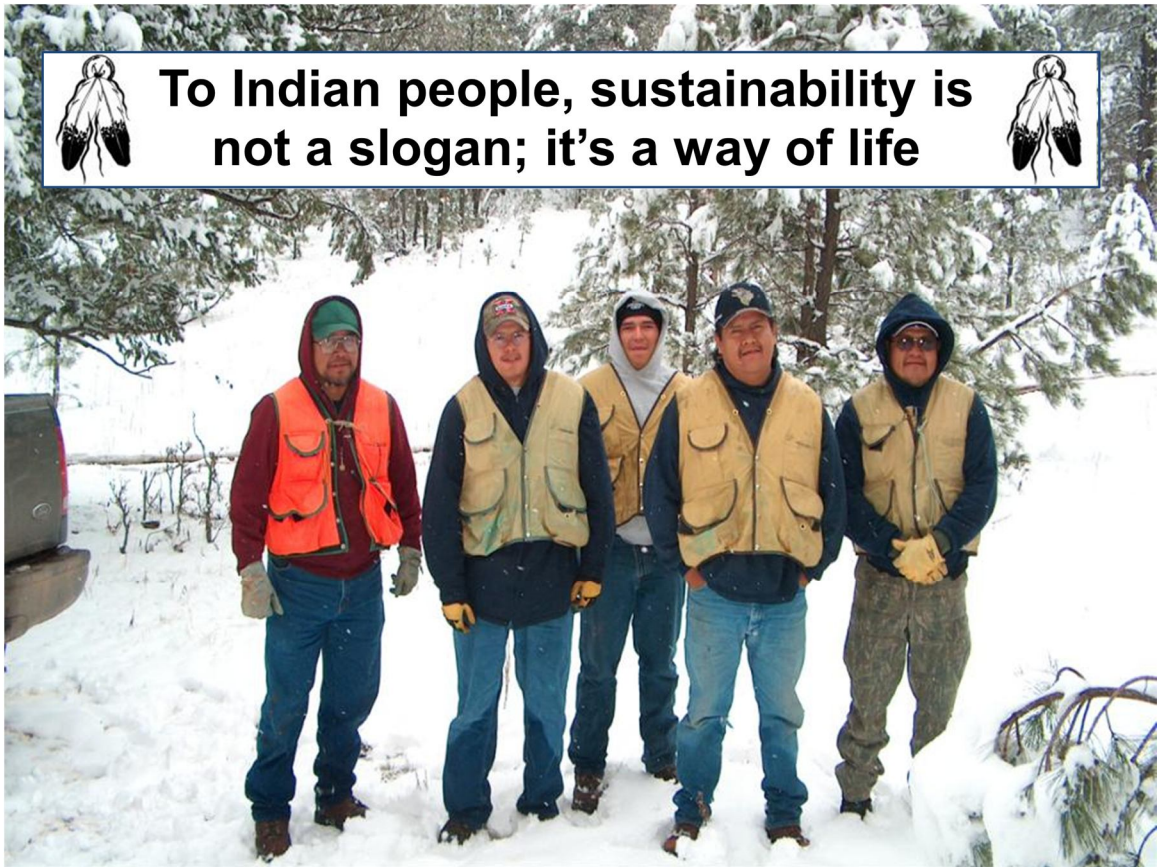
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Module 3

Brands, Trademarks and Product Support



Topic: MODULE 3 Brands, Trademarks, & Product Support

Investigators: Larry Mason, Nicole Tillotson

Task: Investigate the process for establishment of a common brand for TFPs. Identify required product support systems (e.g., product standards & quality assurance controls, reporting), opportunities for regional branding, and alternatives for defraying costs (e.g., use of trademarks, labeling fees).

Key Terms & Concepts:

BRAND: A brand creates an image to differentiate a product in the marketplace. A brand image creates a brand experience over and above product utility. A brand that becomes known acquires brand recognition. Brand recognition accumulates to become brand equity. Brand management is the application of marketing techniques to increase customer perception of value. Brand marketing is directed toward "penetration and pull" of market development and retention. A "brand", however, refers to names, logos, and slogans that are created to distinguish a product or a producer from others in a competitive marketplace.

The overarching objective of branding is to find an effective means of elevating the exposure and appreciation of Indian resource management. An effective brand quickly delivers the message you wish to convey to distinguish Indian products from others in the marketplace and elicit positive response.

TRADEMARK: A Trademark refers to a legal right to use and protect words, names, symbols, sounds, or colors that distinguish goods and services. They require registration which can be accomplished quickly and inexpensively. Trademarks can be renewed forever as long as they are being used in business.

MARKETING: A promotional campaign to increase market recognition, presence and pull of a brand, trademark, or product line.

SALES: Distribution of products or services from producers to buyers, through formal agreements of means of exchange.

ADMINISTRATION: Because brands and trademarks serve as a means of tying Indians and products together, reputations are at stake. Administrative procedures will be needed to ensure quality control and assurance and license the brand and protect trademarks for use only by authorized individuals and enterprises. Resources needed for administrative support need to be identified and secured.

Methodology: Literature and a web review of branding and related topics were conducted.

Results: Terms such as "mark", "brand" and "logo" are sometimes used to refer to a "trademark." A "brand", however, refers to names, logos, and slogans that are created to distinguish a product or a producer from others in a competitive marketplace. Trademark refers to the brand after it has been registered with the United States Patent and Trademark Office. Trademarks protect words, names, symbols, sounds, or colors that distinguish goods and

services. Trademarks, unlike patents, can be renewed forever as long as they are being used in business. Trademark registration is accomplished through application to the U.S Patent and Trademark Office and typically takes one to two years. However, once a trademark application has been filed the trademark, the brand name can be used.

Registration of a TFP brand as a legal trademark can be accomplished quickly and inexpensively. More difficult and costly challenges, however, occur before and after the brand registration. First a brand concept and identity must be created and linked to a conceptual strategy for promotion. Second, a market development program will need be implemented to acquaint the public with the brand identity and desirability of TFPs associated with the brand label.

Discussion & Conclusions:

Indian Brand

The development of a TFP brand is a serious undertaking. A powerful brand image and message accompanied by dependable product quality and delivery can increase sales, market share, and profits. Conversely a poor brand selection or unreliable performance can have negative market consequences.

A TFP brand would need to convey abstract values unique to tribal forest management and ecological perspectives. The Team has developed a short *vignette* to try to convey the principal values that a TFP brand should communicate (refer to Module 2). *Certification* of logs and lumber may provide beneficial augment for assurances of forest practices and chain of custody for access to certain markets (see Module 5).

Survey results indicate high interest in branding (see Module 1). The Team recommends that a TFP brand be based on the tenet that “your story is your brand.” This theme could be adapted to provide multi-level and multi-product opportunities for increasing brand recognition and market promotion, such as international, national, regional, or enterprise-specific.

Marketing

An effective marketing campaign is costly to develop and must be sustained into the future. It is unlikely that individual enterprises could support such an initiative on their own and potentials for market penetration are likely to expand beyond local or even regional opportunities. Therefore, some means of collective market promotion could be beneficial. Various types of entities that could be employed for collective marketing are described in Module 4. Marketing seeks to create long-term brand recognition.

Sales

Sales of forest products are heavily dependent on long-term interpersonal and business-to-business relationships. Branding and marketing campaigns should be directed at supporting efforts of individual entrepreneurs and enterprises. Sales converts brand recognition into purchase agreements. Other opportunities to improve sales may include: Trade missions for development of new export relationships are organized periodically by public and private agencies and associations. Trade associations or councils, such as the Softwood Export Council and the American Hardwood Export Council, provide marketing services to council member companies.

Administration

If a TFP brand is created then a licensing fee, advertising charge, or other source of contributed revenue will be needed to underwrite advertising and administration costs. The magnitude and distribution of operating costs for the marketing program will depend upon number of licensees and the strategy and scope of the branding/marketing campaign. A funding mechanism must be identified to underwrite costs. Funding for administration generally comes from license fees or other self-imposed charges but support could be sought from government or NGO grants. For example, the Intertribal Agriculture Council receives financial support from the federal government through the Foreign Agriculture Service.

Quality Control and Assurance

For forest products, systems have been well-established to provide product quality control, consistency, and assurance in support of sales agreements. For example:

Lumber grade: The US Department of Commerce publishes the Voluntary Product Standard for Softwood Lumber. In the U.S., there are six associations that publish and administer regional lumber grade rules: Redwood Inspection Service (RIS), Northeastern Lumber Manufacturers Association (NELMA), Northern Hardwood and Pine Manufacturers Association (NHPMA), Southern Pine Inspection Bureau (SPIB), West Coast Lumber Inspection Bureau (WCLB), and Western Wood Products Association (WWPA). Softwood lumber export rules such as the "R" list, administered by the Pacific Lumber Inspection Bureau (PLIB), have been designed to serve the specific needs of overseas transactions. Hardwood grading standards are overseen by the National Hardwood Lumber Association (NHLA) and are used in both domestic and export trade. Lumber inspection associations are private, non-profit, lumber quality inspection agencies that provide grading and grade stamping services to lumber manufacturers, re-manufacturers, and drying facilities. Services available from lumber inspection bureaus may extend beyond appearance inspection to Machine Stress Rating.

Log scaling: Independent log scaling bureaus provide third-party, accurate, unbiased, uniform log scaling and log grading reports that are generally required to verify log qualities and quantities that are exchanged in sales transactions. There are a number of log scaling bureaus that are regionally distributed throughout the U.S. and Canada. The three most common domestic log scales are the Doyle rule, the Scribner rule and the International 1/4" Rule. Sometimes log sales are based upon weight. Independent weigh scales are used for weight-based transactions. Export log grade standards may be developed on a supplier to customer basis, however, volume determination is generally accomplished through log grading associations or by weight scale.

Fumigation may be needed if lumber or logs are to be exported (importing country specific). Information on phytosanitary requirements for wood exports can be obtained from the USDA.

Standards and processes for certifying chain of custody (legal ownership) and management sustainability (product origin and environmental history) are provided by established certification systems. These systems do not differentiate Indian products, however. Study surveys (Module 1) indicate that respondent interest in establishing a tribal certification system is high. Discussion of standards and requirements for developing a tribal certification system is provided in Module 5.

If non-timber forest products or services are to be marketed under a TFP brand, development of standards and associated programs to protect public health and safety may be required.

TRIBAL DECISIONS NEEDED:

Branding & Trademarking:

- *Should a TFP brand be developed or should use of an existing brand such as “Made by American Indians©” be sought?*
- *Should a national TFP brand be developed for forest products or a generic brand that could encompass other products (e.g., crafts, natural foods, ointments, etc.)?*
- *Should a new TFP brand be developed or should the emphasis be placed on supporting the development of regional or enterprise-specific brands?*
- *Does the vignette prepared by the project team adequately reflect the values and messages that Indian peoples wish to convey?*
- *Should a professional advertising firm be consulted to assist in brand and trademark development to develop a message and symbol that would appeal to the general public or target niche markets that are generally unfamiliar with the superior qualities of TFPs?*

Marketing:

- *What type of marketing structure should be pursued? Module 4 describes alternatives and discusses funding requirements and governance issues.*
- *How should a branding and marketing program be supported? Seek on-going financial support? Seek support for start-up with a transition to self-sustaining programs through licensing and distribution fees? Other?*
- *Should a professional advertising firm be recruited to help develop and implement a marketing strategy?*

Appendices:

What is a Brand?

A brand creates an image to differentiate a product in the marketplace. A brand image creates a brand experience over and above product utility. A brand that becomes known acquires brand recognition. Brand recognition accumulates to become brand equity. Brand management is the application of marketing techniques to increase customer perception of value. Brand marketing is directed toward “penetration and pull” of market development and retention.

Types of Brand Names are many and varied. The tribal brand may defy categorical description. The following are examples of the diversity of brand types.

Acronym: A name made of initials (UPS or IBM)

Descriptive: Names that describe a product benefit or function (Whole Foods or Airbus)

Alliteration and rhyme: Names that are fun to say and stick in the mind (Reese's Pieces or

Dunkin' Donuts)

Evocative: Names that evoke a relevant vivid image (Crest, Tide, Best Buy)

Neologisms: Completely made-up words (Kodak, Xerox)

Foreign word: Adoption of a word from another language (Volvo, Volkswagon)

Founders' names: Using the names of real people (Walt Disney, Eddie Bauer)

Geography: Many brands are named for regions and landmarks (Fuji Film, Columbia Sportswear)

Personification: Many brands take their names from myth (Nike or Apollo) or from fictitious images created by advertisers (Betty Crocker, Mr. Clean)



SpiritWood

Grown in America's Indian Forests



Forest Products of Exceptional Quality from America's First Stewards

ADDITIONAL REFERENCES

American Hardwood Export Council

<http://www.ahec.org/hardwoods/pdfs/IllustratedGradingGuide.pdf>

Business.gov <http://www.business.gov/>

Intertribal Ag Council <http://www.indianaglink.com/>

Softwood Export Council <http://www.softwood.org/default.htm>

United States Patent and Trademark Office <http://www.uspto.gov/>

USDA Animal and Plant Health Inspection Service <http://www.aphis.usda.gov/>

USDC American Softwood Lumber Standard

<http://ts.nist.gov/Standards/Conformity/upload/Voluntary-Product-Standard-PS-20-10-combined-06-11-2010.pdf>

Module 4

Alternatives for Marketing TFPs

Topic: MODULE 4

Alternatives for Marketing TFPs

Investigators: Jim Haas

Task: Identify and evaluate alternatives mechanisms for marketing TFP

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Key Terms & Concepts:

BRAND and TRADE COUNCIL: An identifying symbol, words, or mark that distinguishes a product or company from its competitors is known as a brand. Brands are often based on a specific mix of product attributes that differentiate a product and provide it with a competitive advantage. Usually brands are registered (trademarked) with a regulatory authority and cannot be used freely by other parties. Branding licenses and promotions are carried out by trade associations/councils.

MARKETING COOPERATIVE: A marketing cooperative is an arrangement whereby various producers cooperate in the marketing of their products or services, often involving shared resources, to establish an independent marketing entity that works to market the cooperative product mix by linking potential customers with cooperative members who have products that match the customer's requirements. Marketing cooperatives sell the products offered by their memberships possibly in conjunction with brand promotion or certification.

FOREST CERTIFICATION: Certification is a market-based, non-regulatory forest conservation tool designed to recognize and promote environmentally-responsible forestry and sustainability of forest resources (Module 5). Most forest certification programs include chain-of-custody verifications that allow tracking of forest products through the supply chain. Certification labels are thought to reward responsible environmental performance with market benefit and may be required for participation in some product markets. Certification labeling can be used to augment the promotional and selling activities of both trade associations/councils and marketing cooperatives.

Methodology: In addition to drawing upon Mr. Haas's extensive professional experience, discussions with the members of the investigation team explored marketing alternatives and developed rationale for progress.

Results:

A TFP brand, which may or may not include certification for chain of custody and sustainability (Module 5), would have to be created and registered for use (Module 3). A TFP brand could be developed and registered for use within a short period of time at modest expense, but promotion of the brand would be much more costly and require a long-term commitment.

TRADE COUNCIL: Typically a trade association or council would be created to conduct a campaign to promote a brand and aligned products by heightening visibility and educating targeted market audiences to the unique and compelling values that the branded products can provide to domestic and international markets. Participating tribes would either have to support the "trade association/council" concept financially via dues/fees or (non)government

support could be secured to provide part or all of the financial support needed. For example, licensing fees are not charged for using the “Made by American Indians” trademark as the USDA Foreign Agriculture Service (FAS) provides funding support to the Intertribal Agriculture Council to defray costs. The trade association/council’s role would be to promote a TFP brand, typically through national and international trade shows where customer contacts can be made and data on regional/national/international markets can be gathered for analysis.

MARKETING COOPERATIVE: Currently, individual enterprises or entrepreneurs market or sell their own forest products. While this local style of marketing could be the lowest initial cost, outward connectivity to broader national and international markets could be lacking. The survey data (Module 1), along with anecdotal information derived from discussions conducted at ITC meetings and annual symposiums over the past two years indicates that additional marketing capacity could increase tribal ability to compete. Regional or national marketing cooperatives that would combine efforts across many Tribes/Products (Logs/Lumber/Panel/Value Added products) could be organized through/with the ITC or other existing national tribal authority. Such a cooperative would be an organic operation requiring a lengthy start-up curve, just as with a new business. Marketing cooperatives will have considerable operational and financial responsibilities including terms of sale, credit exposure and risk, currency exchange risk with export markets, trade finance, quality specification oversight, accounts receivable, performance insurance, communication, accountability, and transparency. Numerous operational issues will challenge successful launch and operation of a market cooperative, including recruitment and retention of skilled sales and administrative staff, the ability to coordinate product deliveries of guaranteed quality from multiple tribal producers to the right market at the agreed price and time, and equitable distribution of access to market opportunities and marketing costs.

Instead of establishing a Trade Association/Council or Marketing Cooperative(s), one or more existing forest products marketing companies could be engaged on a fee for service or commission basis. Such an approach would provide quick access to domestic and international markets and take advantage of established relationships to buyers. However, the expertise and reputation of a candidate marketing company must be reviewed with care and due diligence. A company selected to represent Indian forest enterprises should be a well-established organization that recognizes its responsibilities to both grasp market opportunities and to ensure that requirements and expectations of its clients and customers will be met. The lowest cost may not offer the best benefit; it is important that a selection criteria and review processes be employed if an outside marketing group is to be engaged. A few key requirements of an outside marketing company should be: financially sound, strong marketing presence and expertise, absence of conflict of interest, clear financial arrangements, and transparent governance.

Discussion & Conclusions:

There are several alternative ways to increase awareness of the unique values reflected by TFPs. For example, (1) technical assistance could be provided to help tell Indian stories in compelling ways and to develop a public information campaign; (2) a TFP brand could be developed and marketed by individual enterprises; or (3) an entity such as a trade association/council or marketing cooperative could be formed.

A TRIBAL TRADE ASSOCIATION/COUNCIL would need to agree/convey a clear set of defined

objectives for branding and marketing. For example, promotion of the brand to elevate visibility and unique values of TFPs with goals to increase economic benefits from collective promotion of TFPs and provide a path of opportunity for Indian business enterprise development and career advancement.

If a TRIBAL MARKETING COOPERATIVE is also to be pursued, an oversight (ITC?) group would want to identify the considerations that need to be addressed in a Marketing Business Plan, such as:

- Would a Market Cooperative work alongside the trade association/council or eliminate the need for a Trade association/council by assuming dual roles of promotion and sales.
- Proforma projections must be developed: Balance sheets of Income and Costs linked to management authority and expectations would need to be transparent, whether marketing was from a collective platform or performed by an outside marketing company.
- Multiple market analyses will be needed to inform development of strategies for discovery and penetration of new market opportunities.
- Market customer profiles of home centers/mass merchandisers, wholesalers, architects, government, etc. must be matched to tribal products and the right market paths in order to generate maximum value returns.
- How will 3rd party or possibly a tribal certification label fit into the promotion and marketing plan?

Conclusions:

Our working hypothesis during this investigation has been that the Indian story is powerful, that the products are unique, and that new approaches to marketing will improve revenue streams from the sales of TFPs.

The surveys of Indian forest managers and products processors conducted in Module 1 of this investigation indicated that the majority of respondents showed interest in pursuing a TFP brand, a tribal marketing cooperative, and a tribal certification program. The TFP brand was given the highest priority. Survey findings indicated as well that respondents felt that products from Indian forests were indeed special for reasons of quality and character.

In contrast, while our survey of log and lumber purchasers (as presented in Module 2) was limited by low response, results appear to reveal very limited enthusiasm from mainstream markets for a TFP brand. Awareness of the unique qualities reflected by TFPs was low. Other business considerations for successful market participation, such as reliability of supply, competitive product costs, and timely delivery of required product quantities are more important to purchasers. It is apparent there may be risk associated with development of a TFP brand and marketing program. If poorly executed, a marketing/branding program that promises more than can be delivered could aggravate forest product purchasers and well prove to be harmful rather than helpful to Indian sales programs.

Another limiting factor to improvement in wood products marketing potential has been the historic and prolonged decline in housing starts, lumber markets, and log prices. The Western Wood Products Association recently reported that the lowest lumber production since records

were first begun following WW II occurred in 2009.

In light of the uncertain nature and duration of depressed markets for forest products and the market skepticism of the value of a TFP brand, the project team recommends that a cautious path forward be taken should leadership decide to pursue a branding and marketing initiative. A low risk, incremental approach is recommended to avoid harm and undertake prioritized initiatives that hold greatest promise of return. For example, we find that the marketing cooperative carries the greatest potential costs and risks and received the least endorsement from the survey respondents. On the other hand, if a compelling Indian brand is selected, registration as a trademark is simple and inexpensive but could begin a potent campaign of heightened visibility for Indian stewardship, wood products, and influence. Although Indian certification brings a host of both challenges and opportunities, a first and inexpensive step forward could be the establishment of chain of custody documentation through ITC and BIA. Chain of custody may be all that is needed to expand export sales. Outside funding support, otherwise not available for forest operations, can be pursued to assist economic development and projects like branding, marketing, and tribal certification systems should appropriately qualify. The ability to draw upon outside funds that lessen the investment risk and impact to participating enterprises may be an important consideration in determining the pace of brand/marketing development.

