

The Queen Charlotte Islands

**A Discussion of
Forest Sector Development**

Working Paper 2000.01

by

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The Queen Charlotte Islands: A Discussion of Forest Sector Development Options

Abstract

The purpose of this report is to provide a short review on the relative economic status of the Queen Charlotte Islands (QCI) and to identify potential options for sustainable forest related development. A broad definition of forestry was adopted to include traditional timber and timber processing options, non-timber forest products, wilderness options and sport fishing activity.

It is clear that the current economic performance of the QCI is highly influenced by the commercial timber harvest and forest sector competitiveness. An estimated 35% of the QCI income is from the forest sector (despite the large proportion of non-regional employment in harvesting operations and very limited regional timber processing). As a consequence, the QCI economy is expected to be relatively sensitive to ongoing provincial efforts to reposition forestry. This repositioning is in response to, among other things, changes in public expectations on forestland use, improved information on forest inventory and ecology, emerging consumer expectations/acceptance on the environmental legacies of products, First Nations' land claims, and ever-increasing market competitiveness.

The report provides information on the QCI economic structure and a recent history of commercial forestry. It is the fundamental character of the QCI, the wilderness and the physical isolation, which create both the challenge and the opportunity to sustainable economic development. Insight into regional economic development experience is presented with a review of the literature on development and regional case studies on the US Pacific Northwest and southeast Alaska. Both these regions recently had to adopt to major and abrupt reductions in federal timber harvest volumes.

The development options discussed in the report include: a more intensive silvicultural effort to capture the timber growth performance on the QCI; log exports, albeit on a restricted basis, via a selection harvest method; a log sort yard to facilitate improved local log supply; and a secondary manufacturing cluster in log home production. The potential and constraints on expansion in a selection of non-timber forest

products (mushrooms, pharmaceuticals, floral greenery, and bottled water) are examined. The option for wilderness tourism based on the QCI wilderness and Haida Gwaii culture is also explored. A guide to preparing a business plan, a necessary part of assessing any manufacturing opportunity in development, is provided in the report.

It is unfortunate but sustainable economic development depends on the product of a variety of unknown factors and there is no formula or model that can be employed. However, despite this limitation there is merit in the due consideration of the regional fundamentals at work and the development options that are available based on those fundamentals. This is particularly true given the limited ability of the public sector to intervene with direct financial support. Instead, it is the institutional and regulatory settings and their impacts on sustainable development that are increasingly key public sector contributions.

Introduction

The Queen Charlotte Islands (QCI), part of Canada's west-coast archipelago, are a remote group of islands off the north coast of British Columbia (BC) with a population (1996) of 6,200 people. The QCI is a region with a rich endowment of ecological, natural and cultural resources but a history of relatively poor economic development and changing fundamental conditions that challenge current economic performance. Paradoxically, it is this combination of isolation and natural resources which creates both the challenge and the opportunity to regional economic development. A small population and geographic isolation from the main stream of economic activity and markets produce major limitations on the QCI range of commercial options and viability of entrepreneurial efforts. Historically, the regional economic activity has focused largely on resource extraction and the basic services to support these activities with very little "downstream" economic activity. With current and expected future harvest levels from both forestry and fishing sectors falling, and the recent reduction in public sector employment resulting from the conversion of the Canadian Forces listening post at Masset to a remote operation, there is considerable additional economic uncertainty for the QCI. In an effort to position the region to respond to the changing resource situation there is a need to identify the region's economic strengths and to examine how these might be developed to provide a basis for a sustainable improvement in the economic performance of the region. The identification of development opportunities must consider market viability in the absence of public sector financial support. Given the financial reality in which public sector funding decisions are made, it is unrealistic to expect any sustainable infusion of direct regional development funds.

The objective of this report is to identify potential options for sustainable development of the QCI forest sector resources and to provide an initial examination of these options. The report takes a broad definition of forest sector resources including traditional harvesting and processing but also including the less traditional products of non-timber products, wilderness tourism, and sport fishing.

Current Status of the QCI Economy

The QCI economy has not progressed past being an ‘early stage’ staples region, highly dependent on external demand for its primary resources, mainly timber, and to a lesser degree, fish. Most of the timber harvests are transported to primary processing facilities in southern British Columbia. The small volume of timber that is ‘processed’ on-island (generally cedar), is often cut into cants, and shipped out of the QCI in that form. A large percentage of the jobs associated with logging and transport, and an even larger percentage of the total jobs associated with timber harvests accrue to non-island residents in the QCI. The portion of the economy dependent upon the fishery resource is largely shifting from the commercial to the sports sector, which is less extractive and has a larger service sector. As with commercial forestry, the bulk of the economic benefit in the sports fishery accrues to off-island interests.