TRIBAL DECISIONS NEEDED:

- (1) *Should technical assistance be provided to help tell Indian stories in compelling ways and to develop a public information campaign instead of developing a TFP brand and collective marketing system?*
- (2) *Should a TFP brand be developed and marketed by individual enterprises?*
- (3) *Should a collective marketing mechanism such as a trade association/council or regional/national marketing cooperatives be established?*
- (4) *Should one area of interest (branding, marketing, or certification) be prioritized by ITC leadership for further short-term pursuit?*
- (5) *Should an investigation be launched to pursue new governmental or non-governmental funding support for pursuit of any or all of the trade development options?*
- (6) *Should a national workshop on TFP branding and marketing be convened by ITC?*

Issue-specific discussions regarding these areas of interest and others pertinent to this investigation are provided in further detail by the full report and the other Module Topic Summaries.

Module 5

Certification

CERTIFIED

Topic: MODULE 5 Forest Certification

Investigators: Vincent Corrao, Larry Mason

Task: Investigate opportunities to expand market presence and increase income for Indian forest enterprises through development of tribal certification standards for Indian forest management and wood products.

Key Terms & Concepts:

CERTIFICATION: Certification is a voluntary non-governmental process whereby the forests of particular ownerships are recognized as being sustainably managed based upon environmental, social, and economic criteria established by the certifying organization. Certification programs extend further to provide chain of custody (CoC) and sustainability (FM) verification of forest products including whole logs, building materials, and pulp and paper products. A fundamental premise behind certification is that markets will pay a premium for certified products. Existing certification can be intrusive and expensive with uncertain record of market reward. However, some forest product purchasers and green building standards require CoC verification and FM certification as prerequisites to market participation. As yet, there are no certification programs that have been developed for Native American forests by Native Americans.

HYPOTHESES: 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.

Methodology: In addition to drawing upon Mr. Corrao's extensive professional experience as a certification auditor, a literature review of certification and related topics has been conducted.

Results: FM certification protocols are the requirements and process that auditors use in determining conformance to a standard on managed forest lands. CoC certification is product certification and includes the verification that the products produced, used or sold to the end user are produced from certified sources and that the claim on the label is accurate and verifiable through the complete delivery chain from forest to the consumer. Although certification standards are relatively recent developments, are "voluntary", and have been unable to reliably generate price premiums (FNDI 2002), effectively exerted political pressure by interest groups has resulted in acceptance of certification as a prerequisite for entry into some domestic and international wood product markets (Hansen et al. 2006). In addition, growing global determination to reduce illegal logging is adding regulatory pressure to demands for CoC verification as proof of legal ownership and responsible management.

An analysis of FM certification was prepared from five studies of forests of varying sizes

throughout the United States by Cornick et al. in 2005. A wide disparity in costs was found to be dependent upon the magnitude of forest acreage. For example, the lowest initial cost was \$0.09 per acre for 300,000 acres while the highest was \$11.66 per acre for a 1,000 acre forest. Annual audit costs thereafter varied from \$0.01 per acre (2 million acres) to \$1.82 per acre (1,000 acres). Corrao and Mason (this investigation) estimate that for a sample forest of 100,000 acres initial costs of \$0.12 to \$0.30 per acre can be expected with annual audit costs thereafter ranging from \$0.045 to \$0.08 per acre.

A survey of Indian forest managers and processors (see Module 1) indicated strong interest in the development of a Tribally developed and managed forest certification system. A prior study found that existing FM certification standards have inconsistent criteria and do not reflect the Native American values and operational realities that influence Indian forest management practices (Mater 2005-6).

Discussion & Conclusions:

Conclusions: Several existing certification programs such as the Forest Stewardship Council (FSC) and Sustainable Forest Initiative (SFI) are available for use by Indian forestry programs. However, existing certification schemes are expensive, intrusive, and fail to provide the unique recognition for Indian forest management and wood products. An opportunity exists for development of a tribal certification program which, when coupled with branding or labeling to increase appreciation of the unique qualities of TFPs, could eventually lead to new market access and product premiums. There are two general realms of certification development for consideration.

Chain of Custody (CoC) requirements for log sales can likely be fulfilled by the authority of individual Tribes with endorsement from the federal government. CoC verification of manufactured products, however, is more complicated and may require an audit by a third party to verify the tracking and accounting of the products purchased, produced, and sold. The cost of CoC third party certification audit ranges from \$2000 to \$3000 per facility. Staff preparation for a CoC internally will range for 5 to 8 days. If self-certification is approached on an incremental basis, CoC would be a logical first step.

Forest Management Certification (FM), developed by tribes, would need to meet all Federal, BIA, tribal, economic, social, environmental and cultural requirements. Tribal FM Certification Standards should also address the criteria and indicators broadly accepted in existing standards. All criteria and indicators can be tailored to fit tribal needs through tribal participation and would alleviate the sensitivities regarding external interference with tribal prerogatives. The verification process could be implemented through a second party audit process where internally the tribes would set up individuals with expertise and resources to audit operations. Third party certification could also be done by an International Standards Organization (ISO) - recognized certification registrar with qualified third party auditors conducting independent assessments of forest management programs or CoC processes. Third party audits would provide the highest level of recognition and credibility. The certificate would be provided by the certification body conducting the audit, a tribally recognized certification entity or by the Federal government.

A tribal Certification system could be developed through a "Standards Development Committee" administered by ITC or other acceptable organizational framework. Individual

tribes could choose whether or not to participate. Funding resources may be available to help defray costs of organizational development and promotion.

The tribal standards can be verified through independent audits. The independent audits can be conducted by a second party (independent audit team) made up of tribal, BIA and independent auditors. A certificate could be issued to a forest management program from a recognized certification entity or by the Federal government.

Caveats: In order to be effective, a tribal certification must be enduring, rigorous, and aggressively promoted if tribal certification standards are to achieve recognition and respect by wood products markets. A tribal certification program will require creation of a new central organizing authority such as ITC or other appropriate trusted representative body. The hypothesis is that tribal certification in conjunction with a Indian marketing and branding program will increase appreciation of the unique qualities of TFPs and in turn generate new market access and product premiums. There is no guarantee, however, that this will be the case. Costs of developing, implementing, and sustaining a tribal certification program may well equal or exceed the costs of enrolling in existing non-Indian programs.

TRIBAL DECISIONS NEEDED:

- *Should efforts continue beyond the exploratory phase towards development of a tribal certification program?*
- *If yes then should ITC be the organizing authority from which a tribal certification program might evolve?*
- *If yes then should a committee be formed to seek funding resources to underwrite costs of organizational development and promotion?*

Identify and Evaluate Alternatives for Tribal Forest Certification

Vincent Corrao and Larry Mason

Introduction & Purpose

Indian forest management has the potential to be recognized for its exceptionally well-managed and sustainable practices. The management of Indian Forests and the products produced can be certified by existing certification programs, but also could be recognized through a Tribal certification system that is tailored to the cultural and historical beliefs of the different Tribes and their long-term management practices.

Certification is the process where the forest management practices and the products produced from these forests can be recognized as being well-managed and sustainable. This green labeling is a mark of responsible land management and a commitment to long-term sustainability. Certification recognizes the protection and sustainable management of the forest, the water resources, culture and community, wildlife habitat and other values.

We investigated opportunities that a Tribal certification program can bring to the Tribes from two main points of focus. One focus is that a Tribal certification program would align with Tribal culture, community, and life style while supporting the long-term management commitment that Tribes have been implementing over many generations. The second focus is the opportunity for Tribal Forest Management to be acknowledged for its outstanding management approach and implementation which provides recognition of products made from Tribal timber and the potential for additional value in the market place for these products. A Tribal certification program would be authorized and supported by Tribes, as an unprecedented alternative to certification schemes currently available.

History of Certification

Wood products were first labeled in Europe as early as 1637 to identify where the wood originated for the products produced. Early development of forest certification in the United States can be traced back to 1941 and the creation of the American Tree Farm System in Washington State (ATF 2004). The original American Tree Farm (ATF) certification program was developed to reflect requirements for the sustainable “farming” of forests. More recently forest certification and labeling have emerged to promote broader environmental sensitivities.

The creation of the Forest Stewardship Council (FSC) in 1993 resulted from the concerns of large environmental groups about rapid deforestation of tropical rain forests. Forest certification expanded from the tropical deforestation to sustainable temperate forests and is now found throughout the world. Shortly after the formation of FSC, the America Forest and Paper Association, a North American industry trade group, launched the Sustainable Forestry Initiative (SFI) as an industry self-certification program to ensure forest sustainability. Other certification systems, in addition to ATF, FSC, and SFI that evolved in the 1990's, include the Canadian Standards Association (CSA), the Green Tag program for woodland owners, and the international Programme for the Endorsement of Forest Certification (PEFC). Although only 10 percent of world forests are currently certified, forest certification has brought a credible third party guarantee that certified forests are managed responsibly and that the resulting products are harvested from environmentally, socially, and economically sustainably managed forests (Rametsteiner and Simula 2003).

Description of Certification

The certification process is complicated, multi-faceted, and involves retailers, consumers, producers, mills, non-governmental organizations and various certification systems from around the world. The certification process includes rules and regulations for the certificate holders and label users that insure the forest product and claims are being derived from responsible and sustainable practices and are verifiable and meet all the requirements of the standard. The independent third party certification bodies and third party auditors insure that the processes are in place. The auditors verify conformance of the forest practices and product standards for the wood produced.

There are two fundamental certification functions in the forestry sector. These are FM certification and CoC (product) certification. FM certification includes verifying adherence to standards of sustainability by a landowners forest management planning, inventory, harvest, silvicultural practices, and roads practices and includes all operations performed on the ground.

CoC certification includes the tracking of the harvested timber from the forest through the various stages of process to the final consumer. This includes the entire supply chain from transportation, storage, processing and distribution of the wood products. Once the CoC has been established and verified, the product can be sold as certified material that meets the claim as identified on the product label.

So why would you want to be certified? Primary benefits of certification to forest landowners are thought to include public recognition of environmentally responsible practices, access to premium markets, and increased market share. In recent years some of the world's largest lumber retailers such as Home Depot, Lowe's, Lanoga Corporation, and IKEA have made public commitments to pursue increased sales of certified forest products. A number of studies have surveyed public attitudes about certified forest products and have found that consumers are generally favorable to certification and that some portions of respondents express willingness to pay a premium for certified products (Irland 1993, Winterhalter and Cassens 1994, Forsyth et al. 1999). Although consumers may express a preference for certified products it has yet to be shown whether very many will pay a price premium (Anderson and Hansen 2004, Rebhan 2004, Ozanne and Vlosky 2003, Fletcher et al. 2002, Vlosky and Ozanne 1998, Hansen 1997). Although price premiums have been realized by some certified products such as hardwood specialties, review of the literature found little evidence that reliable price premiums are available for wood products from FM certified forests. However, FM certification does have public relations benefits as it is a credible endorsement of quality and product assurance and is viewed positively as a "green stamp" of approval by many end users, manufacturers, and building professionals. Some forest owners regard certification as a necessary social license needed to sustain and compete for wood products market share. FM certification may become a prerequisite for participation in government "green" building programs.

Tribal experiences with certification have been mixed (FNDI 2002) perhaps in part because there are no certification standards that reflect the unique cultural values of American Indians and Alaska Natives (Mater 2005-2006).

Existing Certification Programs

The standards used in North America have been produced by environmental groups, resource professionals, and other interested stakeholders. Certification process and requirements are reviewed by an independent review committee that refines standards to reflect the social, environmental, and economic impacts each indicator will have on the resources and communities.

FM certification protocols are the requirements and process that auditors use in determining conformance to a standard on managed lands. CoC certification includes the verification that the products produced, used, or sold to the end user are produced from certified sources and that the claim on the label is accurate and verifiable through the complete delivery chain from forest to the consumer.

The two main FM certification systems used by large public and private forestland owners in the United States are FSC and the SFI. Each of these certification systems has its own criteria and indicators that have to be satisfied. Both certification standards protect resources and the differences can be summarized as to how much documentation is sufficient to protect resources and what management intensity is considered appropriate. Both standards measure the effectiveness of environmental performance and balance activities between social, environmental and economic considerations. Both standards exist in addition to governmental regulations and forest practice requirements. SFI has recognized the more relaxed American Tree Farm System as adequately meeting the certification needs of small non-industrial forestland owners and FSC has the small or low-intensity managed forest (SLIMF) program for small non-industrial forestland owners that is less demanding than the FSC standard for large landowners.

CoC protocols are also provided by FSC and SFI for product labeling. Both have requirements to avoid fiber from undocumented or illegally harvested sources. CoC documentation requires written procedures, training records must be kept, and tracking of the inventory, billings, invoices and shipping documents is required to make sure the supply chain has not been broken. Internal audits are required to insure that the CoC system is working effectively and a customer feedback complaint system is implemented to determine how well the system is working. Evolving regulations, such as the Lacey Act, are expanding legal requirements for CoC documentation.

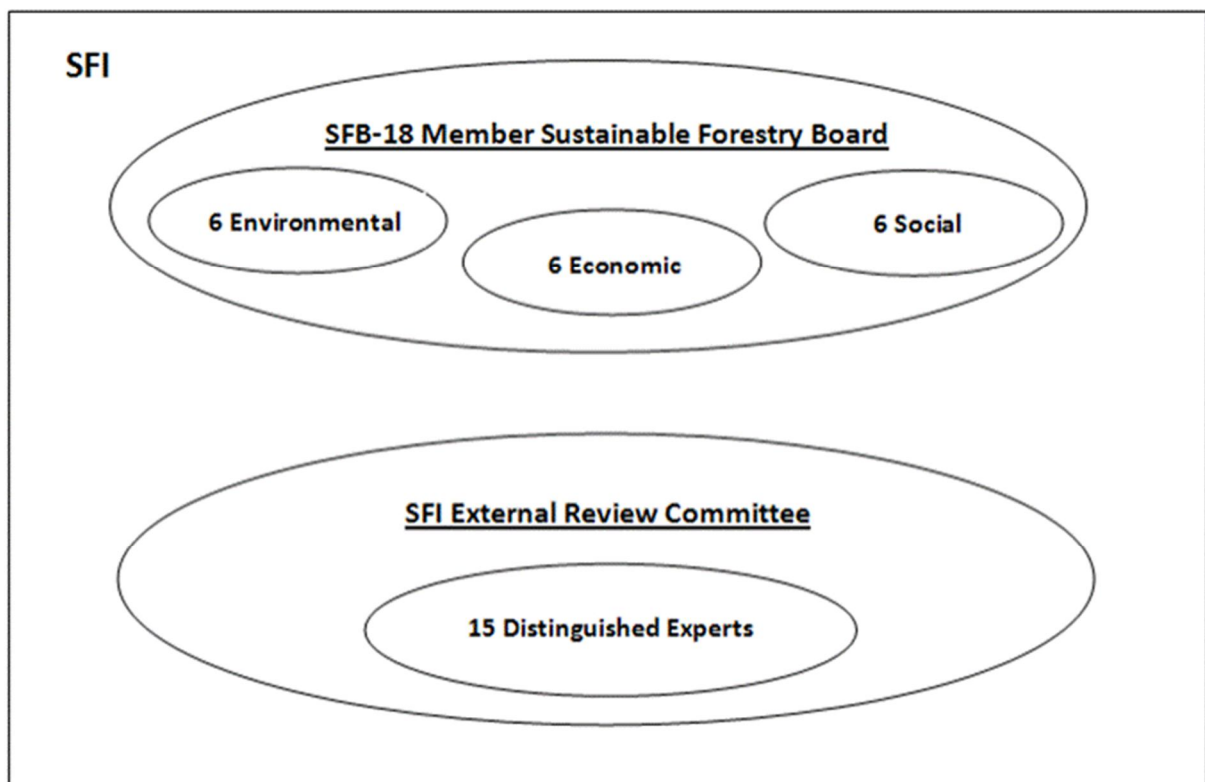
FSC is internationally recognized for FM and CoC. SFI is primarily a North American Standard, but is recognized internationally through the Programme for the Endorsement of Certification (PEFC) and through the Canadian Standards Association (CSA). For CoC certificates that have been issued to various companies in North America who are tracking certified material, SFI has 807 certificates and FSC has 4258 certificates as of March 2010.

All certification standards are voluntary and reflect evolving objectives. As an example, FSC and SFI are produced by their own interest groups for a variety of reasons. Contemporary certification systems were developed to slow deforestation of tropical forests, improve and protect forest resources, and to gain recognition that these forest are sustainably and responsibly managed. This was followed by a marketing strategy for green certified products to appeal to the public such that consumers would be willing to pay higher prices for certified products. As the certification marketing strategy matured, chain of custody and labeling green certified products emerged as the stamp of proof for certified products. While some certified

program participants have experienced a premium for their products, market rewards for certification have been inconsistent (FNDI 2002). However, effectively exerted political pressure by interest groups has resulted in acceptance of certification as a prerequisite social license for entry into some domestic and international wood product markets (Hansen et al. 2006).

Some background on how the existing certification programs work can provide a basis on how a Tribal certification program might operate. Since certification is voluntary, most participants get involved because they want to be recognized as producing green sustainable products from their forest and to benefit from using a stamp or label for the wood products produced from these forests.

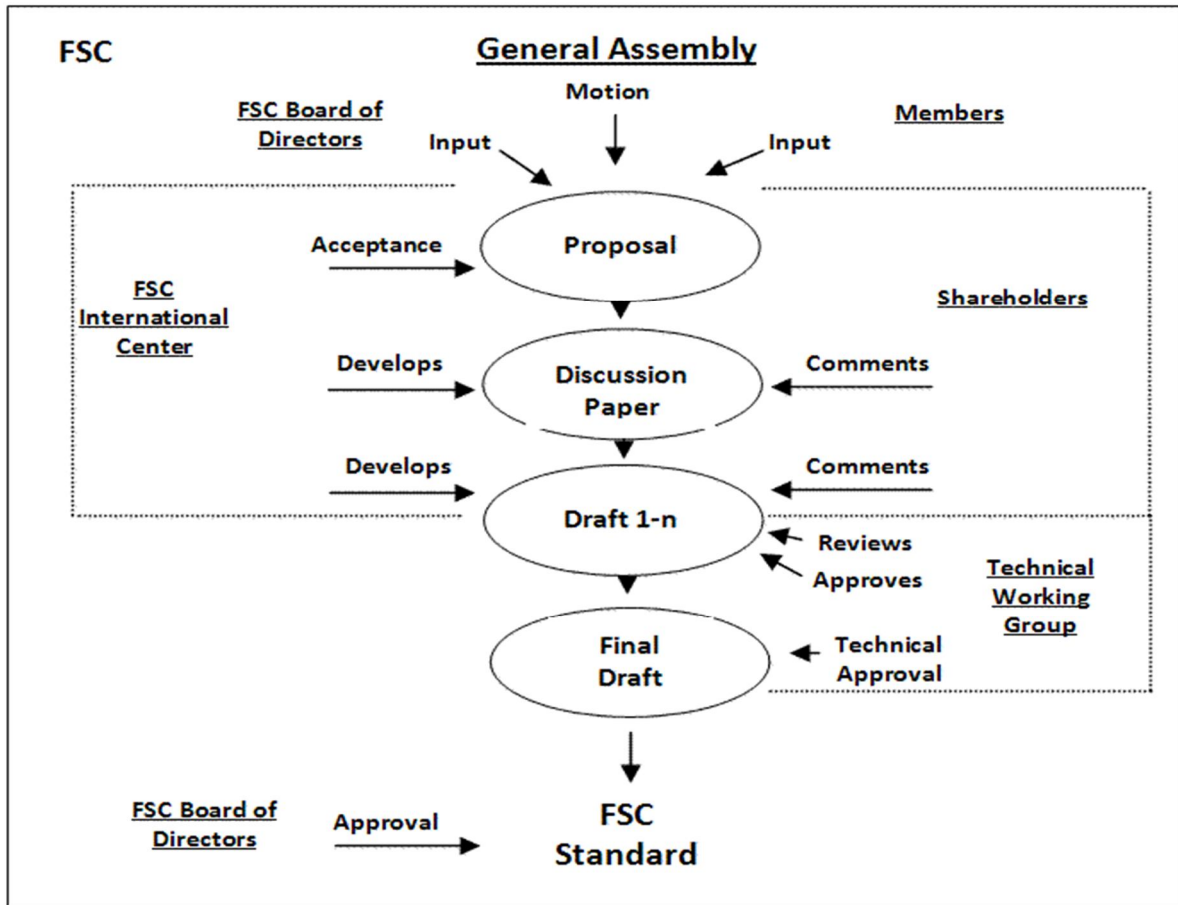
Both FSC and SFI work off of three sectors (or chambers) to address environmental performance in their standards. These sectors include an environmental, economic and social committee. The inclusion of the three sectors is to insure that a balance is being addressed in the verification of the management on the land. The SFI, Inc. organizational structure has an 18-member Sustainable Forestry Board and a 15-member External Review Committee and is structured as shown in the graphic below.



FSC structure is a combination of the General Assembly, FSC Board of Directors and the FSC Members. These groups work through a series of Proposals, Discussions and the Technical Working Groups to make changes and revisions to the FSC Standard. The organizational structure is shown in this graphic below.

FSC and SFI are both non-profit charitable organizations and both have a set of Criteria and Indicators that include a process where the components are verified through a review of the documentation and a verification of the on the ground activities. FSC and SFI requirements are

similar in many of the Indicators. Both protect resources and both attempt to balance between the environmental, economic and social issues. FSC is based on stakeholder input and is guided by what responsible forest management means to their stakeholders. SFI is based in applicable forest science as applied by resource professionals and is peer reviewed by an independent External Review Panel. FSC supports longer rotations, higher retention of mature timber and encourages participants to minimize allowable harvest volumes. SFI allows management as a regulated forest as long as it meets regulatory requirements and protects biodiversity as identified by peer reviewed science.



The main differences between the standards are provided in this Table.

	FSC	SFI
Management Plan, EA and Transportation Plan	A detailed Management Plan, EA and Transportation Plan are required.	An EA is not required; Management Plan and Transportation plans are less rigorous and are addressed through the BMP/silvicultural programs.
Biodiversity, Old Growth, Harvest levels and High Conservation Value Forest (HCVF)	Detailed documents and directives are required for harvest levels, old growth and HCVF.	These issues are addressed in Programs and Policies and through monitoring BMP compliance.
Public Stakeholders Input Process	Public input is required and can take considerable staff time to meet the public input requirements.	Public involvement is encouraged but not required in forest management operations.
Monitoring Program	Detailed documentation on monitoring is required with metrics on results.	Monitoring is conducted through inspections and BMP compliance results.

FSC, SFI and PEFC certify products through CoC. CoC is the path taken by raw materials from the forest to the consumer. This includes all successive stages of processing, transformation, manufacturing and distribution of the product. Verifiable traceability of the wood fiber from the sustainably managed forests to the product shelf is documented. This is to insure the end user that the products are coming from sustainable sources.



The written procedures for the elements of CoC are very similar. Records must be maintained, billings and invoices must be tracked, consumption and production data documented, internal audits are conducted and a customer feedback system is required. The requirements for the

FSC, SFI and PEFC CoC audits are similar that generally the three CoC audits can be conducted all at the same period during the site visit at the facility.

Cost of Certification

There are two areas of cost in the implementation of certification: (1) The cost of preparing for a third party audit by the staff engaged in the management of the forest; and (2) the cost of actually having an audit team from a certification body or registrar come and audit the operations. The cost of implementing a certification program can be evaluated by using a base acreage amount of 100,000 acres as an average. The cost and investment of staff time for preparation would be approximately the same whether the ownership was 15,000 acres or 300,000 acres. On smaller ownerships the cost per acre can be higher and for larger ownerships lower. Total costs can range 10 to 20 percent up or down and depend on the land owner's internal requirements and the rate fees charged by the registrar. The amount of activity occurring on the ownerships also has an effect on the cost. Ownerships with hundreds of harvest, planting and site preparation activities will require more time for preparation and for the third party verification audits. An example of a third party forest management audit is provided in the following chart.

	FSC Draft 8.1 in Review	SFI 2010-2014 Program
Principles/Objectives Criterion/Performance Measures Indicators	10 Principles 57 Criteria 190 Indicators	20 Objectives 39 Performance Measures 115 Indicators
Requirements Where a Certificate Cannot Be Issued	Major Non-Conformance and Fatal Flaws are a barrier to Certificate	Must Receive a Major Non-conformance
Cost of Initial Audit	Cost of Initial FSC Audit for approx 100,000 acres will range from \$22,000-\$30,000	An Initial SFI Audit for approx 100,000 acres will range form \$12,000-\$15,000
Cost of Annual Surveillance Audits 100,000 acres	The cost of the annual surveillance would be \$7000-\$8000 and depends on the amount of activity	SFI Annual Surveillance would be \$4500-\$6000 and depends on the amount of activity

These cost estimates indicate that for a sample forest of 100,000 acres initial costs of \$0.12 to \$0.30 per acre can be expected with annual audit costs thereafter ranging from \$0.045 to \$0.08 per acre. These cost estimates are consistent with those developed by Cornick et al. in 2005 from an analysis of FM certification that drew on information from five studies of forests of varying sizes throughout the United States. A wide disparity in costs was found to be dependent upon the magnitude of forest acreage. For example, the lowest initial cost was \$0.09 per acre

for 300,000 acres while the highest was \$11.66 per acre for a 1,000 acre forest. Annual audit costs thereafter varied from \$0.01 per acre (2 million acres) to \$1.82 per acre (1,000 acres).

The cost for forestry staff to prepare for a certification audit will range between 30 and 50 days of staff time for an SFI audit and 40 to 70 days to prepare for an FSC audit. This time will be focused on developing the policies and procedures, monitoring programs, and documentation necessary to meet the intent of the standard. The actual cost depends on the staff rates at each location and the number of days the program participant actually requires to meet the Indicators of the standard. These costs do not include accommodations for significant changes in current management practices and documentation.

The cost for a CoC audit for a manufacturing facility or sawmill is significantly less and more directed toward the tracking and accounting of the products produced and sold. Recent cost estimates of CoC third party certification audit range from \$2000 to \$3000 per facility per year (SFI 2010). A study of tribal sawmills and certification, conducted from 1999 to 2002, indicated that costs of CoC assessments were approximately \$5,000 for a medium to large mill that produced up to 50 MMBF per year (FNDI 2002). Staff preparation for a CoC internally will range for 5 to 8 days. If the person in charge of the certification is not familiar with audits, this may require a few additional days to understand the protocols and process that the auditor will conduct in verifying conformance for your operation to the standard.

A Tribal Certification Program

Forest certification is voluntary and the standards are developed by those who want them implemented. A Tribal Certification Standard can be developed by the Tribes and would need to meet all Federal, BIA, Tribal, economic, social, environmental and cultural requirements. The Tribal Standard should also address the criteria and indicators universally accepted in existing standards and the Montreal Process (Mater 2005-2006). All criteria and indicators can be tailored to fit Tribal needs through Tribal participation and would alleviate the sensitivities regarding external interference and intrusion by outside certifiers with Tribal prerogatives.

Tribal Standards can be developed for both Forest Management and Chain of Custody. These standards will provide recognition of Tribal forest management and certified labeling of TFPs. Tribal Standards can be recognized on their own in North America and internationally. Brand recognition and realization of marketing potential builds over time and will require a focused and enduring effort. Note as example that existing certification standards have been in operation for over 15 years and are still considered immature in terms of potential program development.

A Tribal Certification Standard can be accomplished through the development of Criteria and Indicators by representatives of interested Tribes, facilitated by ITC. This can be done through a series of committees that represent the Tribes' interest and management practices. The participating Tribes would adopt the requirements of the standard and would want to conduct a Tribal Standards Independent Review with specialist before undergoing independent audits.

The verification process could be implemented through a second party audit process where internally the Tribes would set up individuals with expertise in the resources to audit the Tribal operations. A third party certification can also be done by an ISO recognized certification registrar with certified third party auditors. This would involve an ISO certification body and their third party audit teams to conduct an independent assessment of a forest management

program or CoC process. The certificate would be provided by the certification body conducting the audit. This would be the highest level of recognition and credibility in the business of certifications. The opportunity for the Tribes to produce their own Forest Management and CoC Standards exist and a TFP brand or label for marketing native products can be used throughout the world.

A Tribal certification program could provide an independent assessment of the Tribes' sustainable practices and would set up a platform for labeling and marketing certified products. The recognition of the certified product comes from the successful completion of a third party audit conducted against standards recognized by the Tribes, BIA and an internal review committee.

There are several processes that can be used to recognize the Tribal certification standards; one way may be to have the ITC or a separate Tribal entity or the Federal government, through the Department of Interior, authorize the standards. The Tribal standards can be verified through independent audits. The independent audits can be conducted by a second party (independent audit team) made up of Tribal, BIA and independent auditors. A certificate could be issued to a forest management program or the processing facility (CoC) from a Tribal recognized certification entity or by the Federal government. CoC requirements for log sales can likely be fulfilled by the authority of individual Tribes with endorsement from the federal government. CoC verification of manufactured products, however, is more complicated and may require an audit by a third party to verify the tracking and accounting of the products purchased, produced, and sold.

An alternate verification process could also be implemented where the certification is done by an ISO recognized certification body with certified third party auditors. This would involve an ISO certification body and a certified third party audit team to conduct an independent assessment of a forest management program or CoC process. The certificate would be provided by the certification body conducting the audit. This would be the highest level of recognition and credibility in the business of certifications. The process that would develop a Tribal Certification Standard could entail several entities, committees and organizations.

Developing the Initial Drafts of the Tribal Standards

The initial draft of the Tribal FM certification standards would include the existing BIA and CFR regulations and commonly accepted criteria and indicators found in the existing standards used in North America. This initial working draft is for the Tribal Standards Development Committee to begin working with and get started on an official document.

The initial draft for the Tribal CoC Standard which would be for the tracking of forest products from the forest to the manufacturing facilities will also be developed during this time period.

Organizing a Tribal Standards Development Committee

The Tribal Standards Development Committee would be responsible for the review and requirements of the indicators and criteria included in the certification Standards. The set-up and organization of the Tribal Standards Development Committee, which may include six to eight individuals, would provide the guidance on what needs to be in the Standards. This can be a very time consuming period in the Standards development. An estimate of six all day meetings may be required with the members of the Committee. These meetings would include a facilitator. Once this Committee completes its work, it may be discontinued.

Organizing an Independent Standards Review Committee

The Tribal Independent Standards Review Committee would act as a peer review process. The committee would review and make written comments. The comments would be evaluated and recommendations would be made for each indicator and criteria for acceptance by the committee. The Independent Review Committee could be made up of eight to ten scientists, resource managers and specialists as needed to conduct a science based assessment of the requirements. The Committee would have representation for the cultural, environmental, social and economic sectors. A two-day meeting would be held to discuss the recommendations and provide the platform for completing an initial Tribal Certification Standards. This Committee would stay active and available for changes and to address issues as the certification program is implemented and active.

Tribal Comment Periods for the Standards

This initial Tribal Standards would be for the entire U.S. with common requirements and would have special provisions for Tribes specific rules and regulations throughout the country. To facilitate the unique cultural and Tribal rules, the Standard would be circulated to all interested Tribes for comment. The comment period will require six to twelve months and a summary will be published and recommendations made before the documents would be officially authorized by the Tribal recognized entity.

Ongoing Monitoring of the Tribal Certification Program

Once the Tribal Certification Standards have been authorized, the rules for audit procedures, auditor qualifications, label use, interpretations and a complaint process would need to be developed. These will guide the performance of the standards and will be monitored and specific issues can be addressed by the Tribal Independent Standard Review Committee. The initial work will require the guidance documents to be developed, and once completed; the Committee will have annual monitoring to insure that the certification program is directed by science and Tribal inputs.

This is an outline of a process that may be used to implement a Tribal certification program for forest management and chain of custody. Once developed the Tribes using the process would be verified and recognized for their successful completion. The certification would recognize a standard of excellence in sustainable management and provide the platform for marketing products grown from well managed forest. It also provides consistency that all Tribal products recognized by certification are of the same high standard.

Green Building Certification

One of the market influences that has evolved from certification standards has been the development of "green" building programs, which, under direction from state and federal regulations has created exclusive markets for some certified forest products especially those certified by FSC. The two most active green building certifications in the U.S, are U.S. Green Building Council (USGBC) and Green Globes. USGBC is a 501c3 non-profit organization. Leadership in Energy & Environment Design (LEED) is the green building rating system of USGBC. Green Globes is software based and is an on line green building certification that started in 1996 in the United Kingdom and Canada. Green Globes in the U.S. is run by Green Building Initiative (GBI) which is also a 501c3 non-profit organization. Green Globes recognizes multiple

certification programs whereas LEED currently only acknowledges FSC wood products as “green” but this exclusive designation has not been without controversy and may not endure (PRNewswire 2010). Government green building projects are examples of procurement markets where lack of certification may preclude penetration.

The cost of green building certification varies by organization. The total cost for Green Globes, not including facility improvements is approximately \$5000 to \$7000 for registering the building and includes third party assessor verification. This includes any size space and recognizes SFI, FSC, CSA, PEFC and Tree Farm certifications.

The LEED cost is \$12,950 for the process which is the registration and membership and covers up to 500,000 square feet and recognizes only FSC at this time.

Key Findings and Conclusions

Through the marketing and branding committee surveys (Module 1 – Interest in participating in tribal marketing programs) it was found that the majority of the Tribes are interested in a Tribal certification program. The question as to whether certification has or will raise the value and prices for Tribal certified products has mixed reviews. It has been studied and reported by landowners, verifiers, governments and consumers with both sides being favorable and negative on the results. Some specialty products and specific species have received a premium, while others report little to no improvement in price. Some reports indicate that certification has allowed producers to hold on to market share and in some cases take more of the market share away from competitors. There is also growing pressure for forest managers to produce CoC documentation of legality as well as sustainability. The recent economic downturn, however, has made consideration of the costs and benefits of certification speculative as many wood processors have had difficulty selling their production at any price.

Certification in the U.S. and Canada has focused on the need to be able to address pressure from the green movement and to verify that the forests are managed sustainably and responsibly and that the products made from these woods are not destroying native forests or impacting communities in a negative manner. Certification has generally not been used for marketing and branding products as industrial companies have their own labels, logos and marks to identify their products. The certification label is to signify that their products are produced from sustainable responsibly managed forest. The FM certification process for industry has not been widely used to raise the level of awareness about managed forests, nor has it been used as an advertisement campaign to build industry support. This is due to competition between certification systems and litigation presently occurring in the U.S. and Canada between FSC and SFI. FSC, which has comparatively little certified lands in the U.S. and Canada, is quick to criticize other certification programs such as SFI and CSA. SFI is reluctant to push the awareness of SFI certified products because of direct attack by FSC supporters and the simple fact that the majority of forest lands in the U.S. and Canada are SFI or CSA and by default have the majority of the market share. This can be seen as few industry SFI program participants actually showcase the SFI label on their products.

The absence of using certification as a marketing tool for raising the awareness of sustainable and responsible management and as a parallel to branding recognition can be regarded as an opportunity. The Tribes have the opportunity to evaluate what has worked the best, take the results and develop a program that raises the awareness of responsible Tribal stewardship. Tribal certification should be possible above from the competitive fray between FSC and SFI.

Both FSC and SFI have implemented accommodating standards for certification of small private forestlands so it would seem only appropriate that similar recognition of special circumstances be extended to tribal forests.

Certification is a long-term commitment, one that will take vision, commitment, and a consistent message. Tribal lands are well-managed, meet the sustainable requirements of all of the existing standards, and can be recognized by long-term community-based goals and respect for the land, the wildlife, and biodiversity. A Tribal certification can be the platform for a marketing program that verifies superlative stewardship and coincides with a brand promotion that elevates the visibility of the uniqueness of Native forests and wood products.

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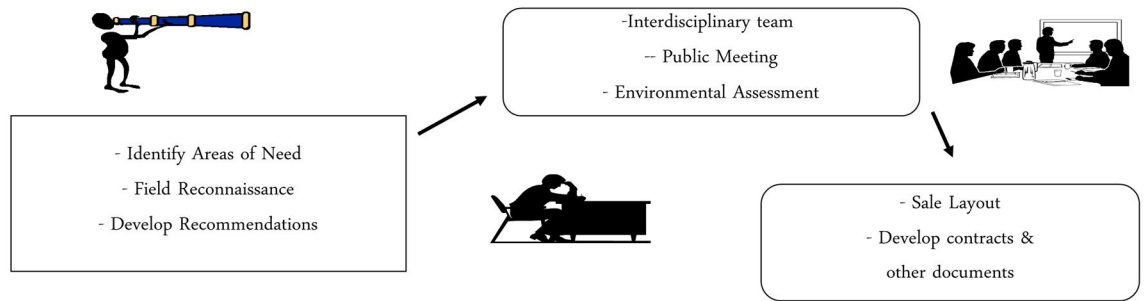
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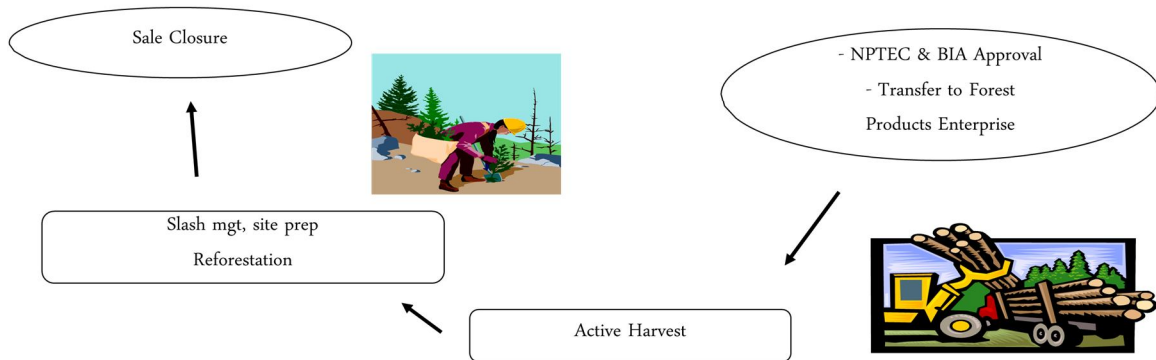
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Module 6

Timber Sale Preparation and Administration



TIMBER SALE PROCESS



Topic: MODULE 6

Timber Sale Preparation and Administration

Investigators: Vincent Corrao, Larry Mason, Gary Morishima

Task: Develop summary comparisons between tribal and industrial timber sale preparation and administration practices and discuss opportunities for timber sale practices to more effectively align with enhanced market opportunities.

Key Terms & Concepts:

LOG MARKETS: Log markets are created by shifting demands for raw material supplies that reflect the periodic needs of domestic and international log purchasers. Demands fluctuate over time resulting in constantly changing value relationships between logs of different species, sizes, and qualities. For simple example, in the Pacific Northwest, there has historically been an inverse relationship between the value of saw logs and the value of pulp logs. This is because saw log prices rise when saw mill production is up. A by-product of increased lumber manufacture is greater chip production which in turn lowers the market demand and price for round wood pulp which is the alternative raw material source for the pulp and paper industry. Conversely, when saw mill production (and accompanying chip production) is curtailed due to soft lumber demand, a temporary spike in pulp wood prices can be expected. Many other diverse factors from currency valuations to hurricanes can create rapid demand changes that reflect as spot market opportunities. The flexibility of tribal log suppliers to quickly adjust product offerings to exploit temporary market price fluctuations will not only determine profitability but will also influence the ability of tribes to sustainably manage forests. For instance, some forest health activities such as thinning may only be economically feasible when pulp markets are high.

HYPOTHESES: Improvements in current procedures for timber sales preparation and administration that increase flexibility to respond to fluctuating log market demands could benefit tribal marketing and branding strategies.

Methodology: A discussion of timber sale administration has been created which draws upon information presented in the IFMAT Reports (I & II), anecdotal contributions from tribal and BIA forestry professionals, and the many years of timber sales experience amongst the authors.

Results: Improvements in current procedures for timber sales administration under BIA manuals and handbooks could benefit tribal marketing and branding strategies. The tribal timber sale layout process presently includes an inter-disciplinary team (IDT) approach that develops a formal environmental assessment (EA). A review of the EA is conducted and a Finding of No Significant Impact (FONSI) is prepared before a proposed timber sale can move forward through the process. The sale, including an appraisal of value, is then prepared and approved by the tribe and the BIA. Following approval the sale can then be advertised. Sales are commonly stumpage sales and can be harvested over a three year period. Generally one sale is prepared at a time and made available for purchase before preparation of another can begin.

By comparison, the timber sale preparation process widely employed by industrial forestland

owners (real Estate Investment Trusts, REITs and Timber Investment Management Organizations, TIMOs) is a combination of delivered log sales and stumpage sales. Where multiple species are sold, as in the Pacific Northwest, the delivered log sale process is used more frequently. Where one or two species are being sold and are of similar size and quality, as in the southeastern U. S., the stumpage sales process is more common. The process is direct and streamlined and often the sale areas are chosen to attempt to meet the demands of the market place and the purchasing strategies of the log buyers as well as to accommodate least costs for harvest and transport.

Most private timber sales programs do not conduct a formal environmental assessment but instead complete an environmental checklist that reviews the issues associated with the timber sale area. This does not necessarily mean that environmental protections are compromised as evidenced by the fact that many industrial timberland owners are compliant with the requirements of third party certification. Silvicultural prescriptions are developed by foresters and the sale is prepared and approved by the resource manager. The sale is sold by species, product type and sometimes by grade to the highest bidder for each sort. Delivered log sale contracts generally last three to nine months and are negotiated between seller and purchaser based upon the short-term market demand of the region and the negotiated price leverage of buyer and seller. In the case of stumpage sales which are generally sold on a lump sum basis, the timber sale is sold to the highest bidder at auction and can be available for harvest at any time for 1 to 3 years depending on the payments schedule and contractual requirements of each landowner. Industrial timberland owners strive to reduce administrative costs while increasing stumpage returns. The major differences between industry and tribal timber sales processes are shown in Table 1.