A recent study completed by the BC Ministry of Finance and Corporate Relations (Horne, 1999) examined community dependency for specific industries across BC. One indicator developed in this study is an income dependency measure, which is defined as the percentage of after-tax income attributable to each sector in a local economy. The results of the estimated dependency, by sector, for a selection of northern region BC communities are shown in Table 1.

Table 1: Income by Sector Source for Select Northern BC Communities, 1996

Community	Forest	Other Res	Tourism	High Tech	Public Sector	Constr	Other Basic	Trans	ONEI
QCI	35	6	8	0	32	2	2	9	5
P. Rupert	22	15	8	0	27	4	11	13	5
Kit-Terrace	24	18	5	2	22	8	3	11	5
Hazelton	37	5	7	0	35	3	2	10	3
Stewart	25	12	7	0	35	3	12	5	2
Central Coast	26	9	10	0	37	5	1	8	4

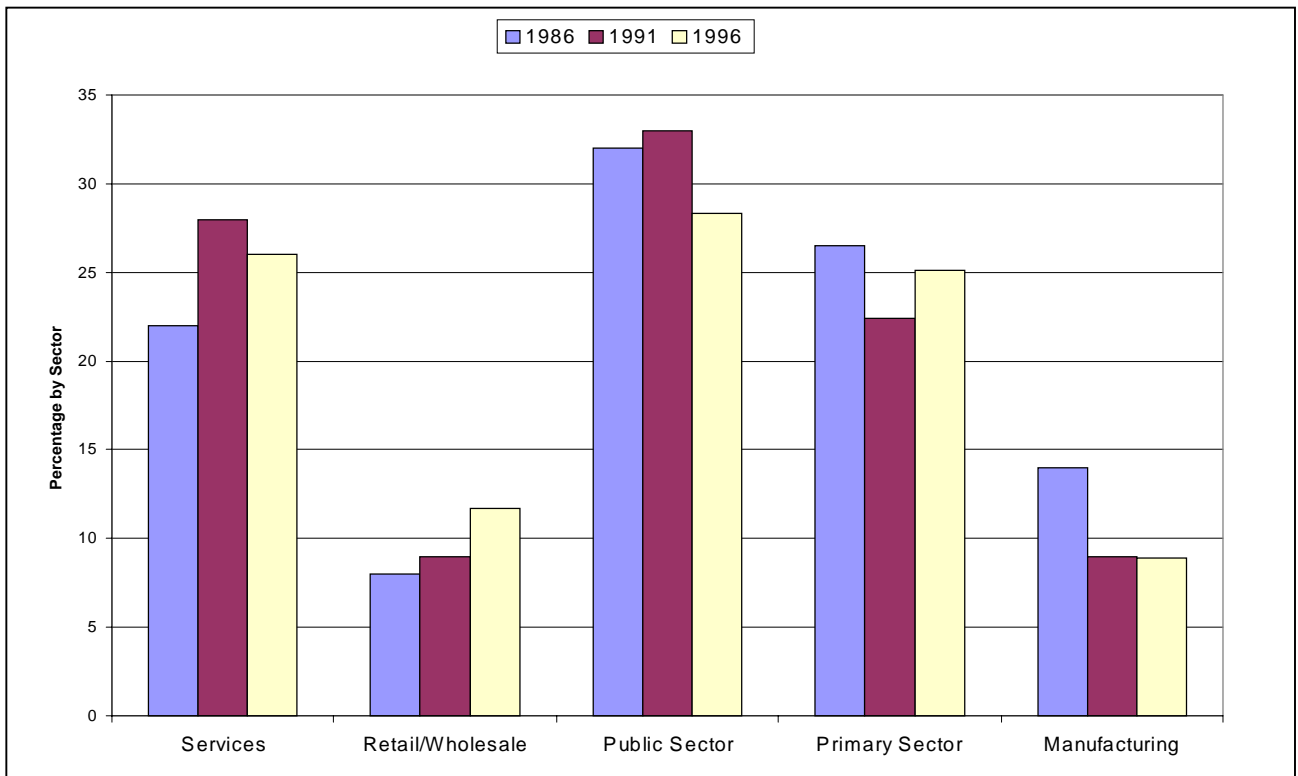
Note: Constr is construction, Trans is transfer payments, and ONEI is other non-employment income (mostly from investments and corporate pensions).

Source: Horne, 1999.

It is quite clear from the results in Table 1 that the QCI is highly dependent on the forest sector for income. The only other northern community with this level of dependency on forestry is Hazelton. Examining the results province-wide, 10 of a total of 63 communities had a higher level of income dependence on forestry. The Horne study

also estimated an indicator of economic diversity for the communities examined. Of the 63 BC communities examined, only eight scored lower on this index than the QCI. Comparing the QCI to the same coastal communities listed in Table 1, only Hazelton's economy is less diverse by this measure.

According to employment data from the 1996 Census, QCI employment was dominated by the service sector at 38% of the total, followed by the public sector at 28% and primary industry at 25%. The QCI primary industry is largely made up of logging and forestry jobs (about 20% of total primary industry) and only about 5% is employment in fishing, trapping and agriculture. The percentage breakdown of employment in the main sectors for 1986, 1991 and 1996 are given in Figure 1.



Source: Census data (1986, 1991 and 1996).

Figure 1: Percentage QCI Employment by Sector - 1986, 1991 and 1996

Comparing the 1996 employment numbers to 1986 shows some modest changes in the relative employment shares among economic sectors. Employment in the primary,

manufacturing and public sectors declined while the service and wholesale/retail trade sectors increased. Factors contributing to these changes include, among others, the loss of annual allowable cut (AAC) resulting from the creation of Gwaii Hanaas National Park Reserve, provincial protected areas, and the conversion of the Canadian Forces listening post at Masset.¹ Since 1996 there have been additional developments which have had an effect on QCI employment. The most notable have been further reductions in timber access and restrictions on commercial fishing.

Select economic indicators from the 1996 Census are provided in Table 2. The indicators in Table 2 indicate a rough conformity between the QCI and the province as a whole. Average individual income is slightly higher in the QCI, although average family income is lower. The unemployment rate is somewhat higher in the QCI (especially so in the native communities of Old Masset and Skidegate).

Table 2: Economic Indicators For QCI Communities, 1996 Census.

	Masset	Port Clements	Skidegate & Old Masset	Remaining QCI^b	QCI Total	British Columbia
Mean Income:						
Individual ^a	27,700	37,800	18,400	27,800	27,200	26,300
Family	60,100	68,500	44,300	58,850	56,900	60,600
Number Employed	700	305	525	1,390	2,920	1,773,290
Unemployed	7.3%	6.2%	17.0%	8.9%	9.8%	8.9%
Sector Employed:						
Primary	6%	45%	26%	28%	24%	6%
Secondary	3%	8%	11%	9%	8%	18%
Tertiary	91%	47%	63%	63%	68%	76%

^a This is the average annual income for those individuals reporting income.

^b This includes Queen Charlotte City.

A large difference between the QCI and the rest of BC is the high degree of employment that occurs in the primary sector in the QCI and the very low percentage in the secondary (or manufacturing) sector. These numbers are consistent among the QCI

¹ In 1993 CFS Masset employed approximately 300 of the total 792 public sector employees on the QCI. Following the announcement in 1994 that the Masset listening post was to be converted to a remote operation over 90% of the military personnel left.

communities, except for Masset, which is dominated by the tertiary (service) sector. It is this dependency on the primary sector, largely forestry, which presents the major challenge to both employment and income levels as QCI harvests are reduced to meet various provincial objectives on First Nations' land claims, sustainable forestry, non-timber values and land use changes.

Existing Forest Sector

Harvesting.

At the completion of the recent Timber Supply Review (TSR 1) in 1996, there were three Tree Farm Licenses (TFL's) and a Timber Supply Area (TSA) on the QCI. The TFL's are: Weyerhaeuser Canada Ltd. (formerly MacMillan Bloedel) TFL 39, TimberWest's TFL 47 and Western Forest Products TFL 25.² The major share of the AAC is from Weyerhaeuser's TFL with an annual harvest of 1.21 million m³ (63% of the QCI AAC) of a total of approximately 1.93 million m³ for the QCI. The major licensee in the Queen Charlotte TSA is Husby Forest Products, which controls three of the Forest Licenses. Data on the QCI licensees and AAC levels are provided in Table 3.

The age class structure and species profile changes across the management units. Based on TSR1 reports, the timber harvest land-base in TFL 39 consists of stands two-thirds of which are greater than 130 years old and the remainder are under 50 years old (MoF, 1996). The species mix is mostly western hemlock, 30% either red or yellow cedar and 12% Sitka spruce.

² TimberWest is no longer operational in the QCI. J.S. Jones now manages this TFL, although at the time this report was completed TimberWest still retained the tenure.