Effective marketing of timber involves a combination of the timing of sale advertisement, harvest delivery schedules, log manufacturing quality and providing consistency in delivering annual sales volumes. As sawmills manufacture product for sales, the species, log quality and volume availability are important for them to meet their customer's expectations. An efficient log seller that can reliably satisfy such expectations can become a preferred provider with ability to leverage market premiums for timber sales programs. When developing a timber sale program, sale preparation should be a facet of the whole log marketing process such that a variety of customers and products are considered to ensure sufficient utilization and market return for the total harvest yield.

Other methods of maximizing net stumpage returns from sales of timber include gains in process efficiencies and development of a diverse portfolio of timber units prepared and ready for sale that is referred to as pipeline volume. Current administrative requirements imposed by BIA manuals and by the Office of the Special Trustee serve as obstacles to the capacity of tribes to take advantage of market opportunities. In order for tribes to sell timber into spot markets, they need suite of sales available "on the shelf" (pipeline model) which they can draw upon at opportune times.

There may also be opportunities to increase market return for tribal logs through contract manufacture for value-added products. Current economic downturn and mill closures present some opportunities for contractual partnerships with existing manufacturing facilities that are referred to as custom cutting where tribal logs are sawn for a fee. This strategy allows tribes to market sawn products with the need for risky capital investments in tribal facilities or the

challenges associated with day-to-day operations. If tribes can develop markets for specialized products, or recognize that they are also consumers with needs for building materials to undertake projects for housing, schools, government, and business development, they could partner/contract with local mills to manufacture wood products for identified markets and uses. Mill owners, anxious to retain workforces and protect the value of their operations are likely to be favorably inclined to contract milling services and may even be willing to make needed investments in capital improvements.

Discussion & Conclusions:

Alternative procedures to current appraisal methods are needed to allow tribal foresters sufficient flexibilities to exploit transient market opportunities. This will require changing the age old model founded in precepts of paternalism and fears of potential claims of liability by the United States. Creation of pipeline inventories of prepared timber sale units will also require increased short term investment in timber sales preparation. The timber sales flexibilities created by pipeline sales inventories can be particularly important during periods of market instability and economic downturn.

There is a need to better integrate forest management with market forecasts for forest product sales. Through forest management, species mixes, stand treatments like thinning or pruning, density and rotation regimes affect the types and characteristics of the timber that can be produced from Indian forests. The long-term commitment of tribal forestry programs to sustainability should mean that tribal logs can be available for sale indefinitely. Reliable deliveries of needed raw materials are important to log purchasers and recognition should translate to enhanced value returns for tribes. Better integration of timber sale preparation and administration with investment and marketing strategies, the operation of existing mills, and development of future markets can improve tribal stumpage returns.

Timber Sale Administration is specifically mentioned in both IFMAT I and IFMAT II as an area of tribal forest management ripe for improvements if tribes are to obtain full benefit from timber harvested from their forests.

TRIBAL DECISIONS NEEDED:

- *IFMAT II recommended that a series of regional workshops be arranged by ITC to determine the reasons for the differences in stumpage revenues between tribes and neighboring public and private lands. Unfortunately, these workshops never occurred. Should workshops be convened to examine the differences in stumpage returns and timber sale administration amongst tribal, private, and public timberlands?*
- *Should a task force of tribal and BIA representatives be formed to synthesize timber sale workshop findings, identify opportunities, and develop recommendations for increasing efficiencies and improving the capacities for tribal timber sales administration to increase stumpage returns and support tribal marketing and branding initiatives?*

Appendix:

	Industry Timber Sale Layout Process	Tribal Timber Sale Layout Process
Environmental Assessment	Complete an environmental checklist for sale area	Prepare EA with ID Team, complete public input, prepare FONZI, Tribal and BIA approval required
Type of Sale Advertisements	Primarily delivered log or lump sum stumpage payment for sale	Primarily stumpage sales
Harvest Timelines	Delivered logs are 3 to 9 month sales	Tribal and BIA stumpage sales are generally 3 year harvest contracts
Ability to Respond to Markets	Short layout period and quick harvest response works well to meet market expectations	Tribal BIA stumpage sales are slow and cumbersome and lack ability to respond to market conditions

Table 1. Comparison of industrial and tribal timber layout process

Module 7

Non-Timber Forest Products



Juniper woodland on the San Carlos Reservation in Arizona. Photo courtesy of Seth Pilth, Ethnobotanist for the San Carlos Apache Tribe.

The United States holds over 10 million acres of woodlands in trust for Indians. Woodlands provide many products and services that are vital to tribal communities. Funding is inadequate to address serious concerns, principal among them being the lack of information on sustainable harvests and inventory to support integrated resource planning, conversion of grasslands to woodlands, wildfire risk, and maintenance of grazing lands, wildlife habitat, and hydrological functions.

Mesquite. Photo courtesy of Ronald K. Miller. Cultural Uses of the "Forgotten Forest". Journal of Forestry Special Issue on Forestry on Tribal Lands. November 1997 vol(95):11.

Mesquite provides fuel for heating, cooking, and sale. Its wood provides materials for construction of corrals and tools. Flowers (inset) produce nectar for honey. Mesquite beans have high nutritional value and can help combat diabetes that plagues tribal peoples. The plant is also used in traditional medicines, dyes, and paints.

Topic: MODULE 7

Non-Timber Forest Products: Medicinals, Mushrooms, and More

Investigators: James R. Freed and Larry Mason

Task: Investigate the market potential for non-timber forest products produced from native forests by Native American individuals, families, communities and business enterprises.

Key Terms & Concepts:

NON-TIMBER FOREST PRODUCT (NTFP'S): NTFP refers to a group of vegetal products produced from forests that includes medicinals, nutraceuticals, forest botanicals, fresh floral, preserved floral, charcoal, aromatics, nuts, berries, roots, flowers, decorative woods, cones, seeds, Christmas greenery, chips, shavings, excelsior, sawdust, bark mulch, pine straw, firewood, flavorwood, syrups, wild game meats, honey, craft materials, mushrooms, native landscape plants, music woods, cultural and spiritual products, and more.

- Medicinals are the oldest medicines and include dietary supplements, ethnic traditional medicines, and other herbal formulations thought to improve health.
- Nutraceuticals are foods and nutritional supplements which contain naturally occurring compounds which may be beneficial to ensure good health and disease prevention.
- Forest botanicals are plants or plant parts (seeds, nuts, berries, bark, foliage) valued for medicinal or therapeutic properties, flavor, appearance, and/or scent.
- Aromatics are oils extracted from plant parts that provide pleasurable or therapeutic aromas.
- Excelsior, sometimes called wood wool, refers to thin curly wood shavings used for packing or stuffing.

HYPOTHESES:

For thousands of years, Native Americans have actively used many of the species that we now call non-timber forest products. Across the area that is now the United States, Indians used more than 4,000 species to create over 40,000 medicines, foods, shelter materials, baskets, and other subsistence and trade items (Moerman 1998). Contemporary recognition of the value of indigenous approaches to health and wellness has led to incorporation of many traditional plants and herbs into medicines. High regard for Native remedies helps create opportunities for Native peoples to develop markets for health, herbal and cosmetic products. Traditional tribal stewardship represents the earliest form of organic and sustainable management of forest ecosystems adding further NTFP opportunity to take advantage of expanding marketing interest in high value "buy local" programs, organic food marketing and direct-to-consumer "green" marketing programs. Harvest, preparation, and sale of NTFP's provide low cost entry to potentially rewarding business opportunities. Marketing both traditional and new forest products can provide individuals and business based in Indian Country with sustainable incomes from the forest which could be critical during the cyclical fluctuations of timber markets.

Marketing of NTFP's could fit well with other tribal enterprises such as gaming and ecotourism.

Methodology:

Internet survey of existing Native and non-Native producers, face to face survey of Native American communities who have the potential to produce non-timber forest products, phone survey of existing Native businesses, review of literature, phone survey of potential local, regional, national and international markets.

Results:

- Markets for all non-timber forest products are expanding at an annual rate of 4%.
- The world market for plant-based medicinals is over \$9.5 billion per year.
- The natural foods market in the USA is over \$3 billion each year.
- The native transplant market is estimated by the American Horticulture Association to be over \$450 million per year.
- All Native American communities in the continental US, Alaska, Hawaii have traditional knowledge of local native plants. Each one is different and differences make it possible to offer a spectrum of products to the market place. This provides the consumer with choices and expands the total market for all Native American products.
- Research has shown only limited attempts by Native communities, families or individuals to market Native made products from native plants for medicinals, floral greenery, Christmas trees, native landscape plants, Christmas greenery and wild edibles.
- Over 84% of Native craft products are sold via non-Native internet sites and stores. The large consumer market for crafts representing Native American culture is dominated by non-Native producers. In most Native American casinos the products sold are not produced by Native Americans.

Discussion & Conclusions:

Native American Peoples have an opportunity to develop sustainable economic enterprises based on harvests and sales of native plants and non-timber forest products. Historical uses of native plant materials to meet the basic food, shelter, clothing, health, cultural and craft needs of Native American communities created unique traditional knowledge. Reservations contain many NTFP's that may be appropriate for sale to and desired by both Native and non-Native purchasers.

Native American communities' have treaty rights to harvest NTFP's on federal lands. Tribes with these rights may be able to work with federal land managers to develop sustainable harvesting programs to support development of tribal NTFP enterprises.

Certified Native American herbals, aromatics, nutraceuticals and craft products can command an economic premium in domestic and international markets. To take advantage of this market premium, tribal individuals and companies will need to rely upon marketing organizations; to enter global markets as individual businesses is likely to be prohibitively expensive. A

cooperative market promotion program provided by the Intertribal Agriculture Council (IAC), the Intertribal Timber Council (ITC), or other organizational framework will be helpful. Specialized market experts can provide valuable support to help connect Tribes to international and domestic market opportunities.

However, many small business opportunities will be available that may not require specialized assistance. "Buy local" markets are easily accessible places to sell nutraceuticals, forest botanicals, fresh floral, preserved floral, charcoal, aromatics, nuts, berries, roots, cut greens, flowers, decorative woods, cones, seeds, Christmas greenery, chips, shavings, excelsior, sawdust, bark mulch, pine straw, firewood, flavorwood, syrups, honey, craft materials, mushrooms, native landscape plants, music woods, cultural and spiritual products. Internet marketing provides low cost access to large numbers of potential buyers.

The knowledge to conduct management, harvesting, and home preparation is already present in the Native American communities across the United States. However, training in how to prepare products for commercial markets, package for effective presentation, and care for raw materials after harvest may be valuable for tribal businesses. In some cases public programs such as university-based extension services can provide needed technical assistance.

The basic costs for equipment to manage, harvest, store, and initiate value-added activities can be very low. Large power equipment is not needed for many NTFP business operations. However, if the producer engages in commercial processing of food and nutraceuticals care must be taken to meet local, state, and markets safety requirements.

Non-timber forest products can provide business opportunities to all family members regardless of age. Many preteens and teenagers have skills to run a small seasonal business based on native plant products. NTFP businesses can help tribal families sustain intergenerational learning.

Forest greenery, Christmas trees, fresh fruits, preserved craft materials, fresh craft materials, fresh vegetables, nuts, cones and Christmas greenery all have horticulture markets to access with traditional products so there will be no need to develop a complete new marketing program for these products. By participating in the many associations and organizations that manage these horticulture markets, individuals and tribes can gain access to many potential customers.

The harvest and traditional processing of NTFP's represent great opportunities for business integration with cultural tourism. Hands on activities like wildcrafting have expanding local, national, and international audiences. The greatest value-add potential from harvesting and processing of NTFP's will be obtained when individual business or tribal enterprises can connect directly with the consumer. Test markets in the Pacific Northwest with u-pick wild berries, herbs, Christmas trees, Christmas greenery, mushrooms and floral products have all proven very successful. This form of direct marketing provides an enjoyable experience for the consumer as well as access to high quality products.

TRIBAL DECISIONS NEEDED:

- *Each Tribe or Native Alaskan village must make its own determinations of appropriate use of NTFP's subject to the prerogatives of local governance, community values, and cultural practices. There will be great demand for all native products. In some cases, this demand*

could result in unwanted pressure to increase harvest of traditional cultural resources. In other cases, protections of traditional knowledge, cultural resources, and special places may preclude distribution of NTFP's to people from outside of the Reservation.

- *Should NTFPs be incorporated into a branding and marketing program for solid wood products?*
- *Should marketing networks be developed for Native NTFP's to expand sales opportunities and provide access to expertise in product preparation and packaging? Are tribal and individually-owned enterprises that feature NTFP's best served through a new marketing program developed by ITC or might Native NTFP businesses be better served by joining the "Made by Indians" food and crafts program offered through the Intertribal Ag Council?*

Appendix

NON-TIMBER FOREST PRODUCTS COMMODITY GROUPS

Prepared by James Freed M.S.

FRESH AND PRESERVED HOLIDAY GREENERY & CONES

- These are the natural fresh and preserved vegetative materials that are used to decorate homes, landscapes, offices and buildings to provide a holiday atmosphere.
- The main holiday is Christmas but greenery is also used for Halloween, Greenery day (Japan) and Thanksgiving.
- Many of the products that are made from vegetative materials are based in historical cultural celebrations.

Raw Materials Resources

- All Native American tribes and nations are located in areas of the country where raw materials are harvested to supply the holiday greenery industry.
- Some of the trees that are used to supply the raw materials for the holiday greenery industry are: American Holly, English Holly, Live Oak, Eastern white pine, Balsam fir, Virginia pine, noble fir, white spruce, Douglas fir, Grand fir, red pine, Arizona Cypress, Colorado blue spruce, Eastern red cedar, scotch pine, western red cedar, Port Orford cedar, incense cedar, rocky mountain juniper, western juniper, western white pine, Common juniper, Ponderosa pine, Pinyon pine, Monterey cypress, Atlantic white cedar, Redwood, Northern white cedar, California red fir, Fraser fir, silver fir, Jeffery pine.
- Over 90% of the raw materials are harvested from forested stands of trees. 2% is generated from arboriculture efforts like pruning landscape trees and removal of landscape tree. 6% is generated as part of Christmas tree management programs. 2% is generated on commercial bough farms where the trees are grown specifically for the production of holiday greenery.
- Specialized raw materials like mistletoe, ivy, Oregon grape holly, palm fronds, snowberries, rosehips, laurel, lichens, deciduous tree leaves, pine cones, spruce cones, juniper berries, Spanish moss are used to add variety to decorations.
- There are over 297 different plant parts that are used mostly in local markets. Many of them are used to provide raw materials for Halloween, thanksgiving, Christmas.
- Native American can integrate holiday greenery management into their traditional forest management programs. By interplanting tree species used for greenery with timber species the first thinning of the forest can be done by harvesting the trees for holiday greenery.

Harvesting and Labor

- The management of the harvest of holiday greenery and cone products on federal lands has strong possibilities for the development of long term stewardship contracts between tribes and federal lands agencies.
- Tribes managing their lands for holiday greenery and cone products can control the harvest to insure sustainability of the native plant communities

- The beauty of marketing holiday greenery is that there is little large expensive machinery needed in production.
- The harvest is seasonal so it suits the person looking for part time employment to supplement their income.
- The harvest occurs at the time of the year when there are few other crops that need to be harvested by migrant workers. This means that there is a ready supply of workers who are willing to do this kind of seasonal work.
- Training of workers is not expensive or time consuming do to the uncomplicated manner of harvesting raw materials and the basic skills needed to manufacture finished products.
- Storage facilities to keep the raw materials cool can often be rented from other seasonal crops producers that are not using them at that time of the year. Many plant nurseries have unused cooling storage unites for rent.
- Refrigerator trucks and trailers can be rented or leased.
- Processing facilities do not need to be very sophisticated. Processing operations can be located in barns, vacant lumber manufacturing facilities, county fairground buildings, summer camp facilities.
- By timing pruning operations of forest trees to the times of the year when companies are looking for holiday greenery raw materials will enable forestry land owners to obtain funds from the sale of these boughs. Some forestry land managers will trade greenery for pruning and thinning activities. The USFS has stewardship contract that give the company doing the thinning and pruning operations the option of salvaging the boughs for use in the holiday greenery industry.

Markets and Marketing

- The markets are as varied as the product and producers both in size and scope.
- Family based companies can market their products to any Native American communities.
- Native American communities and business could develop producer to market internet programs to make it easy to for native owned business to sell in Indian Country.
- Family based fresh wreaths, garland, swags, center pieces, bulk greenery and boughs are sold directly to the consumer at farmers markets, holiday bazaars, online markets, catalogs, direct farm sales and local news paper adds.
- Direct marketing requires great people skills. Being able to meet the needs of the consumer is very important in a face to face business. Having the skills to handle difficult consumers is very important to long term success.
- In 2009 over 90% of the North American u-cut Christmas tree farms sold homemade wreaths, garlands, swags, center pieces and boughs. This greenery is a by-product of the Christmas tree management programs in most cases.
- In 2008 over 12 million evergreen wreaths were sold in retail markets America. The retail market place include nursery outlets, farm and Garden stores, florist shops,

Costco, Wal-Mart, Atlantic and Pacific tea company, Safeway, Kroger, Albertson, Piggly Wiggly, Lowes, Home Depot, true value hardware stores. The average retail cost of each wreath was 21.50. The average wholesale cost was 12 dollars. Over one-quarter of these wreaths were manufactured by small family based companies, producing less than 5000 wreaths per year.

- The manufacturings of dried herbal wreaths are important in the harvest season holidays like thanksgiving, but they are also produced and sold throughout the year. In 2009 over 4.7 million dollars was earned at the wholesale market level for raw materials in the USA.
- Cones are an important part of the green wreath business. They add character and variety to plane green wreaths. Over 2 million dollars worth of wild harvested cones were purchased in 2009.
- Cones are collected from forested lands in all parts of the United States of America. In 2008 dried cones were used in cone wreaths and bags of mixed cone collections that generated over 4 million dollars in wholesale market in North America. Over 60% of the cones are imported from China and other Asian countries. These cone wreaths and bags of cones are sold in craft stores.

Active Native Business – None that can be found on the internet or in visit buyer and tribal contacts.

Resources

- http://afsic.nal.usda.gov/nal_display/index.php?tax_level=1&info_center=2&tax_subject=299
- <http://christmasfarms.com/about-us.aspx>
- <http://florapacifica.com/>
- <http://cfgfloral.com/index.php?inc=christmas>
- <http://www2.hiawathacorp.com/>

FRESH, DRIED AND PRESERVED FLORAL PRODUCTS

- The floral products industry is one of the most organized and longest lasting non-timber forest products industries in America. Floral products are used in the manufacture of Florist decorations and handmade crafts products. These finished products are used around the world. Gifts of flowers are given for hundreds of reasons. Floral arrangements are used to celebrate beginnings of life and for the ceremonies at the end of lives. All major holidays around the world are celebrated with floral arrangements.
- Floral and products have been used by all native families and communities to celebrate all of the major events in their lives and to improve the living atmosphere of their homes and places of gathering.

Raw Materials Resources

- There is not a forested Native American community in the United State of America that does not have access to native plants that can be harvested by native peoples to supply raw materials to the floral industries.
- Native plants can be found for every type of environment, from dry and sunny to soggy and shady. With their variety of colors, stem, leaves and fruits they can add beauty and interest to any floral arrangement.

- In the Pacific Northwest salal, evergreen huckleberry, sword fern, Oregon grape holly and beargrass have been harvested from native forest lands for over 60 years.
- In the Southwest palm fronds, silver sage, blue sage, red stemmed dogwood, silver buffaloberry are harvested for local and regional markets.
- In the Northeast pussy willow, bayberry, river birch, eastern ninebark, mountain laurel plants are important native floral plants.
- In the southeastern inkberry, hoary azalea, spicebushes, wax myrtle, backhaw viburnum, saw palmetto, cabbage palm, Spanish moss are all used in local market, regional markets.
- Lake states produce many craft products from river birch trees, Paper Birch trees, Aspen, boxwood, fragrant sumac, Michigan holly, American witch-hazel and Carolina rose.

Harvesting and Labor

- Most harvesting is done with local labor that is working to provide subsistence funds or additional supplementary funds.
- The floral products industry that relies heavily on migrant workers and seasonal workers is the floral products industry harvest from the Pacific Northwest forest.
- Less than 1% of the floral products are harvested by the forest land owners.
- The management of the harvest of floral products on federal lands has strong possibilities for the development of long term stewardship contracts between tribes and federal lands agencies.
- Tribes managing their lands for floral products can control the harvest to insure sustainability of the native plant communities.
- Most land owners lease their lands to commercial harvesters. The landowners receive about 10% of the funds received by the harvesters from the brush houses.
- Harvesting is not a high skilled occupation but it is labor intense.
- Harvesting and basic procession does not require complicated equipment or buildings.
- Training of workers is not expensive or time consuming do to the uncomplicated manner of harvesting raw materials and the basic skills needed to manufacture finished products.
- Storage facilities to keep the raw materials cool can often be rented from other seasonal crops companies that are not using them during the harvest season.
- Refrigerated trucks and trailers can be rented for short season crops.
- Processing facilities do not need to be very sophisticated. Processing operations can be located in old barns, vacant lumber manufacturing facilities, county fairground buildings, summer camp facilities.
- Dry storage for shipping containers is a necessity.

Marketing and Markets

- Native American communities and business could develop producer to market internet programs to make it easy to for native owned business to sell in Indian Country.
- Floral products are marketed to all markets around the world.
- Small producers of fresh products can sell to Native American business like casinos, hotels and florist.
- The international markets are very sophisticated, well organized and require great knowledge of their workings to access them successfully.
- International markets buy in the millions of pounds and require the ability to supply high quality products in a sustainable timely manner
- Most producer/harvesters only access the local commodity markets. These markets pay by the pound and prices for raw materials have been little changed for over 30 years.
- Land owner typically only market to harvesters. This generates for the land owner about 10% of what the harvester.
- Most harvesters sell their products to local wholesale floral companies. The harvester share is about 10% of what the Wholesale floral companies receive.
- Wholesale floral companies sell to brokerage companies in foreign countries and in regional center in North America.
- The local brokerage companies sell to florist and local florist associations.
- Florist sells to the consumer. The consumer will be paying per piece for native plant greenery in their floral arrangement what the harvester received per pound for those plant materials.
- The markets that individuals, families, and small business are most successful participating in are the local markets for fresh, dried and preserved floral products. These include individual florist shops, garden nurseries, craft stores, farmers markets.
- Developing a relationship with a successfully local farm fresh fruit and vegetable market that would be willing to sell "forest fresh products" on consignment would be a great way to expand the marketing of local produced materials.
- Consumer direct markets are a growing industry. These markets are managed by local cooperatives and associations that link producers directly to consumers.
- The development of Native American floral products that have a historical and/or traditional use would be an important way to provide the floral markets with something unique. Products produced by natives using native techniques in harvesting and manufacturing are in great demand by exiting floral products markets.
- Special Native American floral products could be marketed directly to the consumer via the internet or they could be marketed to niche markets in Europe and Asia.

Active Native American Business – None found on the internet, tribal visits or interviews with buyers.

Resources –

- <http://cfgfloral.com/index.php?inc=floridagreens>
- <http://cfgfloral.com/index.php?inc=westerngreens>
- http://ultimatefloralindustrysupplyguide.com/results.php?category=Celebrations/Sentiments&heading=137&category_id=23
- <http://www2.hiawathacorp.com/>

CHRISTMAS TREES

- In 1901 Theodore Roosevelt wanted the practice of commercial wild harvesting to stop to insure the forests were protected. The harvests were not managed in any controlled way at that time.
- 1901 the first Christmas tree farm was started in New Jersey with the planting of 25,000 Norway spruce for the New York markets.
- The forest land owner in New England harvested wild trees and sent them into the Boston and New York markets. In the Upper Michigan peninsula the forestry land owners sold trees into the Chicago, Saint Louis and Cleveland markets. In 1950 the forestry land owners in the Pacific North West started selling wild Christmas trees into the southern California markets. These trees were all natural by-products of the logging industry.
- In the 1960's growers took steps to insure higher quality and consistent shapes of their trees. Christmas tree growing has move out of the forest and into the farming communities. The old traditional wild, fresh, local and natural tree has been replaced by highly cultured trees. Most trees are now sprayed for insects, weeds and diseases. They are sheared to control their shape and size. They are so uniform they do not look natural any more.
- As of 2004 less than one-third of the homes in America have real Christmas trees.

Raw material Resources

- Evergreen trees are the only trees managed for Christmas trees in North America.
- Native American can integrate Christmas tree management into their traditional forest management programs. By interplanting Christmas tree species with timber species the first thinning of the forest can be done for Christmas trees.
- Areas too poor for good timber production often make ideal locations for growing Christmas trees.
- Trees grown in the Pacific Northwest for Christmas trees are in rank of importance: Douglas fir, Noble fir, Grand fir, Fraser fir, Colorado blue spruce, silver fir, Scotch pine, white pine, white fir and California red fir.
- Southern growers rely on Fraser fir, Korean fir, Eastern white pine, Concolor fir, Norway spruce, white spruce, Virginia pine, Arizona cypress, Nordmann fir, Douglas fir.
- Lake state produce Christmas trees from Balsam fir, Canaan fir, Concolor fir, Douglas fir, Fraser fir, Scotch pine and white pine.

- 30 million trees are grown in plantations in the United State. Oregon is the number one state for plantation grown trees.

Harvest and Labor

- Over 90% of the labor used to shear and harvest the trees is migrant labor. Commercial crews move around the states doing this work on a contract basis.
- In 2008 over 8 million trees were cut by the consumer at choose and cut tree farms.
- 300,000 trees are harvested from national forest, state forest and Bureau of Land Management lands.
- Trees harvested on remote forest lands are often removed from the site by helicopter. This is very costly but gives access to very difficult and remote sites.
- The major expense in growing trees is land ownership. Second major expense is labor and third is equipment.
- Specialized handling equipment has been designed for post harvest Christmas tree care.
- Wrapping and cleaning the tress is time consuming and hard work.
- Harvesting is not complicated but it requires individuals that will work in weather that is often cold and wet.

Markets and Marketing

- The fastest growing market for Christmas trees is the “choose and cut” markets. This is the market where individuals and families go to a tree farm to harvest their own trees.
- “Choose and cut trees” or “you cut trees” programs provide families buying the tree with an experience when they are selecting their trees. They listen to music, talk to Santa, buy decorations for the tree, buy other fresh greenery products, drink hot chocolate and do all this as a family.
- The “choose and cut” markets provide the growers with the most income per tree, but require the most personal contact with the consumer. Successful “choose and cut” operations must be within 2 hours of major population centers.
- Native American Christmas tree growers could develop truly unique buying experiences for their clients. Tree harvest weekends on tribal lands with native guides.
- Native American communities and business could develop producer to market internet programs to make it easy to for native owned business to sell in Indian Country.
- The use of native grown trees in native business, casinos and hotels is a good market for local small producers.
- Native artisans could develop tree and home decorations that feature toys and gifts that would be given within a Native American community.
- Native American communities could manage their trees organically to develop and access the high valued organic markets places like Wholefoods.

- In 2009 there was a demand for 30,000 organic Christmas trees in California that was not met by any traditional growers.

CHRISTMAS TREE PURCHASE FIGURES SINCE 2002
(In millions)

	2002	2003	2004	2005	2006	2007	2008
Real	22.2	23.4	27.1	32.8	28.6	31.3	28.2
fake	7.4	9.6	9.0	9.3	9.3	17.4	11.7

WHERE PEOPLE BUY REAL TREES

LOCATION	2004	2005	2006	2007	2008
Choose & Harvest Farm	27%	22%	29%	21%	31%
Nursery/Garden Center	19%	17%	15%	20%	11%
Chain Store (Wal-Mart, Home Depot, etc.)	16%	19%	19%	23%	24%
Retail Lot	13%	19%	25%	12%	7%
Non-profit Group (Boy Scouts, churches, etc.)	8%	12%	9%	9%	18%
Internet	N/A	N/A	4%	N/A	N/A
Other	13%	7%	9%	15%	9%

Active Native American Business – No business were found on the internet, in trade associations or in visits with tribal contacts.

Resources

- <http://www.christmastree.org/home.cfm>
- <http://www.christmastreeassociation.org/>
- <http://virginiachristmastrees.org/>
- <http://www.nh-vtchristmastree.org/search.php>
- <http://www.texaschristmastrees.com/types.html>

CRAFT MATERIALS

Craft materials include all the materials from roots, stems, bark, twigs, leavers, flowers, berries, seeds and fruits needed to make dyes, paints, picture frames, toys, games, clothes, utensils, specialty furniture, rugs and storage devices.

Raw Materials Resources

- The raw materials for the craft industry are the plants that make up the ecosystem of every Native American forest.
- These plants are all the plants that grow in association with the trees and the trees themselves.

- The plants that support the local, national and international craft programs are the same ones that native peoples have used for thousands of years.
- The harvest of the native plants by Native Americans was in a sustainable manner that took into considerations the needs of the plants, animals and humans when harvesting and managing these native plants.
- dry twigs of the deciduous shrubs are used in baskets, furniture and specialty picture frames
- Bark of the Alaskan yellow cedar trees, juniper, leatherwood, western red cedar, Atlantic white cedar, Eastern red cedar, ironwood trees, corkwood trees, redwoods, giant sequoia was used for weaving of baskets, paints, dyes, nets, clothes, hats, shoes and rugs.
- Roots of over 87 different plants are used in weaving of baskets, hats, lamp shades, table mats and wall hangings.
- Knots and burls are used in the manufacture of specialty utensils, candle holders, pipe bowls, picture frames, coffee tables and end tables.
- Stems of shrubs and small trees are used for wicker furniture, candle holders, utensils, picture frames, and canes.
- Dried flowers are used as home decorations, potpourri, dyes and personal decorations.
- Dried mushrooms are used in the manufacture of natural dyes and nature crafts.
- Berries are used in potpourri mixes, display art and dyes.
- Dried flower buds are used in potpourri mixes and dyes.
- The largest sources of craft materials are Mexico, Asia, Africa and India.

Harvest and Labor

- Most of the natural raw materials are harvested by wild crafters.
- Wild crafters will harvest for a specific market and products.
- There are few large commercial wild crafting operations. The large commercial harvesters do wild crafting to supplement their incomes between other businesses.
- Most of the labor in the harvesting and first step processing is done in small local brush sheds and homes.
- The concentration sheds buy from individual harvesters or small groups of harvesters.
- The concentration sheds sort, clean, grade and bundle the raw materials into units that can be sold to the wholesale craft buyers in the US, Canada and Europe.
- A few artisan and craftsman will do their own wild crafting. This is form of wildcrafting generates the most income for the harvesters/craftsman.
- Native American wild crafters can harvest on tribal lands and traditional and accustom harvest sites on public lands.

- Tribal wild crafters can work with tribal forest managers to develop wild crafting management plans that are included forest management plans. This will insure a sustainable supply of raw materials and native plant communities.
- Raw material acquisition by tribal member should be part of all harvest plans. Bark and root harvest can be done before the trees are felled or at the landing during times when logging is not operating.

Markets and Marketing

- Most markets will be very specialized. Harvesters will be collecting for a specific artisan or craftsman or group of artisans and craftsman.
- Craftsman working on projects in Native American communities can be contacted with local producers to supply the materials that the craftsman can use.
- Most marketing will be through the internet arts and craft site or artist and crafts publications that target the users of the raw materials.
- Native American communities and business could develop producer to market internet programs to make it easy to for native owned business to sell to markets in Indian Country.
- Direct marketing at local arts and craft festivals, shows, fairs and exhibitions has proven very successful. The selling of raw materials needed to make art and craft projects has proven very profitable. This gives the person attending the event a place to buy the materials they need to make the project they learned how to do right on site.
- The large craft stores like Joann fabrics and Michaels do not buy local. Almost all their supplies come from international suppliers.
- Tribal wild crafter can access the markets best by working together to develop internet sites that market raw materials for craft projects.
- Craft Kits and art project kits that have all the needed supplies to make a basket, painting, rug, hat or utensil have been very successful in local, national and international markets.
- Wild crafting can be linked to the tribal communities' tourism programs. Individuals and groups can attend tribal sponsored wild crafting excursions where they learn about the correct way to harvest, prepare and use native plant materials for craft and art projects.
- Tourism activities associated with wild crafting will help develop long term relationships between harvesters and consumers.

Active Native American Business – Many artisans and craftsman were found. The list is native wild crafting of forest products is very small. Most craft sites and galleries focus on end products of beading, leather work and arts.

- <http://www.redlakenationfoods.com/prod-crafts.html>
- <http://artfromthetribe.com/>
- <http://theoscrownsnest.tripod.com/sticks.html>
- <http://petersongalleries.com/>
- <http://www.twodogssouthwestgallery.com/>
- <http://www.matoska.com/catmain1.htm>

- <http://www.crazycrow.com/>
- <http://naarts.com/default.aspx>
- <http://www.nativeart.net/>
- <http://www.nativespirit.com/basket.htm>

Resources

- <http://www.nativetech.org/>
- <http://nativeartsandcultures.org/>
- <http://alaskanativearts.org/index.aspx>
- <http://jacobsonhouse.com/kiowa-five/>
- <http://www.nativeart.net/artists.php>
- <http://www.atada.org/>
- <http://www.nnaba.org/>
- <http://onaba.org/>
- <http://www.californiabaskets.com/weavers.html>
- <http://www.simplynantucketbaskets.com/BasketryLinks4.html>

SPECIALITY WOODS PRODUCTS

- The woods for these products are usually not of construction grade. Often the wood has defects that make it valuable to craftsman but not to builders. Blue staining due to fungus infection on maple and pines is considered a valuable trait in the specialty woods markets.
- Specialty woods are used in the restoration of historical wooden boats, historical homes and wooden airplanes.
- Wooden Musical instruments, hunting bows, shuttle cocks for weaving, rot resistant fence post, water tight barrels, kegs and cask, hot tubs, saunas, crop support poles and hand crafted storage boxes all are marketed with specialty woods from all the nations forest.

Raw Materials Resources

- Land managers must look at their trees for all uses not just timber. A single misshapen maple tree in a stream area may not be of any value to the land owner but may be worth thousands of dollars to a music wood buyer.
- Trees providing specialty woods are often the ones with special barks like birch for canoes, cork oak tree for bottle corks.
- Trees like western red cedar, Atlantic white cedar, Western juniper, black locust, Arizona ironwood, costal redwood, red oak, western yew, honey locust, Osage orange, madrone, Bald Cypress all have woods with high rot resistance which make them very valuable to industries making outdoor furniture, Saunas, Hot tubs, Fence post and garden structures. These trees all have lumber value but the trees that do not meet lumber standards can and should be used for specialty wood products.
- Raw materials for the specialty woods products industry are often woods produced as byproducts of traditional timber management programs.

- Thinning of over stocked trees stands will generate large amounts of small diameter trees. If these trees can be salvaged they can be used for hops poles, wooden fence rails, Teepee frames, tent frames, snowshoes, tool handles and garden structures.
- A single maple tree may be only worth a few dollars as chips but if it has figured wood in it can be worth up to 2 dollars per pound.
- Trees with defects like blue stain are used in the cabinet industry.

Harvesting and Labor

- To take advantage of the specialty woods programs Native American forest land managers, lumber mills and forestry crews will need to be trained to know what other values can be obtained from their activities besides timber.
- Because of the high value of these products wood poaching is quite common. A crew of 3 or 4 persons will scout or prospect the area. They will blaze the side of the trees away from the road. If they find a candidate tree they will come back later.
- Harvest crews legal or illegal will often cut the trees and remove only the parts that they can sell.
- Contracts and Leases with licensed harvesters is the best way to insure that valuable specialty woods are protected.
- Most harvesters/producers of raw materials for the specialty woods markets have very small operations.
- One of the best sources of specialty woods is portable saw mills that do custom cutting. These mills can take trees that have little or no lumber value and work them into forms that make the very valuable to the specialty woods users.
- Some raw materials are manufactured for a very specific product like figured woods for musical instruments and high valued furniture.

Markets and Marketing

- Most specialty wood markets are very demanding in the specifications for the raw materials that they will buy.
- If a tribal member or organization wishes to enter the specialty woods markets they need to spend time researching what these markets are willing to pay for.
- These markets do not have many written grades or standards. Most of these standards are "just know" by the people working with and in the industry.
- Some universities and trade associations have developed marketing site that link producers to buyers.
- Native American communities and business could develop producer to market internet programs to make it easy to for native owned business to sell to business in Indian Country.
- Craftsman need to contact the managers of the gift shops in tribal casinos and hotels to have their local products sold there.

- The international markets for these wood products buy and sell from brokers and marketing firms. Very few will be direct buyers from small specialty woods producers.
- Native Americans wishing to enter this market can capitalize on their long history of using specialty woods to develop their own **"Market to Market"** programs.
- If there was an online site where native producers of specialty woods could advertise their products it would get worldwide coverage.
- E-Bay and similar auction sites have thousands of specialty wood products for sale.
- The best way to maximize the marketing of native American specialty woods is for raw materials producers to work directly with the craftsman that need the products.
- Native craftsman making, bentwood boxes, musical instruments, wooden boats and storage barrels can work with the producers of the raw materials to record the story of the harvesting and processing of the raw materials. Then the craftsman can make a video presentation that can be given to the buyers of their products. This is a great marketing tool to show proper traditional native plant management along with the making of the finished product. The buyer will become an extension of the specialty woods marketing programs.
- One of the largest producers and marketing companies of native art is located in china.

Active Native American Specialty Woods Business – most Native American made products are sold in galleries and online stores not owned by Native Americans.

- <http://www.justart.ca/native-bowls-and-boxes-cat.htm>
- <http://www.nativedesigns.3hawkstrade.com/>
- http://www.nativeamericantrade.com/zencart/index.php?main_page=index&cPath=1
- <http://www.nativetimberlogfurniture.com/>
- <http://moose-r-us.com/Item/lodgesamples/mnbbhandledwovenbasket.html>
- <http://www.boxesandflutes.com/oilsboxes.html>

Resources

- <http://www.woodenboat.com/>
- <http://www.antiqueboat.com/>
- <http://www.wcha.org/>
- <http://www.worldcooperage.com/oak-source>
- <http://www.forestlumber.com/>
- <http://www.turningwood.com/>
- <http://advantagelumber.com/>
- http://www.cookwoods.com/InstrumentPage_Main.htm

NATIVE LANDSCAPE & RESTORATION PLANTS WILD HARVESTED

- Native plants for the landscape & restoration efforts include all the plants from the forest of North America. The trees, woody shrubs, herbaceous shrubs, vines, grasses, ground covers and wetland are all needed to meet all the goals of landscapers and restoration programs.
- Native landscape plants are used in watershed restoration, restoration of culturally significant native plant harvesting areas, revegetation of forested areas disturbed by fire, landslides, road building, logging activities, home and business landscaping.
- The use of native plants for restoration work has increased the demand of these plants by over 7% per year since 2001.
- Wild harvesting was the major method of supplying the demands for landscaping and restoration native plants until 1999.
- In 1998 over 89 million dollars' worth of plant were harvested from federal lands. This dropped to 28 million dollars in 2007.
- Changes in federal land management programs created fewer this large opening in the forest where most of the young seedlings and saplings were harvested.
- This increased demand has created stress on the forest systems to produce plants sustainably for the nursery and restoration industries.
- To deal with this imbalance between what the natural forest systems could supply over 900 native plant nurseries have been put into production across North America since 1999.
- Since 2000 the intertribal nursery council has identified over 100 tribal nurseries produce native plants.
- State nursery and landscape associations have seen increase in commercial nurseries growing native plants. Washington state nursery and landscape association had 1 native plant grower in 1990 in 2009 they have 121 grower members.

Raw Material Resources

- Wild harvesting of native plants is generally conducted in areas of over stocking like clearcuts, utility right of ways, old logging landings, old burns, active road right-of-way, abandoned railroads, abandoned logging roads and old fields.
- Plant salvage companies collect plants from areas of forest lands that are scheduled to be converted to other uses like housing developments, transportation prisms, utility right-of-ways, and agriculture or business development.
- 31 states have transplant laws that now require wild harvested plants that are sold for resale must kept in transplant beds for 1 growing season. This extra year of handling raised the cost of wild harvested trees to a place where they lost their market advantage over nursery grown plants.
- Wetlands plants are often salvaged in large number to be used in mitigation programs.

- Specimen trees and shrubs are plants that have phenotypic characters that make them stand out in relation to other forest plants. It could be a Douglas fir that has weeping form, dogwood with pink bloom, variegated ash trees, dwarf spruce or a wild huckleberry bush with white berries.
- Trees and woody shrubs growing in very harsh or suppressed conditions will become dwarfed. These dwarfed plants are harvested for the Bonsai plant growers.

Harvesting and Labor

- Specialized wildcrafters locate, purchase and remove specimen trees and shrubs for the high valued landscape markets. They often removed the plants with trained crews working with tree spades or heavy equipment where the sites permit.
- 55% of the harvesting is done by local part time labor working for nurseries, reforestation companies, landscapers and developers.
- Contract crews are used by large revegetation companies to obtain large amounts of seedlings and transplants for major planting project such as soil stabilization efforts after fires, erosion events and major construction events.
- 90% of the transplants are hand dug by with a shovel and removed bare root and have survival rates of less than 40%.
- If the trees are root pruned the year before removal they will have a 86% survival rate and thicker roots in a ball.
- Harvest on federal, state and commercial forestry lands requires lease permits. These permits were free or very low cost until the 90's when all land owners changed their leasing practice to charging rates that took into consideration the market value of the transplants.