Table 3: Summary of the QCI Licensees, Tenure Types and AAC Levels, 2000

Tenure Type	Licensee	AAC (m³)
Tree Farm License	Weyerhaeuser Canada Ltd.	1,210,000
	TimberWest Forest Ltd.	100,000
	Western Forest Products Ltd.	115,000
Total for Tree Farm Licenses		1,425,000
Forest License	Husby Forest Products Ltd. ^a	169,000
	Naden Harbour Timber	115,800
	TFL Forest Ltd.	21,300
	Sitkana Timber Ltd.	23,500
Total for Forest Licenses		329,600
Timber Sale Licenses (<1,000 m ³)		8,700
Timber Sale Licenses (SBFEP)		121,800
Woodlot Licenses		6,500
Total QCI		1,918,400

^a Husby Forest Products Ltd. also holds the Sitkana Timber Ltd. and Naden Harbour Timber Ltd. Forest Licences.

Source: BC Ministry of Forests

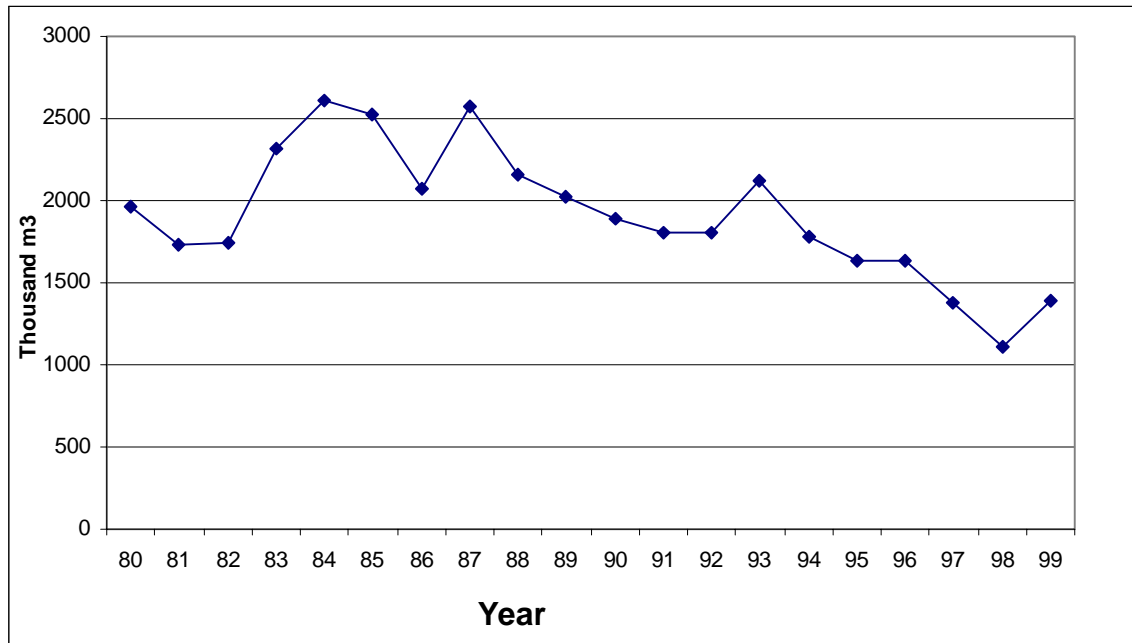
Within the Queen Charlotte TSA, three-quarters of the timber harvest land-base is over 120 years old, with substantial volumes of cedar and hemlock over 250 years old (MoF, 1994). Most of the remaining timber is under 50 years. The species breakdown in the TSA is 49% western hemlock, 30% western redcedar and 21% Sitka spruce.

One of the characteristics of the QCI forest sector is that approximately 94% of the timber volume harvested is barged down to either the Lower Mainland or Vancouver Island for processing. Costly barging, estimated at approximately \$13/m³, is the standard transport option for timber from the QCI due to the rough open water that must be navigated to access southern processing facilities (Clarke *et al*, 1998). The region has been calling for a larger proportion of the QCI harvest to be processed on the islands.

Public pressure continues to reduce the AAC for the QCI (both for the TSA and TFL's). The interest in reducing the QCI AAC and harvest was raised by the majority of community representatives involved in the public discussions in TSR 1. For instance, it is the position of the Council of Haida Nations (CHN) that the AAC should be reduced to approximately 50 percent of current levels (Mullins and Tedder, 1994).³ The actual cut

³ The ACC estimate for the Queen Charlotte TSA in the TSR 1 Timber Supply Analysis is a 12% decline per decade with a long-term level at 205,000m³ per year.

has decreased considerably since the mid-1980s. The QCI cut since 1980 is shown in Figure 2, and cut details for 1996 and 1997 are given in Table 4.



Source: BC Ministry of Forests.

Figure 2: QCI Harvest Levels, 1980-99

Table 4: Harvest Levels in the QCI, 1996 and 1997.