Markets and Marketing

- Local landscapers working on tribal projects would provide a great market for local native plants.
- Specimen plants are sold to the high valued container markets and big tree markets.
- A fast growing market for specimen trees is the forest gardening markets. This is where home owners in housing developments want their own little instant forest.
- Direct marketing to home owners via farmers markets is a great seasonal market for wild crafted native landscape plants. Harvesters can take orders for specific plants and deliver them directly to the home owners.
- Native American communities and business could develop producer to market internet programs to make it easy to for native owned business to sell to other business in Indian Country.
- Bonsai plant collectors can be contacted through bonsai exhibits, shows and magazines. Displays of wild harvested plants at collector events are very effective methods of making contacts with buyers.
- Advertising in trade journals for landscape architects, landscape designers and companies is one of the preferred methods of marketing high valued landscape plants.

- Joining horticulture, nurserymen's and landscapers associations makes it possible for harvesters to better understand the needs of the members and provide native plants to meet those needs.
- Contracting with plant retail nurseries to provide them with unique plants for their customers. Wildcrafters can provide this market with products that cannot be obtained from commercial greenhouses and plant nurseries. A great example of this product is groupings of over stocked alpine firs, mountain hemlocks or alpine larches. These groupings of many small plants are used in container and rock gardens.
- The internet is a fantastic way to get the initial word out about harvester's products, acquisition methods and services. It is also a great way to obtain customers evaluations of products and services.

Active Native American Business

There were no Native American wildcrafting companies specializing in providing wild harvested landscape and revegetation plants found in internet search, buyer interviews and industry publications.

Resources

- <http://www.nurserytrees.com/>
- <http://www.hoopa-nsn.gov/departments/forestry/tsemeta.htm>
- <http://www.nativeplantsalvage.org/>
- http://www.wholife.com/issues/10_6/03_article.html
- http://harvestseeds-nativeplants.com.au/about_us.php
- <http://www.extension.umn.edu/specializations/environment/components/biodiversity.html>
- <http://www.azda.gov/ESD/nativeplants.htm>
- http://indiancountrynews.net/index.php?option=com_content&task=view&id=5907&Itemid=114
- <http://gardening.wsu.edu/text/nvgettng.htm>
- <http://el Paso.tamu.edu/research/Docs/Plant%20Acquisition%20Ethics.pdf>
- <http://nativeharvest.com/six-nations-nursery>
- <http://flnativeorchids.com/nativelaw.htm>
- <http://plants.usda.gov/pmpubs/pdf/mtpmcsylandrecl.pdf>
- http://thegardenerslist.com/Resources/buy_native_plants.html
- <http://www.tardigrade.org/natives/nurseries.html>
- http://www.lrconline.com/Extension_Notes_English/pdf/trnsplntng.pdf
- <http://www.afnn.org/docs/afnntransplantspolicy.pdf>

FUNGI WILD HARVESTED AND CULTIVATED

- Over 10000 different fungi are growing in North America
- 250 plus fungi are considered edible.
- 250 plus fungi are considered poisonous.
- 9500 are of unknown edibility.

- Commercial harvest generates of between 9 million and 30 million dollar annually from wholesale sales in the Pacific Northwest.
- Mushroom supplies are greatly effected climate conditions. In years with dry conditions during traditional harvest seasons the crop can be nonexistent at levels needed for commercial commodity sales.
- Since 1990 large commercial crews of migrant workers harvest over 40% of the Morels and Chanterelles in the Pacific Northwest.
- Nationwide the yearly harvest of wild mushrooms is valued at over 180 million dollars
- There are 6 major species of edible fungi that are harvested for large commercial sales. They are Morels, Chanterelles, Shitaki, Boletus Edulis, Matsutake and Maitake.
- The wild harvest of mushrooms in the United State of America represents less than 10% of the total world harvest.
- Fungi grow in every forested environment.
- Beneficial mushroom management in forest systems is little studies and often relies on harvester experiences and research.
- 19 mushrooms can be cultivated in forest conditions.
- Truffles are a high valued fungus that grows on the roots of conifers and Oak trees in North America.

Raw Material Resources

- According to the North American Mycological Association over 6 million people in the United States maintain that they have harvest wild mushrooms for personal use.
- Until 1980 most of the commercial harvesting was done by individuals or family groups.
- Mushroom harvesting was a source of subsistence income for forest workers during down turns in timber markets.
- Harvesters and land owners do little management of the fungi to insure sustainable long term production.
- Harvesting techniques have been studied by USFS, BLM and state forestry departments for short terms but do to funding cuts none of these programs are long term and none are ongoing at this time.
- Mushroom supply is most affected by the way the forests are managed for timber production. The removal of the overstory will eliminate or diminish mushroom production.
- Shorter rotations for timber put stress on fungi that go in association with more mature timber stands.
- Forest fires are sites where black morels are found for 2 to 5 years after the fires in commercial quantities.
- Major insect events that kill off large amount of trees stimulate large blooms of mushrooms.

- The use of forest fungicides and iron based fertilizers has show a diminishment of wild mushroom crops.
- Traditional family harvest sites are being harvested by commercial pickers in all areas of the United States of America.
- The use of permits and leases for both commercial and recreational harvesting on commercial forest lands has forced many harvesters on to private forest lands.
- Commercial harvesters are mostly new US citizens. Asians and Hispanics make up the largest numbers of commercial harvesters.
- New US citizens from the old Soviet Union (over 30,000 in the PNW) buy commercial harvest permits to supply their communities needs.
- Forest lands certified organic for wildcrafting will increase the value of the mushrooms harvest from these lands by 3 to 5 times.
- To provide a more consistent crop of mushrooms private land owners are establishing cultivated mushrooms on logs and chips from trees that are removed as part of thinning operations or have no commercial timber value.
- Land owner written leases and permits are required in most states.
- The land owner can expect to receive about 15% of the value that the harvester earns.
- The average commercial harvester can make 75 dollars. Good harvester with controlled sites can make 200 plus dollars per day.

Harvest and Labor

- Truffles are now harvested commercially in all parts of North America.
- The oak and conifer forest of the Pacific Northwest have seen commercial crews harvesting of truffles since 1996.
- Truffles are harvested by hand by removing the dirt around the roots of trees thought to have truffles on them. Some harvesters will use dogs to find the truffles others will watch native animals that forage on truffles to give them the locations of active truffle sites.
- If the soil is left without covering the roots the trees will stressed and die.
- Most commercial mushrooms are purchased from the harvester at buying sheds located in the harvest area.
- Commercial mushroom harvesters are paid by the pound.
- Mushroom harvesting is very seasonal. Most mushrooms season last only 8 to 10 weeks.
- The price paid the harvesters fluctuates during the season. Prices are high at the start and then drop as more harvesters and mushrooms enter the markets.
- Commercial mushroom harvesting is very labor intense and low tech. 14 hour days are common and you only need a knife and picking basket.
- Storage of the fresh mushrooms must be in a cool (40 degrees) area with good ventilation.

- Mushroom must never be washed but should be cleaned of dirt and debris with a soft brush.

Markets and Marketing

- Mushrooms can be sold in any market from the small farmer's roadside market to the super organic markets like whole foods.
- Native American communities and business could develop producer to market internet programs to make it easy to for native owned business to sell to buyers in Indian Country.
- Selling mushroom directly to the native casinos and hotels for use in their restaurants should be a market goal of any native wildcrafter.
- 85% of the mushrooms that are harvested from the United States forest for commercial sales go to Asia or Europe.
- What the harvester received for pound of fresh mushrooms is what the consumer pays per ounce for fresh mushrooms.
- Mushroom can be marketed fresh, dehydrated, frozen, pickled and smoked.
- A direct sale of mushroom to restaurants is one of the most profitable forms of direct sales for local wildcrafters.
- An internet sale of mushrooms provides a great way to sell mushroom based products for the wildcrafter who is not located near the market place.
- A direct sale of mushrooms in employee lunchrooms in large business and government buildings has been tested by local growers in Washington, Oregon and California with great success.
- A guided wildcrafting event on native lands is a marketing activity that gives the client an experience based program with a native guide. These programs can be used to protect the sustainability of the mushroom crops. In Japan these events cost from 250 to 1000 dollars US for a two day weekend.
- Cultivated mushrooms markets are controlled by large commercial mushroom growers.
- Small cultivated mushroom growers are best suited to market into the direct markets like the farmers markets and to restaurants.

Native American Active Business

In a search of the internet, visit with native forest lands managers and literature search, there were no native business identified that harvested, processed and marketed wild or cultivated mushrooms. Four tribes in the Pacific Northwest did lease their lands to non-native harvesters.

Resources

- <http://www.marxfoods.com/products/mushrooms>
- <http://www.fungimag.com/>
- http://www.mykoweb.com/na_mycos.html#WA
- <http://www.foodsinseason.com/mushrooms/wild-mushrooms.php>

- http://www.madaboutmushrooms.com/mad_about_mushrooms/commercial_mushroom_picking/
- <http://www.mushroomsbymillard.net/>
- <http://news.opb.org/article/5917-mushroom-harvest-transforms-oregon-outpost-multicultural-mecca/>
- http://www.matsiman.com/formalpubs/chapter_3.htm
- http://www.fungaljungal.org/papers/Richards_NativeNTFP1997.pdf
- <http://www.organicmushrooms.com/>
- http://www.diamondorganics.com/prod_detail_list/27
- <http://attra.ncat.org/attra-pub/mushroom.html>
- <http://mushroomcompany.com/>
- <http://www.globalbuyersonline.com/Mushroom&Truffle/>
- <http://fungi.com/>

FRESH AND PRESERVED FOODS FROM NATIVE PLANTS

- Foods from native plants have been an essential part of all Native American families and communities for thousands of years.
- Native American's cultivated and protected food producing plants to insure their sustainability.
- The food products are quite varied. Blueberries and Wild rice from the great lakes regions, Maple syrup and cranberries from the northeast, Persimmons and Ramps from the Smokey mountains, Hawthorne and Paw Paws from the southeast, Pecans and Greenbrier from Texarkana, Pinyon pine nuts and prickly pears from the southwest, serviceberries and wild huckleberries from the Rocky mountains, Camas and elderberries from the pacific northwest, wild moosberries and high bush cranberries from Alaska.
- Finished products include fruit leathers, soups, teas, pastries, sweeteners, frozen vegetables, trail mixes, jams, jellies, wines, beer, liquors, flavorings, meat rubs, sodas, candies, stuffing's and many more.
- The use of forest native plant products for foods both fresh and preserved has increased by seen a steady increase since 1998 as the consumers look for different foods, produced naturally in local forest.
- Native plant food products from North American forest have been a source of subsistence for many new Americans. People coming to the United States of America from Asia, Russia, Europe, Central America and South America all are very familiar with wild harvesting of native foods.

Raw Material Resources

- Native Americans have their traditional and accustomed harvest areas that can be great sources of raw materials.
- Many native communities do not want to see their native plant products commercialized for fear of over harvesting and loss of traditional gathering sites.

- Native communities and individual harvesters working with federal and state land managers can develop long range management programs using traditional management techniques.
- Over 600 native plants are used as foods by native peoples, wildcrafters, commercial harvesters and personal use harvesters across North America.
- The roots, leaves, flowers, fruit, nuts, bulbs, tubers and corms, buds and bark are harvested for used.
- Raw materials are obtained by wildcrafting natural forest stands, picking cultured stands in commercial forest.
- Sap is harvested for syrups and sweeteners in the spring, berries jams and jellies in the summer, nuts for pies in the fall, roots and bark for teas in the late winter, bulbs for soups in the spring and buds for teas in the spring.
- Lichens, moss, fungi, algae products can be harvested from mature old growth timber.
- Blackberries, raspberries, thimbleberries, huckleberries, gooseberries, blueberries, moosberries are all harvested in open areas of the forest or very young forest.
- Pine nuts, walnuts, hickory nut, acorns, pecans, persimmons are harvested from young mature trees.
- Forested wetlands provide a variety of products from labadore tea, salmonberries, elderberries and cranberries.

Harvesting and Labor

- Most harvesting is done with only hand equipment that includes knives, shovels, rakes, pruners and ladders.
- Harvesting is done as individuals, family groups or small commercial teams.
- Most harvesters learn their trade from older family members or as part of a commercial harvesting crew.
- Harvesting is very seasonal which fits the lifestyle of many residents of forest communities.
- Rules for harvesting wild food plants varies by state, land management agency, commercial forestry company, private land owners and tribal land managers. They all have one thing common you must have a permit to harvest or you are stealing.
- States like Oregon and Washington have strong nontimber forestry laws that require special permits to transport and sell wild food products.
- Under the federal food safety laws records are to be kept of which harvester sold what products from lands located where?
- Some state and local health department are requiring that harvesters obtain food handling permits before selling at public markets.
- The most important activities that harvesters can do to increase the price received is to cleaning, grading and protecting the quality of the products after harvest.

- Harvesters must have equipment to keep the fresh fruits and berries cool and moist. If the berries and fruits remain at ambient temperatures they will soften and spoil before they can be sold.
- Lands certified organic for wildcrafting will provide the wildcrafters with double or even triple the incomes they can obtain from nonorganic crops.

Marketing and Markets

- The closer the producer gets to the final consumer the higher will be the return on the time invested to procure the wild food products.
- Most people who harvest wild food products do not have the people skills needed to do retail or direct marketing.
- Lack of marketing skills forces most harvesters to sell their products to the commodity markets. The buyers for these markets pay pennies per pound when the finished products will be sold for dollars per ounce, but they ask few questions and pay in cash.
- Local direct markets provide small operations access to the fresh and processed markets.
- Many of the farmers markets will allow wildcrafted foods, herbs and teas to be sold directly to the consumer. Membership in the farmer's market association is often required and fees are charged for booth space.
- Ads in local newspapers provide opportunities for harvesters to sell directly to consumers.
- *Forest Fresh* portable markets are used to travel to festivals, fairs and community events to sell directly to attendees.
- Harvesters with good people skills and knowledge of customer needs can sell into local restaurants. These markets require consistent and timely products that meet their individual specifications of size, color, shape, maturity and volumes.
- Most communities now have community assisted agriculture programs that link buyers with sellers of local fresh produce.
- International markets would be accessible to native producers if the producers could meet the volume, labeling and shipping requirements. To meet these requirements most small producers or even individual tribes would need to band together with other producers to access larger international markets.
- Native American produced native food products have a strong demand in national and international markets.
- Most finished food products based on native plants are produced by nonnative companies. These companies buy in bulk from local producers and then manufacture their own labeled wild plant products.
- Tribal producer often never even sell their products outside of their communities. One native American from Georgia told me, "*native people have a real problem asking for money for their food products, their tradition of sharing what they have is still strong*"
- The Natural foods markets are a 2.6 billion dollar industry in the USA alone.

- These natural foods markets pay a premium for local, sustainable, natural, wild, traditionally gathered and traditionally processed products.
- Native American communities and business could develop producer to market internet programs to make it easy to for native owned business to sell to other business in Indian Country.
- Specialty fruit based wines are available in all wine shops and most major grocery stores.
- The farm to school program is active in most states. It is a method for local producer to sell directly to local schools to provide them with high quality products.
- A Native American produced wine, sprints, beer or cooler would be well received by all markets local, national and international.
- Markets for sodas, bottled water and natural fruit drinks are expanding as populations want the alternatives to natural water. Birchbeer, Rootbeer, Birch water and water sweeten with maple sap have all been marketed with great success in America, Europe and Asia.
- Linking up with the owners and managers of the Native American casinos/hotels to have native produced products used on site and for sale to customers would be a great market for local products.

Active Native American Business

- Small family based businesses are located in native communities in across the USA.
- There are 10 family based Herbal tea companies in North America.
- No large processing or marketing efforts are Native American owned and operated.
- Tribal cache in Alaska is quiet will organized <http://alaskatribalcache.com/>
- Tribal agriculture foods are very well organized and coordinated by Intertribal agriculture council <http://www.americanindianfoods.com/>

Resources

- http://afsic.nal.usda.gov/nal_display/index.php?info_center=2&tax_level=2&tax_subject=299&level3_id=0&level4_id=0&level5_id=0&topic_id=1433&&placement_default=0
- <http://www.uga.edu/nchfp/index.html>
- <http://www.nal.usda.gov/afsic/pubs/csa/csa.shtml>
- <http://www.northernbushcraft.com/plants/index.htm>
- <http://www.farmersmarketsintheusa.com/>
- <http://www.svt.org/>
- <http://www.nativeamericantea.com/>
- <http://www.kstrom.net/isk/food/plants.html>
- <http://www.theeaglesnestonline.com/content/products/NativeAmericanHerbalTea.htm>
- http://www.arnatural.org/wild_foods.htm
- <http://www.wildblueberries.com/>
- <http://wildfoodplants.com/resources>

- <https://www.wholefoodsmarket.com/company/vendors.php>
- <http://www.wildpantry.com/jelly.htm>
- http://www.thedesertdancer.com/Cactus_Jelly.html
- <http://www.cactuscandy.com/oscommerce/>
- <http://alaskasyrup.com/>
- <http://www.alaskabirchsyrap.com/albipr.html>
- <http://www.root-beer.org/>
- <http://www.lewis-clark.org/content/content-article.asp?ArticleID=2129>
- <http://www.cosbyrampfestival.org/>
- <http://www.hoodsport.com/main/wines.html>
- <http://www.hort.cornell.edu/forestfarming/learningf531.html?unit=6§ion=Marketing>
- http://www.agmrc.org/commodities_products/nuts/pine_nuts_profile.cfm
- http://www.agmrc.org/markets_industries/understanding_markets.cfm

MEDICINALS, ESSENTIAL OILS, FRAGRANCES AND TEAS

- Native herbal plants like nettles, saw palmetto, Aloe, Juniper and Sassafras have been used for thousands of years by native peoples.
- Products from native plants includes aromatic oils, massage oils, pain remedies, skin care lotions, hair care products, nutraceutical, mental health products, vitamins, eye health products, stomach care products and thousands more.
- The consumer in the USA and around the world is looking for more natural products that have been gathered and processed in a traditional manner.
- Prices paid for aromatic and Essential Oils reached \$700,000,000 in 2008.
- Native herbal plants can be managed through all stages of forest development from open clearcuts to old growth stands.
- Native plants have great value in native communities. The importance of native plants for medicinals, essential oils and fragrances elevated these plants and their products to spiritual status within all tribes.
- There is great pressure from pharmaceutical companies and universities with schools of pharmacy to document all the medicinal qualities of every native plant. Because of these efforts and long standing tribal values on native plants much of the native knowledge on the management and use of the plants of North America is guarded very closely.
- The use of native plants of North America has been documented by early missionaries, fur trading companies and plant gathers from around the world.
- Many of the North American plants are similar to plants growing in other ecosystems around the world that have been studied for their medicinal, essential oil and fragrances.
- Native people who have secured traditional and accustomed harvest areas have the opportunity to manage and market these products.

- The natural medicine industry is the one of the most regulated in the world. Because of its impact on the pharmaceutical industry profits it is watched very closely by their associations.
- Over 67% of the world's population relies on native plant based products for their health and wellness.
- The use of herbal teas for medicinals values has generated over \$175,000,000 in the USA each year.

Raw Material Resource

- Over 800 herbs, mushrooms, grasses, shrubs and trees have been found to have medicinal qualities.
- Aromatic products are often the by-product of industries like paper making and distillations process.
- 60% of the world's artificial vanilla came from one pulp plant in Ontario CA until they changed their pulping process in 1990's now less than 15% is generated in that manner.
- Bark, buds, roots, needles, stems and leaves are all sources of the chemicals needed to support the natural medicine industries.
- Cascara bark is used for natural laxatives, Oregon grape holly roots are used for diuretic, lichens are used for antibiotics, sassafras is used for bronchitis, infusions made from juniper berry are believed to have analgesic effects and Shiitake mushrooms are used for liver troubles, American ginseng stimulates physical and mental activity especially in tired or weak patients and tea made from needles of Pine, Fir, Spruce, Douglas Fir, Western or Mountain Hemlock is good for sore throats.
- Few plants are forest cultivated for harvest. American ginseng and shiitake mushroom are forest cultivated.
- Plant residues from forest activities like thinning, Christmas trees management, bough harvest, pruning's and land clearings can provide rich resources of raw materials.
- Native Americans can develop cultivated forest that can be planted with native medicinal plants for tribal use or for marketing to the public.

Harvest and Labor

- There are contract harvesting companies that put large crews into the forest to harvest whatever they can find. These crews typically lease large blocks of land from commercial timber companies, state forestry departments and federal land agencies.
- The use of contract crews is not a sustainable method of harvesting as they must take any all plants that they can sell to make their operations pay.
- Small specialized wildcrafting companies made up of 2 or 3 people are the most flexible in where they can harvest and what plants they can harvest to meet their buyers needs.
- Like most of the other nontimber forest products the harvest of raw materials from the forest does not require sophisticated equipment or knowledge.