Category	1996	1997
Tree Farm Licenses	906,900	890,000
Forest Licenses	315,442	164,441
SBFEP	216,546	172,804
Other	187,647	146,206
TOTAL	1,626,650	1,373,160
Percentage of 1994 AAC	85%	72%

Source: BC Ministry of Forests.

Using coefficients for both direct and indirect/induced employment for 1000 m³ of harvest the impacts of harvest reductions to both provincial and QCI employment can be estimated. The employment coefficients for the TSA are given in Table 5.

Table 5: Employment Coefficients for the Queen Charlotte TSA

Category	QCI	Off-QCI	Total
	Jobs/'000 m ³		
Harvesting	0.16	0.23	0.39
Processing	0.09	0.71	0.80
Silviculture	0.04	0.01	0.05
Total Direct Employment	0.29	0.95	1.24
Indirect/Induced Employment^a	0.13	1.22	1.35
Total Employment	0.42	2.17	2.59

^a Indirect employment results from the direct purchases of goods and services while induced results from re-spending of direct and indirect income. These estimates, while lower than those in TSR1, are based on the most recent employment data available (Horne 1998).

Sources: Direct Employment from Mullins and Tedder, 1994; Indirect/induced Employment calculations based on estimates in Horne, 1998.

It is clear from the coefficients in Table 5 that the majority of employment generated from the Queen Charlotte TSA harvest accrues to people who reside outside of the region. This has important implications when considering the impacts of potential harvest reductions in the QCI. Based on the most recent AAC for the TSA, set in 1996 at 475,000 m³, and the coefficients in Table 5, the TSA supported a total of 1,230 jobs, 200 of these on the QCI (16%) and 1,030 (84%) elsewhere in the province.

There is considerable pressure to reduce the QCI harvest level. This pressure is the product of, among other things, changes in public land use values, improved forest inventory information, and the interests of First Nations. Given the limited volume of local processing a linear extrapolation on employment impacts due to a reductions in the harvest volume does provide a reasonable estimate of the impact on employment. The estimated employment impacts of a 25% AAC reduction for the TSA and for the entire QCI are provided in Table 6.

Considering that the most recent reported harvest levels (1997) have been at approximately 72% of total AAC for the QCI, job losses in line with the estimates in Table 6 will emerge in the absence of increased harvests or alternative incremental economic development. It is also clear that the majority of job losses resulting from reduced harvests in the QCI will occur in other parts of the province.

Table 6: Employment Impacts of a 25% Reduction in the Queen Charlotte TSA (Case #1) and Total QCI Harvests (Case #2)

	QCI	Off-QCI	Total
Case 1, 25% Reduction in TSA Harvests			
Direct Jobs	34	113	147
Indirect/Induced Jobs	15	145	160
Total Job Loss	49	258	307
Case 2, 25% Reduction in TSA and TFL Harvests			
Direct Jobs	138	491	629
Indirect/Induced Jobs	66	620	686
Total Job Loss	204	1111	1315

A considerable challenge to commercial forestry operations in the QCI is the identification, planning and operating around the various areas of cultural significance to the Haida Nation. These “protected areas” make up approximately 20% of the remaining operable timber (ICSI, 1996). The Ministry of Forests has stopped issuing cutting permits in these areas, but has not removed them from the AAC determination.

Manufacturing.

As noted above, little primary or secondary manufacturing takes place on the QCI. The larger companies with TFLs do all of their processing off the QCI. The largest regional market logging operation (Husby) also ships the bulk of its harvest off the QCI.⁴ Two small mills started up on the basis of 10-year temporary opportunity licenses of 20,000 m³ (QCI Sawmills Ltd.) and 40,000 m³ (Abfam), but these licenses expired in 1994. Some dimension lumber is produced, along with cedar cants that are shipped to Vancouver Island and Lower Mainland mills for further processing into value-added cedar products (largely on a custom-cut basis). The majority of wood processing activity for the purpose of shipping off-island concentrates on either cedar or small-scale niche market production (i.e., local artisan products). The current structure of manufacturing in the QCI, based on a recent survey funded by Forest Renewal BC (Queen Charlotte Adventures (II), 1998) and a project visit to the QCI includes the following:

⁴ Husby has sold cedar logs to the local Abfam sawmill.