- A harvester can go places that loggers can't. They walk; use an ATV or burro to move themselves and their products.
- A harvester of medicinal herbs may be able to carry several hundreds of dollars of products on their backs and no one will even take notice of their activities.
- Many harvesters learn their trade from their elders.
- The companies that buy the raw materials have raw material guidelines that must be followed or they will not buy the products.
- Harvests are dominated by long hours of hard work for small amounts of income.
- The harvester's share of the money from these products is pennies or dollars per pound. The finished products are sold for up to 10 to 100 of dollars per ounce.
- Harvesting is seasonal. Wildcrafters can harvest medicinal materials at the same time they are harvesting other SFP's or they use the harvest of medicinal and herbals plants to fill times when they do not have other crops.
- Harvesters must have written permission from the land owner or a signed original copy of the permit or lease form. Without these forms the products can be confiscated and sold.
- In Washington and Oregon all harvesters must have harvest permits and hauling permits to transport and sell native medicinal plants.
- Harvesting of all native plants is regulated by international laws that protect endangered species.

Marketing and Markets

- To access any of the markets that buy medicinals, essential oils, fragrances and teas will require extensive knowledge of the process for making high quality products and making the products in the form that the markets want.
- 93% of the raw materials harvested from the nation's forest for medicinals, essential oils, fragrances and teas are sold by the harvester to a plant broker.
- The brokers pay in cash and few ask many questions. They are local and easy to access by the harvesters.
- The brokers who buy from the harvesters provide value added functions of concentration, sorting/grading, acquisition and transportation to processing facilities.
- Most local buyers are buying for a pharmaceutical company, herbal tea companies, nutraceutical company and botanicals companies based in the USA and around the world.
- These large companies control all the major markets for these products.
- Less than 3% of the wildcrafters products are sold directly to a professional who will use it in their contacts with the end customer. This market is made up of local alternative medicine practioners and herbal tea markets.
- Native American communities and business could develop producer to market internet programs to make it easy to for native owned business to sell to other companies in Indian Country.

- Alternative markets that have both a health side and recreational side are being developed around the world.
- These spas and natural health centers use local, wildcrafted, sustainable and natural products in their facilities.
- 20 Native American tribes have started to take advantage of these markets. The Warm Springs Nation has a spa and resort.
http://www.warmsprings.com/Warmsprings/Recreation_Tourism/Relaxation_Fun/
- Many Indian casinos have spas but do not have native products in them.
- The cleaning supplies, bathroom soaps, fragrances, lotions and oils in Indian casino/motels do not come from Native American companies.

Active Native American Business

- Most of the small businesses that manufacture herbal, medicinal, aromatic oils, teas and Fragrances are only local.
- Some sell their products at powwows, festivals and fairs. There are no major producers of these products in the USA.
- Products can be found on the internet but only as part of other business not stand alone.

Internet site to access Native American products:

- <http://www.nativenaturals.com/>
- <http://www.ancient-secrets.com/>
- <http://www.naturallynative.com/merchandise.html>
- <http://www.nativewisdombeauty.com/>
- <http://www.sistersky.com/aboutus.htm>
- http://www.nativeamericanbotanics.com/page_products.html
- <http://www.redlakenationfoods.com/prod-tea.html>

Resources

- <http://www.angelfire.com/art/nativeherb/index.html>
- <http://yantaho.com/index.html>
- <http://www.spiritscents.com/>
- <http://www.insight-books.com/NTAS>
- http://www.hernativeroots.com/retailer/store_templates/shell_id_1.asp?storeID=5DRLJ52RTCSR2LHC0G03N0ET9DFGAPV2
- <http://www.shamansgarden.com/p-40-native-american-pipe-smoke.aspx>
- <http://search.barnesandnoble.com/Secrets-of-Native-American-Herbal-Remedies/Anthony-J-Cichoke/e/9781583331002/>
- http://www.ojibwatea.com/essiac_medicinewheel.php
- <http://www.edesa.co.za/>
- <http://www.oilganic.com/usa-essential-oil-supplier-4.htm>
- <http://www.thearomatherapistusa.com/>
- http://www.agmrc.org/markets_industries/pharmaceutical_market_trends.cfm

AREAS OF FUTURE FOCUS AND RESEARCH

- Seeds for native plant nurseries, small forest land owner programs and home landscape Native markets.
- Firewood markets for home and community small boiler programs.
- Wildcrafting experiences for general public examples gathering the materials and making holiday decorations,
- Workshops and conferences for professionals practicing alternative medicine.
- Landscape structures supplies
- Wildlife habitat supplies- whole trees for standing dead snags, large hollow logs for denning sites.
- Stream restoration supplies – stumps, whole trees, root wads etc.
- Cultivating mushrooms in the forest – using wood byproducts and small diameter trees.
- Naval stores.
- Windbreak management for NTFP's
- Domestic animal products – food, health and nutrition.

EVALUATING ALTERNATIVE USES FOR NON-TIMBER FOREST PRODUCTS

This outline is intended to help Indian communities evaluate pros and cons of alternative uses of Non-Timber Forest Products and Services. It is patterned after models developed during meetings with indigenous peoples in Oregon, Washington, California, Alaska, Arizona, New Mexico, Montana, Idaho, British Columbia, Saskatchewan, and Alberta.

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GUIDING PRINCIPLE:

Each Indian community has the right and responsibility to establish policies governing access and use of Non-Timber Forest Products and Services (NTFPs), based on its own customs, traditions, practices, knowledge, and laws to preserve its ways of life and cultural expression.

CONSIDERATIONS:

Sustainability. **Protect the capacity of the resources and the environment to sustain harvest and utilization at levels acceptable to the Indian community.**

Cultural Needs. Maintain availability to NTFPs needed to maintain community lifeways and means of cultural expression.

Free and Informed Prior Consent. Rights to *free and informed prior consent* when deciding whether to withhold or share knowledge or access to NTFPs.

Intellectual Property. Guard individual and cultural traditional knowledge against unprincipled exploitation while providing for fair and equitable sharing of benefits derived from use of NTFPs.

Health and Safety. **Provide food and medicinal products that will promote healing, maintain health, and improve the nutritional quality of the diets for all segments of the community, with special attention given to elders, women, infants, children and at-risk individuals.**

Traditional Markets and Trade. **Importance of NTFPs in sustaining historically important trade networks between native peoples.**

Value Added Through Controlling Scarcity. **Market values can be influenced by limiting the number of products, the form of the products, volume of production, or ways customers can obtain products.**

Certification Programs. NTFPs could be administered as an integral part of an Indian enterprise certification program designed to ensure genuineness, product quality, and fair trade. Certification systems could establish standards for sustainability to address social conscience concerns, enhancing, promoting and preserving the resources, rights, and interests of Indian peoples through public education and legal protection.

Certification programs may enhance marketability of NTFPs and help promote broader consumer-targeted tribal marketing efforts by elevating the visibility of Indian stewardship.

Example:

Outdoor education programs that enable people to experience the beauty and culture of an Indian community could be designed to deliver learning experiences for resource managers, public educators, and the interested public.

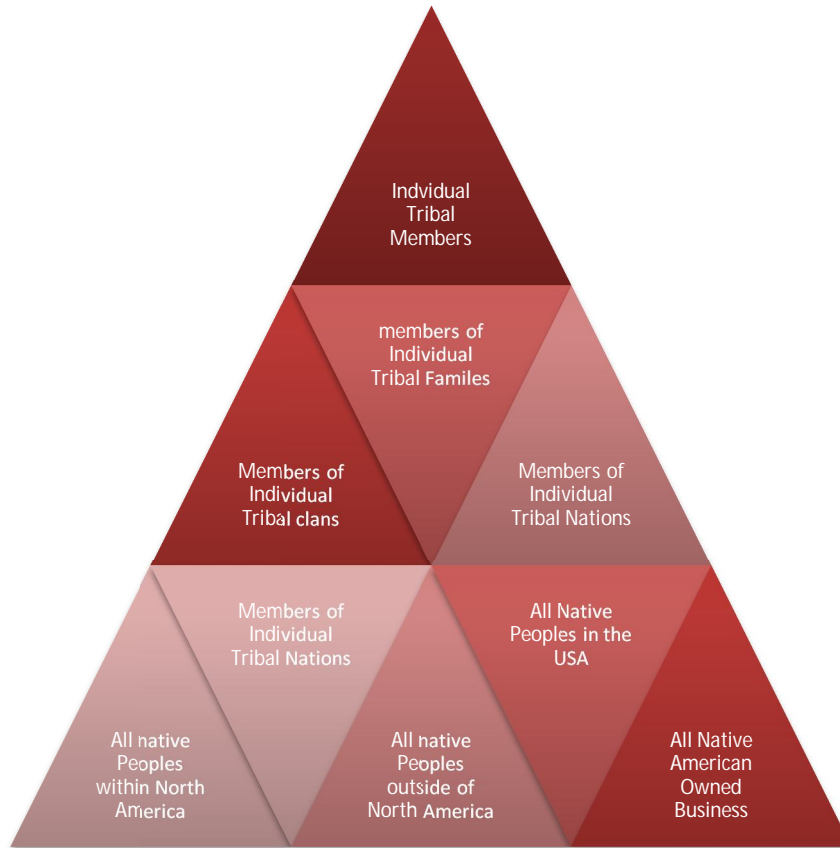
People who might want to partner with Indian enterprises in marketing NTFPs would pay to go through a program to become certified in proper resource stewardship and respectful handling of NTFPs for highest product quality assurance.

PYRAMIDS FOR USE OF NTFPs

Goal: To establish policies regarding limitations on harvest, use and access to ensure sustained production of NTFPs, protect traditional knowledge, and evaluate potential economic opportunities.

Method: Community dialogue led by elders, through which tribal members might evaluate all potential alternatives.

PRIMARY: NATIVE ACCESS AND USE OF NTFPs



INDIVIDUAL TRIBAL MEMBERS AND THEIR IMMEDIATE FAMILIES

NTFP knowledge, skills, products and services limited to personal, discretionary use by individuals and families.

Example:

Native plants used for medicines, foods and cultural activities where the knowledge of traditional harvesting, processing and use is held within a given family.

Validation Authority

Ultimate Validation of marketing potential: An individual or family

CLANS OR HOME NATION MEMBERS ONLY

Access and use of NTFPs limited to members of family clans or the home nation.

Example:

Native plants or the products from them that where the use is restricted to Tribal Members based on tradition and culture.

Validation Authority

Ultimate Validation of marketing potential: Tribal government and community committees.

NATIVE AMERICANS, ALASKANS AND FIRST NATION PEOPLES

NTFPs restricted for sale or trade to other Individuals or Families of Native American, Native Alaskan and First Nations Peoples of Canada and Indigenous peoples of Mexico with whom traditional relationships have been established.

Example:

Raw and processed products that are designed for personal or cultural used by other native peoples only.

Validation Authority

Ultimate validation authority rests with the Tribal government, elders, or designated committee(s).

COMMERCIAL RELATIONSHIPS WITH NATIVE AMERICAN, NATIVE ALASKAN, FIRST NATIONS PEOPLES OF CANADA AND INDIGENOUS PEOPLES

NTFPs available to other organizations and indigenous peoples on a commercial Business-to-Business partnership

Example:

NTFPs that are processed and packaged with the label of another Native American organization for their use in their marketing and trade efforts.

Validation Authority

Ultimate Validation of marketing potential: Tribal government or designated committee(s).

SECONDARY ACCESS TO NTFPs



NON-NATIVE PEOPLE WHO HAVE PARTICIPATED IN A TRIBAL CERTIFIED AND OPERATED TRAINING PROGRAM

NTFPs available only to individuals and families who have participated in training programs conducted by the tribe marketing the products or one of its members.

Example:

Individuals and families interested in having access for personal use of an individual product or a collection of products would participate in intensive educational programs conducted on tribal lands.

Activities

The range of activities would go from a long weekend to one-month programs.

Instructors and Presenters

The individual or family would be working with the tribal cultural, medical, natural resources and wellness professionals.

Housing

The individual could choose to live in tribally-owned facilities, with a tribal member or in a traditional hunting, fishing or berry gathering camp.

Short-term goal

Individual and families would experience a healthier life style based on NTFPs, customs, practices, and traditions.

Long-term goal

To establish a market for NTFPs that would be available only to the people who went through these intensive programs.

Validation Authority

Ultimate Validation of marketing potential: Tribal government, Indian Wellness Professionals, elders, or designated committee(s).

NON-NATIVE ACCESS TO NTFPs



PROFESSIONALS WISHING TO USE NTFPS OR TECHNIQUES AS PART OF ONGOING BUSINESS.

Programs designed to train and certify professionals in the proper use of NTFPs as part of their individual professional businesses.

Certification renewal

Renewal should be accomplished periodically, e.g., every three Years.

Continuing Education Credits and For-College Credit

Continuing Education Credits (CEU) would be organized in partnership with Indian Colleges, Land Grant Universities and Local Community Colleges.

College Credit could be arranged through the Indian College program or other appropriate college or university.

Trade Mark and labeling

All NTFPs would be labeled in accordance with requirements established by the approving tribal government. Such NTFPs could only be resold or used as part of a business when accompanied by informational materials explaining their use and importance to Indian peoples.

Validation Authority

Final validation of marketing programs would be through a tribal government.

NON-TRIBAL PEOPLES EXPERIENTIAL NATURAL RESOURCES PROGRAMS

NTFPs available to individuals, families and nonprofit organizations

Guided experiences.

A local tribal member trained and certified to guide individuals and families through nature-based experiences would be the direct contact.

Guide training

The guides would be trained in wild crafting, survival, traditional story telling, food preparation, public speaking and first aid.

Example:

Mushroom harvest and River Canoe Trip. This could be an overnight experience. The first day would be a guided trip into the forested natural lands. The guide would provide information on tribal stories and traditions. The guide would help visitors to learn about locating and harvesting mushrooms and about the conditions needed to ensure sustainability. An evening meal could be designed around the foods gathered in the forest or otherwise produced by Indian people. If the tour extends to overnight, then a morning mushroom gathering experience could be offered where the mushrooms are saved and taken home by the visitors. The second day could include a float trip down a river in a traditional vessel. The guide would explain the relationship between healthy forest and healthy waters. Tour participants could have an opportunity to fish in a traditional manner with any catch available for a meal or for future use in community kitchens.

Post Experiential Purchasing

Tour participants would have an opportunity to purchase NTFPs at a discount because of their involvement in the outdoor experiences.

Future experiences

To maintain their discount privileges, individuals will need to participate in tribally sponsored outdoor experiences within a designated interval (for example: every five years).

Similar programs could be developed for berries, herbs, fruit, wildlife, craft materials, nuts and vegetables.

Teaching Teams

Skilled individuals or teams could conduct the programs. Teams might include people from the forestry, fish, wildlife, water quality and cultural programs.

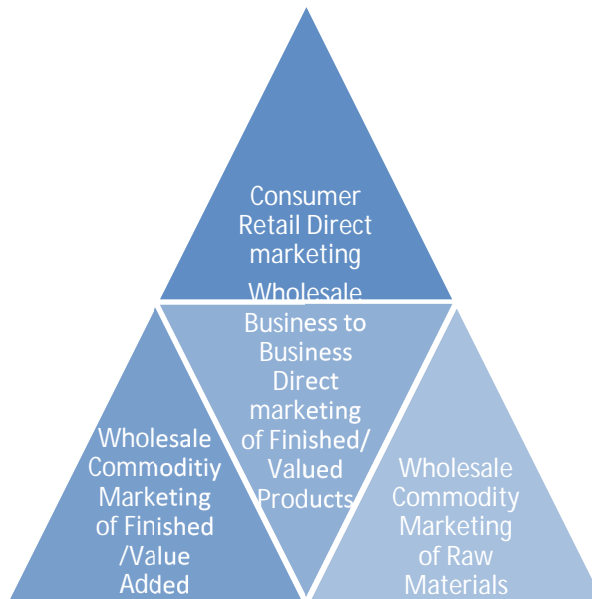
Interns

Provide summer jobs or internships for tribal college students.

Validation Authority

Ultimate Validation of Marketing Potential: Tribal government or designated committee(s).

CONSUMER ACCESS TO NTFPs



RETAIL CONSUMER DIRECT MARKETING

NTFPs available to any individual or family wishing to purchase directly from tribal business or individuals.

Restrictions

Purchase permitted only for personal use and not for resale.

Direct Marketing Efforts

NTFPs would be sold using any of the following direct marketing efforts:

Farmers markets, roadside stands, portable sales booths, portable market vehicles, internet websites, promotional catalogue, retail routes, or wholesale direct marketing to specialized business.

Example

Portable Farm and Forest Produce Stand. This could be a 1-ton truck remodeled to resemble a rustic farmers market or other theme. It would have cool and frozen storage capabilities.

The Portable Stand would take fresh and processed NTFPs harvested from Indian lands and waters.

Sales Locations

Organized farmers markets

Employee parking areas of local businesses and government offices

Festivals sponsored by Native Americans and communities

Public and Private Campgrounds

Products

Wild flowers, floral greens, Christmas wreaths, mushrooms, jams, jellies, teas, fruit leathers, fruit raisins, bentwood boxes, dried fish to complete freeze dried meals are just a few examples of the potential products.

Promotional Activities

All NTFP promotional efforts could incorporate information about Indian peoples and explain how the purchase of NTFPs benefits the people, the community and the natural resources.

Validation Authority

Ultimate Validation – Tribal governments, elders, and designated committee(s).

BUSINESS TO BUSINESS VALUE-ADDED PRODUCTS

NTFPs designed for marketing can be value-added products from joint marketing efforts with other non-native business.

Example:

Fresh salad mixes using native and cultivated plants. A joint marketing effort with Wholefoods Stores. Products would be labeled with information showing their origin, methods of gathering and processing, and cultural information regarding use.

Example:

Fruit Leathers produced using native berries. For example, a joint marketing effort with a fruit leather company like Stretch Island Fruit of Washington State could be organized. Products might have a special joint label or labeled with the name of the tribe e.g., "Makah Wild Berry".

Example:

Fresh and processed foods for catering companies and chefs of high quality restaurants located throughout the state and region of the producing Indian enterprise.

Validation Authority

The ultimate authority for validation for products as part of this level would be the Tribal Government.

WHOLESALE COMMODITY MARKETING

Businesses wishing a large volume of high quality NTFP that was produced in a sustainable manner with some value-added activities associated with its sale.

Labeling and Branding

NTFPs would be labeled to show that they were produced by an Indian community or enterprise for sale by the wholesale company.

Mass Production

Some NTFPs can be mass-produced. They would be of good quality, but not at the level of quality produced by a master craft person. This is where community commercial production facilities could be used most effectively. It is also an area where part-time and seasonal help might be most valuable.

Value-Added activities

The major value-added activities in this area will be:

1. Harvest and concentration of NTFPs – movement of product from the forest or sea to be processed.
2. Grading and scaling
3. Form change – fresh to canned, dried, or frozen
4. Labeling and Packaging – private labeling for companies
5. Storage – cool, freezer, heated, dry, high humidity
6. Transportation – movement to customers processing centers, ships, planes.
7. Guarantees and Insurance – assurances that the products will be reliably delivered as requested.
8. Financial Programs – providing investment and operating capital to support the start-up, production, and delivery of the products, including managing credit card purchases.
9. Health Permits – Certifying that product is free of pests and diseases.

Validation Authority

Ultimate Validation of Marketing Potential: Tribal Government

COMMERCIAL VENDORS

The Indian community has little or no involvement in any of the activities necessary to produce a final NTFP and deliver it to the ultimate consumer.

Space and Building leasing

An individual or company would lease the rights to harvest NTFPs from tribal lands or waters.

Least profitable

This option may be the least productive in terms of potential economic benefits to the Indian community.

Return on Labor

The greatest capture of income would be from company-established operations on the reservation that employed tribal members as much of the potential income from raw material sales to commercial vendors leaves the local community.

Example

Production of native landscape plants in a greenhouse and nursery environment by a commercial nursery wholesaler.

In addition to sales fees, production facilities would generate income through lease arrangement between company and tribe.

The management and marketing would be performed in the company's home office.

Some small benefits

Free plants for reforestation

Used building when they company moves on

Module 8

Ecosystem Services



Lower Quinault River. Quinault Indian Reservation, Washington State. Photo by Larry Workman.

Indian forest management produces non-market benefits like clean water and fish habitat. As such ecosystem services become increasingly scarce, mechanisms to provide compensation may emerge.

Topic: MODULE 8

Ecosystem Services

Investigators: Larry Mason, Gary Morishima

Task: Investigate potential sources of compensation for Tribal and Native Alaskan provision of ecosystem services.

Key Terms & Concepts:

ECOSYSTEM SERVICES: Ecosystem services, also referred to environmental services, include provisioning services such as food, water, timber, and fiber; regulating services that affect climate, floods, disease, wastes, and water quality; cultural services that provide recreational, aesthetic, and spiritual benefits; and supporting services such as soil formation, photosynthesis, and nutrient cycling, Table 1 (MA 2005).

Forestlands provide many ecosystem services, such as habitats for fish and wildlife, wood, soil protection and clean water, that contribute to human well-being. With growing concern about green house gas emissions like carbon dioxide, the removal and storage of carbon from the atmosphere, as occurs through photosynthesis and tree growth, is now recognized as an important ecosystem service provided by forests. When ecosystem services are either undervalued or have no financial value at all, economic pressures for profit maximization can dominate forest management, subordinate ecosystem values, and result in degradation. Regulatory and voluntary systems to reward sustainable forestry and provision of forest ecosystem services are evolving, however, along with heightened public recognition of environmental values. The fundamental assumptions supporting payments for ecosystem services (PES) schemes are that ecosystem services have quantifiable economic value and that this value can provide sufficient incentives to promote socially and environmentally responsible uses of land and natural resources.

HYPOTHESES: For millennia, Native Americans, informed by traditional recognition of the responsibilities of forest stewardship that supersede the tugs and pulls of commercial product markets, have interacted sustainably with forests and other ecosystems. Today, in absence of indigenous care, many forest ecosystems and the services they provide are in decline. Public and private investments to reward provision of ecosystem services could offer needed support for underfunded Native resource programs while assuring sustainable protection of forest ecosystems.

Methodology: Literature and web reviews of ecosystem service compensation schemes and related topics were conducted.

Results: Many of the environmental benefits from forests, such as clean water and air, have historically been available at no cost; provided naturally outside of any need for market valuation or transaction. With growing awareness of the environmental consequences of rapid exploitation of forests, however, there is new recognition of both the importance and vulnerability of forest ecosystems. A wide variety of conservation incentives, tradable environmental credits, and various other public and private schemes have evolved over the last

several decades to incentivize management practices to integrate protections of ecosystems with harvest of resources. Indeed, Section 2709 of the Food, Conservation, and Energy Act of 2008 requires the Secretary of Agriculture, in consultation with other agencies and interests, to "establish technical guidelines that measure the environmental services benefits from conservation and land management activities" (USDA Office of Environmental Markets).

PES markets can be created by regulatory requirements, such as the European cap and trade program, or markets can be voluntary such as carbon trading in the US. PES markets exist in many different forms and for many services throughout the world, but consistent and reliable models for transactions have yet to mature. Transaction costs can be high as services from aggregators, brokers, certifiers, insurers, and others are often required.

Although Native peoples are broadly recognized for their cultural commitment to environmental responsibility, tribes have received little benefit from PES markets. Description of PES markets and services is provided in Table 2. Table 3 shows the magnitude government and non-government (NGO) payments for ecosystem services to be more than \$500 million annually. These funds are primarily directed toward transactions that benefit private landowners, often in support of temporary commitments of performance.

Discussion & Conclusions:

The critical, defining factor of what constitutes a PES transaction is not just that payment is received and an environmental service is delivered or maintained. Rather, the key is that *the payment causes the benefit to occur where it would not have otherwise*. That is, a specific environmental service is "*additional*" to "*business as usual*." For PES markets to work under these circumstances of "*additionality*," a discrete ecosystem service must be disaggregated from other ecosystem functions, the incremental improvement accurately quantified, and the units of provision tied to a system of payment (Katoomba Group 2008).

PES conditions of additionality are curiously problematic for Native resource programs which already surpass the provision of environmental services considered as the baseline for other land managers. A fundamental flaw in the notion of additionality is that PES markets provide the greatest rewards to the worst environmental performers.

There are older and simpler forms of payments for ecosystem services, however, such as conservation easements. Conservation easements are either voluntarily sold or donated by the landowner and constitute legally binding commitments to limit certain types of land uses or development into the future, sometimes extending to perpetuity (TNC 2004). Unlike other PES schemes, no assessment of additionality or determination of ecosystem values is necessary for establishment of conservation easements. Some tribes have successfully negotiated sales of conservation easements to government agencies and NGOs but, as with other types of PES, compensation arrangements often rely upon a combination of payments and tax credits that have been designed for transactions with private landowners and are not readily adaptable for tribal applications.

Conclusions:

- Consistent and reliable models for economically viable PES are not yet available.
- There appear to be better approaches than PES to sustain and expand the provision of environmental services from Tribal and Alaska Native resource managers.

- If conservation investments such as shown in Table 3 were to be used as matching funds to underwrite tribal re-acquisition of forestlands, then more land could be protected from environmental decline than under the present arrangements and a tribal commitment to responsible stewardship could be reliably assured in perpetuity.

Given tribal reputation for stewardship and the passage of the Tribal Forest Protection Act in 2004, the Forest Service has been working with tribes to expand stewardship contracting opportunities where Indian lands are adjacent to National Forests. Under stewardship contracting arrangements, tribal natural resource departments receive payments to restore health to National Forests. In addition to the resulting improvements in environmental services, long-term stewardship contracts can provide a needed source of support to tribal resource programs thereby helping to sustain stewardship capabilities in rural areas of the US where the forest industry has long been in decline. However, progress has been slow and contracts have been few and small. Stewardship contracting holds an unrealized potential for environmental improvement of US National Forests.

TRIBAL DECISIONS NEEDED:

- *Should ITC request a briefing from the USDA Office of Environmental Markets on the process and progress of the guidelines development for environmental services?*
- *Should ITC engage government agencies and non-governmental organizations in discussion of protection of ecosystem services through underwriting costs of tribal land re-acquisitions and expansion of long-term stewardship contracts on National Forests?*

References:

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http://www.nature.org/aboutus/howwework/conservationmethods/privatelands/conservationeasements/files/easements_report.pdf
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<http://www.fs.fed.us/research/sustain/2010SustainabilityReport/documents/draft2010sustainabilityreport.pdf>
- USDA Office of Environmental Markets.
<http://www.fs.fed.us/ecosystemservices/OEM/index.shtml>

Native Lands Re-Acquisition Assistance:

The Indian Country Conservancy <http://www.indiancountryconservancy.org/>

Appendix:

	Forests	Oceans	Cultivated / Agricultural Lands
Environmental Goods	<ul style="list-style-type: none"> • Food • Fresh water • Fuel • Fiber 	<ul style="list-style-type: none"> • Food 	<ul style="list-style-type: none"> • Food • Fuel • Fiber
Regulating Services	<ul style="list-style-type: none"> • Climate regulation • Flood regulation • Disease regulation • Water purification 	<ul style="list-style-type: none"> • Climate regulation • Disease regulation 	<ul style="list-style-type: none"> • Climate regulation • Water purification
Supporting Services	<ul style="list-style-type: none"> • Nutrient cycling • Soil formation 	<ul style="list-style-type: none"> • Nutrient cycling • Primary production 	<ul style="list-style-type: none"> • Nutrient cycling • Soil formation
Cultural Services	<ul style="list-style-type: none"> • Aesthetic • Spiritual • Educational • Recreational 	<ul style="list-style-type: none"> • Aesthetic • Spiritual • Educational • Recreational 	<ul style="list-style-type: none"> • Aesthetic • Educational

Table 1. Examples of Ecosystem Services (MA 2005).

<p>Public payment schemes for private land owners to maintain or enhance ecosystem services</p>	<p>These types of PES agreements are country-specific, where governments have established focused programs (as in Mexico and Costa Rica). While specifics vary by program focus and country, they commonly involve direct payments from a government agency, or another public institution, to landowners and/or managers.</p>
<p>Formal markets with open trading between buyers and sellers, either:</p> <p>(1) under a regulatory cap or floor on the level of ecosystem services to be provided, or</p> <p>(2) voluntarily</p>	<p>Regulatory ecosystem service markets are established through legislation that creates demand for a particular ecosystem service by setting a 'cap' on the damage to, or investment focused on, an ecosystem service. The users of the service, or at least the people who are responsible for diminishing that service, respond either by complying directly or by trading with others who are able to meet the regulation at lower cost. Buyers are defined by the legislation, but are usually private-sector companies or other institutions. Sellers may also be companies or other entities that the legislation allows to be sellers and who are going beyond regulatory requirements.</p> <p>Voluntary markets also exist, as in the case of most carbon emission trading in the United States. For example, companies or organizations seeking to reduce their carbon footprints are motivated to engage in the voluntary market to enhance their brands, to anticipate emerging regulation, in response to stakeholder and/or shareholder pressure, or other motivations. Voluntary exchanges are also a category of private payments (see below).</p>
<p>Self-organized private deals in which individual beneficiaries of ecosystem services contract directly with providers of those services</p>	<p>Voluntary markets, as outlined above, are a category of private payments for ecosystem services.</p> <p>Other private PES deals also exist in contexts where there are no formal regulatory markets (or none are anticipated in the near term) and where there is little (if any) government involvement. In these instances, buyers of ecosystem services may be private companies or conservationists who pay landowners to change management practices in order to improve the quality of the services on which the buyer wishes to maintain or is dependant. The motivations for engaging in these transactions can be as diverse as the buyers, as is explored further in the step-by-step section that follows on finding buyers.</p>

Table 2. Types of Markets and Payments for Ecosystem Services (Katoomba Group 2008).

	2005	2006	2007
Government			
Federal Programs	\$248.0	\$243.0	\$248.0
State Programs	\$8.4	\$8.9	\$12.0
Non-Government			
Voluntary Carbon Market	\$0.2	\$0.4	\$5.5
Conservation Easements	\$69.0	\$92.0	\$111.0
Fee Simple Purchases	\$142.0	\$177.0	\$177.0
TOTAL PAYMENTS	\$488	\$521	\$553

Table 3. Total payments for environmental services in the US from federal and state agencies and non-governmental organizations and individuals in millions of 2005 dollars (USDA 2008)

Module 9

Ecotourism



Havasu Falls is located on the south side of the Colorado River in Grand Canyon West, an area administered by the Hualapai Indian Tribe, adjacent to Grand Canyon National Park. Tourism is a main source of revenue for the Hualapai. The turquoise blue-green color of the water is due to mineralization by travertine (a type of limestone).

Topic: MODULE 9

Ecotourism

Investigators: Larry Mason, Jim Freed

Task: Identify opportunities to increase income and employment from Indian forests through development of ecotourism. Evaluate the potential to promote Indian values and stewardship to support ecotourism-based enterprises as well as a host of other objectives including increased visibility for forest products and environmental services provided by Indian forest management.

Key Terms & Concepts:

ECOTOURISM: Ecotourism is ecologically sustainable tourism that fosters environmental and cultural understanding, appreciation, and conservation (Ecotourism Assoc. of Australia). Ecotourism is responsible travel to natural areas which conserves the environment and improves the well-being of local people (The International Ecotourism Society).

“Some tribes consider tourism one of their economic development priorities, while others live with and tolerate visitation. They do not want to increase it, preferring to simply manage it to their greater advantage. The approaches to tourism development and management are as unique as the tribes themselves. Yet some tribes have succeeded in adding tourism to their economic development mix in a way that affirms the tribal community and improves the quality of life on the reservation.” (National Association of Tribal Historic Preservation Officers)

“There is a new impetus for tourism based on eco- and cultural tourism. It’s proven that the spend rate for eco- and cultural tourism is almost three times the regular tourism rate. They tend to spend more time because they are there to learn instead of doing a superficial visit.” (Indian Country Today, March 12, 2010)

HYPOTHESES: Indian management of forests and other resources can provide more benefits than wood products. As the first stewards, Indians have unique opportunities to benefit from burgeoning demand for environmental and cultural tourism services (ecotourism). Ecotourism can be a dual opportunity to combine hospitality and education. In addition to opportunities for employment and revenue, ecotourism can increase awareness of Indian management approaches for sustainable management of natural resources. A public, educated about the ways in which Indian peoples manage natural resources, will appreciate the unique values that products originating in Indian country bring to the marketplace. In addition, ecotourism could fit well with promotion of other enterprises such as resorts and gaming facilities. Ecotourism activities can include hunting, fishing, gathering, and sight-seeing as well as cultural and environmental education. Ecotourism offers low cost opportunities for entry.

Methodology: Literature and web reviews of ecotourism and related topics were conducted. An investigation of 50 state tourism web sites developed an analysis of state presentation of Indian topics as compared to dominant tourist attractions, such as nature.

Results: Ecotourism is the fastest growing sector of the tourism industry, increasing by 10-15% each year in response to public demand for personally meaningful experiences involving nature. One in four personal vacations includes outdoor recreation.

One hundred million Americans use the internet to plan travel. Therefore, the internet should provide low cost opportunity for promotion of tribal tourism enterprises. However, review of 50 state tourism web sites indicates that, while 90% of states (45) prominently display nature as a tourist promotion, less than half (23) give any mention to Indians, just 16% (8) feature Native American services on the front page, and only 8% (4 states) acknowledge a cultural connection of Indian peoples to nature. The Green Travel Guide, published by the International Ecotourism Society, lists contact information for just one American Indian Tribe (Squaxin). Other sources of low cost promotion of the Indian story include airline magazines and popular media.

Discussion & Conclusions:

Conclusions: Indigenous peoples and ecotourists both value nature. Indian peoples have unique and genuine ecotourism products to offer. Native Americans are well positioned to use ecotourism to obtain income and employment benefits while promoting cultural and environmental education. Your stories and your willingness to welcome tourists to your communities and share your culture become your products.

A subset of the ecotourism industry focuses specifically on nature and indigenous culture. 58% of US ecotourists report planning holidays to include exposure to Native culture. In 2010, US citizens will spend \$640 billion on tourism activities. An additional \$100 billion of tourism receipts will be contributed by overseas visitors. Ecotourism promoters speak of a "triple bottom line" (people, planet, & profit) which appears to be compatible with the objectives of tribal enterprises. Development of ecotourism enterprises may bring ancillary benefits such as opportunities to teach non-Natives about sustainability or to renew pride and intergenerational connectedness for young Indians caught between two worlds and cultures. By including other lands and waters into ecotourism experiences, Indian management approaches could be compared with those practiced by others.

Heightened recognition of Indian influences on "natural" environments could increase understanding of the need to care for natural resources to accord them due respect and ensure that future generations can enjoy the benefits they provide. Indian management practices founded on thousands of years of tradition and wisdom handed down from generation to generation combined with western science provide a compelling story of modern stewardship.

There is a wide variety of opportunities for tribes and individual tribal members to develop ecotourism businesses. Tourism business can be started at any level of investment (from very small to very large) and can encompass many activities (hunting, rafting, scenic tours, ecocultural education, crafts, & more). For example, tours could be developed to demonstrate how tribal forests are managed to produce high-quality, fine grained lumber over long rotations or to demonstrate how grasses and bark are gathered and used in basketry. While an individual tribe could pursue ecotourism development on its own, the diversity of Indian resources, cultures, and values present unique opportunities for collectively employing ecotourism as an element of their strategies to meet community needs for income and employment.

Benefits from ecotourism could include new sources of revenue and employment, amenities to

augment resort and casino attractions, and opportunities for historical, environmental, and cultural education. Feasibility studies and market analyses conducted with assistance from Indian colleges and public universities could provide low cost information for enterprise development while strengthening research and education partnerships between Native communities and academia.

With advent of the internet, State tourism offices offer low cost promotional opportunities to elevate Native cultural visibility and environmental responsibility in parallel with promotion of Native enterprises.

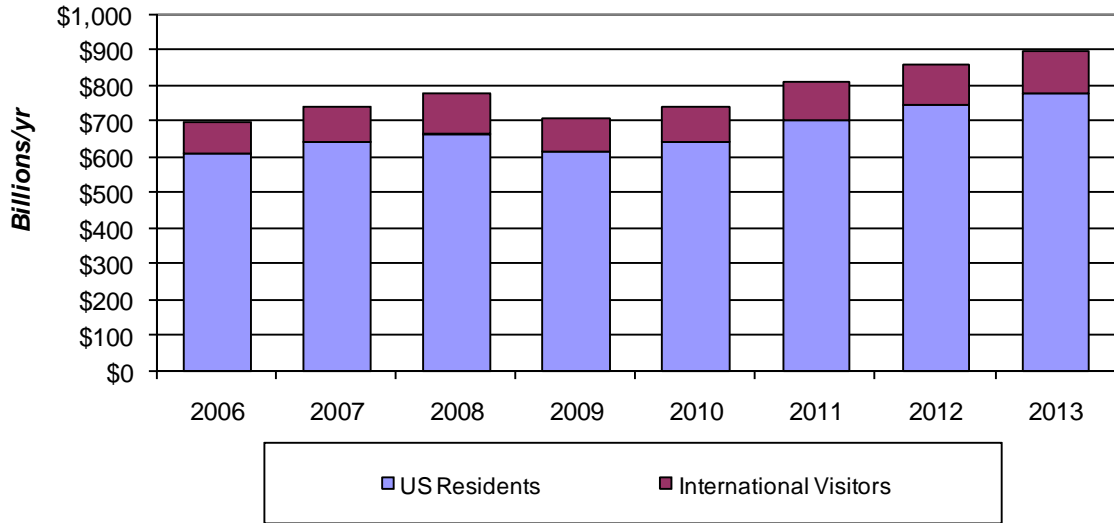
Caveats: Tourism will be intrusive to Indian communities. Native peoples attach unique and often complex meanings to place that extend beyond physical properties to include spiritual, cultural, and religious dimensions. Some communities may choose to limit or avoid sharing of special places and insights with visitors, some may consider it inappropriate to develop economies that treat culture and their homelands as commodities, while others may welcome the opportunity to share their ways of life. The costs and benefits of ecotourism development will be different for every community. Each will need to determine for itself if it wishes to pursue ecotourism and how best to protect traditional, cultural, and sacred values.

TRIBAL DECISIONS NEEDED:

- *Should collaborative studies of ecotourism and American Indians be a topic for discussion by the ITC board on research priorities?*
- *Should promotion of ecotourism be a component of a marketing and branding strategy? If so, should an effort to promote ecotourism through improvements to displays on state tourism web sites and other low cost media be developed? What is the best way to inform Indian communities of opportunities, costs, and benefits of pursuing ecotourism to promote exposure for Indian history, culture, forest products and enterprises?*

Appendices:

US Tourism Industry Receipts - Actual and Forecast 2006-2013



US Travel Association

Results are below from a review of the 50 web sites maintained by state tourism offices. The questions were:

Does the web site contain information on Nature, Golf, and Indians?

Is the information prominently presented on the front page of the site?

Attribute & Presentation	Nature	Front Page	Golf	Front Page	Indians	Front Page
Yes	50	45	46	26	23	8
% total	100%	90%	92%	52%	46%	16%

Does the web site contain information on specific areas of Native interest?

Attribute	Native Historical Sites	Tribal Tourism	Tribal Culture	Tribes & Nature	Pow Wows
Yes	21	15	14	4	9
% total	42%	30%	28%	8%	18%

ADDITIONAL REFERENCES

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- Bineshi Native Products - <http://www.bineshiwildrice.com/>
- Center for International Earth Sciences Information Networks - <http://ciesin.org/>
- Colquille Cranberries - <http://www.coquillecranberries.com/>
- Conservation and Development of Non-timber Forest Products in the Pacific Northwest: An Annotated Bibliography – USDA Forest Service PNW-GTR-375
http://www.fs.fed.us/pnw/pubs/pnw_gtr375.pdf
- Craft and Hobby Convention and Trade Show - <https://www.chashow.org/eweb/startpage.aspx>
- Cultural and Heritage Tourism in Indian Country.
<http://www.nathpo.org/PDF/Final%20Report.pdf>
- Farmers Markets in the USA - <http://www.farmersmarketsintheusa.com/>
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The World Tourism Organization. <http://www.unwto.org/index.php>

Tribal Tourism Toolkit. <http://www.nathpo.org/Toolkit/NATHPO.pdf>

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Module 10

Energy & Emerging Technologies



Photo by Duran Bobb/Spilyay Tymoo

(L-R) Bonneville Power Administrator Steve Wright, Warm Springs Council Chairman Ron Suppah and BIA Northwest Regional Office Director Stanley Speaks sign a transmission line right of way agreement on November 16, 2009. Under the Agreement, the Warm Springs Tribes have an ownership interest in a section of the line, gaining access to the power grid should they develop new energy production capabilities. The Warm Springs Tribes are evaluating the feasibility of constructing a biomass plant to convert residues from sawmills and thinnings from unhealthy forests on tribal and nearby federal lands. This type of an approach exemplifies tribal efforts to improve forest health in a socially, technically, environmentally, and economically sound way.

Topic: MODULE 10

Energy & Emerging Technologies

Investigators: Larry Mason, Gary Morishima

Task: Evaluate potential for biomass and biofuel based enterprises to provide opportunities for increasing value from otherwise non-merchantable forest materials and manufacturing residuals.

Methods: Professional and research experience of the investigators augmented by discussions with members of the project team.

Results: Commercial biomass/biofuels enterprises are not yet readily exploitable but warrant future consideration especially when integrated with process facilities development or expansion. Technologies for renewable energy are developing rapidly and the political landscape is in flux adding uncertainty and risk to project development. In addition, commercial scale development of bioenergy projects will require significant commitments for wood contributions from non-tribal sources. However, combined heat and power projects, designed to serve reservation needs and reduce reliance on expensive imported fuels, may offer the most readily accessible and reliable potential for economic return.

Tribal Guidance/Direction Needed

PRINCIPAL QUESTION:

What relative priority (*vis a vis* branding and marketing) should ITC devote to development of biomass/biofuels enterprise opportunities?

- (1) *Should ITC request a briefing from the US Energy Department's Office of Indian Energy Policy and Programs on efforts to develop forest-based renewable energy?*
- (2) *Should ITC prioritize legislative and policy development to promote forest-based energy from Indian forest lands?*
- (3) *Should ITC be involved in guiding the research priorities for renewable forest-based energy?*

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