- In terms of sawmills, Abfam Enterprises is primarily operating as a custom cut mill, and QCI Loghomes (a division of QCI Sawmills Ltd.) produces log home packages, some remanufactured products and does custom cutting. These two operations continue to operate well below capacity, although they have recently secured Small Business Forest Enterprise Program (SBFEP) timber sales. K. Foote Contracting operates a small mill which uses salvage logs to produce stakes for tree planting on the QCI. Recently, Eaglecrest Enterprises started operations, producing cants in a bandsaw mill. In addition there are a number of micro-mills operating in the QCI.
- There are two small shake and shingle operations that have recently started using salvage cedar.
- A large number of artisans and Haida artists participate in the value-added woodcrafts sector.
- One local operation (Sound Spar Enterprises) makes guitar tops, aircraft spars and parts, and specialty cedar products. They are located in one of the buildings vacated by the Canadian Forces at Masset.
- There is one recently completed small kiln in operation in Masset (12,000 bd ft/load), and a second kiln with a co-generation facility in the development stage (20,000 bd ft/week).
- The remainder of value-added manufacturing is generally done on the basis of demand from local projects (e.g., custom cabinets and furniture)

The key hurdle identified by local QCI manufacturers is a lack of consistent fibre supply. This is the message repeated in virtually all of the reports done on the QCI forest sector. Local processors contend that if wood supply problems could be resolved, they could cope with other challenges such as skilled labour, marketing, residue disposal and energy availability (Dobson, 1996).

A Memorandum of Understanding (MOU) between the Islands Community Stability Initiative (ICSI) and the BC Ministry of Forests was signed in 1996 with the purpose of

addressing local timber supply shortages.⁵ The Ministry did commit to making available SBFEP volumes for local community-based tenures and/or to stimulate local manufacturing. In an Addendum to this MOU, major licensees committed to making logs available to local sawmills at Vancouver Log Market prices less barging and distribution costs.

The development of an Islands Community Forest has been considered as an option to ensure local timber supply interests are met. A study commissioned to examine the feasibility of such a community forest identified the following key elements (see Clarke *et al*, 1998). A community forest for the QCI needs to:

- operate within an area-based tenure system,
- have community-based AAC determination,
- provide for flexible cut control,
- possess a revenue mechanism for payment to the crown which reflects the high operating costs of a community forest,
- have management of all forest resources, not just timber, and
- it must be consistent with the interests of the Haida Nation.

The study concluded that a community forest for the QCI could be a break-even proposition, although it recognized that many political issues remained to be resolved. In a recent interview, Dale Lore, of ICSI, noted that one of the conditions to receiving a community forest tenure is that the Haida be convinced to release currently protected areas back to the working forest (SpruceRoots, October 1997). A pilot community forest based on an ICSI proposal was announced by the BC government on July 5, 1999.

⁵ The Islands Community Stability Initiative is a not-for-profit society with a board of directors that is 50 per cent Haida and 50 per cent non-Haida. An elected board of directors is proposed to manage the community forest located within the Tlell watershed of Haida Gwaii on the Queen Charlotte Islands.

Tourism/Recreation

The main impediments to past growth in QCI tourism are remoteness and a lack of infrastructure. Transportation links with the mainland are limited to either air travel or a six-hour ferry ride from Prince Rupert. When visitors arrive there are very limited opportunities to travel between communities on the QCI. This is especially true if visitors fly in to Sandspit and want to travel to the northern part of Graham Island. The only option is renting a vehicle, which can be in short supply. Regional tourism strengths include the Haida culture and history, saltwater and freshwater angling, hunting and other tourist activities such as hiking, camping, kayaking or the wilderness experience. These are highly valued 'products' which afford opportunities for sustainable regional economic activity. However, it is important to recognize that tourism-based economic development includes its own inherent negative effects. These include environmental disruption and stress, crowding out of local users and capital replacement and seasonality impacts.

The Gwaii Hanaas National Park Reserve is a noted tourist draw for the QCI, attracting a number of domestic and international visitors to the area. The terrestrial portion of this area consists of 144,000 hectares on the southern portion of Moresby Island. Visitor use level was capped at 33,512 user-nights (multiple day-trips) and 10,070 day trips. There is also a reservation system in place with a maximum of 175 people allowed in Gwaii Hanaas at any time. The actual use (user nights) has been considerably below these caps at 17,900, 11,200 and 10,000 in 1996, 1997 and 1998 respectively. This translates to approximately 2,000 visitors for the most recent year, 1998 (Gajda and Stronge, 1998).

Exploring Gwaii Hanaas requires the use of some type of boat because there is no system of trails through the area. Kayaks are the most popular means by which to travel through the park (38% of visitors), followed by powerboats (33%) and sailboats (18%). This has facilitated the development of an industry to either rent kayaks or accompany visitors through the park on organised kayak tours or on chartered boats. The majority of visitors (69%) travel the park on one of the organized tours (Gajda and Stronge, 1998).

In an effort to identify 'appropriate' activities for Gwaii Hanaas National Park Reserve a Backcountry Management Plan was developed for the area. The main goal of

this plan is to identify plans for human activity in the park which are consistent with principles laid out in the Gwaii Hanaas Draft Strategic Management Plan. The Plan is quite specific about infrastructure in the area, in particular trail construction, noting that trails will not be completed except for the protection of natural or cultural heritage, or for safety reasons.

The other destination for camping and/or backcountry adventures is Naikoon Provincial Park located on Graham Island. Naikoon is approximately 50% the size of Gwaii Hanaas at 72,640 hectares but is more developed than Gwaii Hanaas with two organized campgrounds and a network of hiking trails. Naikoon has direct road access and attracts independent visitors rather than those on organized tours. Naikoon campground attendance for 1993 was 4,600 parties and day use totaled 34,150. While the majority of visitors to Gwaii Hanaas are from off-island, many regional residents make use of Naikoon.

Freshwater angling opportunities on the QCI are very impressive with good steelhead, trout and seasonal salmon fishing opportunities. Eight of the streams on the QCI, representing all of the major fresh waters fished in the QCI have been designated as Class 2 waters, which means that non-residents of BC must fish with a licensed guide. As of 1994, a quota of 530 angler days was issued to 10 guides for Class 2 waters on the QCI.

Guided recreational saltwater angling is also popular on the QCI, with a number of lodges operating on a seasonal basis. There has been tremendous growth in this sector with angler-days increasing from 1,000 in the mid-1980's to 44,000 in 1993 (Broadhead, 1995). Approximately 80% of these days are from guests in the commercial lodges, which are owned and operated from the lower mainland and have limited impact on the local QC economy. Another 8%, or 3,500 angler days are guests of locally owned charter operations and the remainder are independent anglers.

Hunting on the QCI is primarily for one of three species; black-tailed deer, black bear and elk (Mullins and Tedder, 1994). Deer hunting is the most popular of the three, with an average of 740 hunters/year between 1983 and 1993. Approximately 50% of these hunters are local, with the remainder being resident BC hunters from off-island

areas. Elk hunting, by comparison is minor and almost exclusively involves local QCI hunters.

The main draw for non-resident hunters in the QCI is black bear. Based on statistics from the early 1990's approximately 40% of all bear hunters in the QCI were non-BC residents, although an average of only 62 hunters per year hunt bears in the QCI. As with fishing in Class 2 waters, non-resident bear hunters must be accompanied by a licensed guide-outfitter.⁶ The draw for black bear hunting in the QCI is the fact that the bears tend to be very large versus the black bear populations open to hunting in other jurisdictions.

Active QCI Economic Development Initiatives

The South Moresby Forest Replacement Account (SMFRA) is a forestry-related initiative aimed at research activities, inventory, incremental silviculture and public education (Mullins and Tedder, 1994). The fund is jointly administered by the BC Ministry of Forests and the Canadian Forest Service. SMFRA now funds activities related to developing forestry employment, management, research and education. Currently, SMFRA is scheduled to end in the spring of 2000 but negotiations are underway among regional stakeholders and governments that are considering renewal alternatives. Recent research program priorities (1999/2000) for the Research and Inventory Advisory Committee of the SMFRA include: cedar regeneration, deer management, market studies and alternative silvicultural systems.

The QCI forest sector has also received funding through Forest Renewal BC (FRBC) under the Forest Community Economic Development Program (FCED). The main purpose of the project is:

- To identify short and long-term initiatives which diversify and strengthen the local economy, workforce and forest sector.

⁶ Rates for a guided bear hunting trip are \$250/day, with a typical trip lasting 5 to 10 days. This does not include transportation to the lodge.

- To assist with implementing these initiatives to maximize future socio-economic and environmental benefits for the Islands.

Theories of Regional Development

There is a large body of literature on regional development but despite this research effort there is no formula or consensus on the route to sustainable economic development. Despite this limitation, it is useful to include a brief overview of regional development theory in an effort to ensure a more insightful identification and subsequent assessment of development options. At a minimum there are lessons to be learned from what has not worked to promote regional economic development.

For example, one consistent characteristic of a prolonged and prolific Canadian effort in stimulating regional development is that direct public intervention results in non-competitive “businesses” which fail shortly after the withdrawal of public funds or favoured positioning. Following is a short discussion on a selection of development theories (Shaffer, 1989; Blakely, 1980).

Supply-oriented theories are based on the neoclassical production function. The importance of the basic factors of production is the central basis of these theories, and equilibrium occurs when the growth rates among regions are equal. For instance, the Productivity Theory argues that a region must generate and finance investments for the purpose of increasing productive capacity. The assumption is made that resources move to the regions with the highest level of return, until the final unit of capital yields equal returns amongst the regions. This theory argues that regional economic development results from the ability to utilize the non-natural resource base to produce goods and services that are demanded by external regions.

Conversely, the Resource Endowment Theory is based on the assumption that regional economic development is a function of the natural resource base, and the demand for products from those resources. A key to this theory is that the demand for the resources is a derived demand. The natural resources have little use unless used in the production of goods and

services (these are not limited to private consumption goods and services but would include wilderness preservation through to standard timber harvesting).

In these supply-oriented theories economic linkages, both forward and backward, are key to regional development. Forward linkages are the economic ties with added processing and backward linkages are with the suppliers of basic production factors.

Demand-oriented development theories look to externally generated demand for goods and services as the main reason for local development. The most widely accepted of these is the Export-base Theory. Under this theory a regional economy is divided into an export sector, which generates economic activity through export dollars, and a non-export sector which locally sells goods and services. Regional development depends on the strength of those industries that export goods and services. Strategies for maximizing local growth and development focus upon increasing those exports which, through multipliers, lead to the largest increase in economic activity.

The well-studied Staples Theory may be considered a specific example of the Export-base Theory (Bradfield, 1988). This theory was developed by the Canadian economic historian Harold Innis in the 1930's and 1940's to describe how Canada developed as a supplier of staples for relatively more economically mature regions and countries (Willems-Braun, 1997). The Staples Theory has been extensively used to analyze the evolution of resource dependent economics like BC (Marchak, 1983; Gunton, 1997), and by economic and social planners to develop economic strategy (Willems-Braun, 1997).

The Staples Theory assumes that a region's development occurs because of demand for the major export. There is an initial stage, where the staple is a raw commodity product, which can be simply collected (fishing, trapping, harvesting, etc.) and sold. The region is then "opened up" due to exploitation of the resource. As the staple is exploited, regional demand for labour, capital and institutions grows. If the demands from the domestic and foreign economies for the staple are high enough, infrastructure and other factors supporting production are funded, and a growth industry develops.

The Staples theory, as do most development theories, depends on the economic

activity associated with forward and backward linkages to facilitate development. In the forestry case, backward linkages would result from input suppliers to the forest industry such as suppliers of fuel, machinery and other factors of production. Forward linkages result from additional processing of timber into downstream products.

There has been criticism of the Staples Theory as being representative of development in British Columbia. Marchak (1982) noted that the BC government (among others) has historically believed in the Staples Theory, building an infrastructure of roads, rail and company towns to facilitate industrial development. However, there is considerable evidence that sustainable regional development has not occurred despite these investments. Marchak warns that development will not occur unless government action and investment are directed towards diversification of the economic base.

Another key is that a region must not become too dependent on a narrow range of resource sectors. This is especially true with commodity products. A region risks becoming vulnerable to the highly volatile commodity markets, technological obsolescence and to the omnipresent deterioration in real prices for commodity products.

A second theory of incremental growth is the Stages Theory. In this theory an economy moves through five different development stages (Bradfield, 1988). The first is the subsistence society in which resources are devoted to basics such as food and shelter. This is followed by pre-conditions in which technological change frees labour to perform other tasks. The takeoff stage occurs once savings and investment exceed a minimum level, and at least one high growth manufacturing industry begins. The drive to maturity is characterized by manufacturing industries stimulating growth, stimulated by income elasticities of demand for outputs of manufacturing and service industries. Finally, increases in output are so high that the economy reaches a stagnation stage.

The Stages Theory has been criticized as more of a description than an explanation of how growth occurs, especially tailored to the case of growth in Europe. There is no identified mechanism for how an economy moves between stages. According to Bradfield (1988) it is not useful for under-developed regions within developed national economies.

The Metropolis/Hinterland Theory takes a completely different approach to

explaining regional inequities in economic conditions. In this case, regional inequities are considered a natural result of growth in a system where bargaining takes place between agents/regions with different levels of wealth and power. As the hinterland regions staple product is developed, economic rents are captured by the more powerful agent/region acting as the developer. In other words, wealth generated through export of the staple is “*wealth from the region, not wealth for the region*” (Bradfield 1988). This results in a further consolidation of wealth and power by the developing metropolis region.

Location theory is a relatively well-known regional development theory that differs from the previous examples being based in the field of geography rather than economics. Spatial considerations are key in location theory which deals with the dispersal of resources, production centers, markets and the transportation network tying these components together. Different versions of the theory focus on either minimizing the costs of manufacture and transport, maximizing total revenue, or a mixture of the two.

In the least cost formulation of location theory, firms minimize the total costs of both production and transport to market. Production facilities are situated in the locale that yields the lowest total costs of production plus transport. For example, even if the transport costs for bulky raw materials exceed those of final (manufactured) products, manufacturing takes place nearer the market if savings in production costs exceed the differences in transport costs. Demand, faced by the regions is assumed to be the same.

In the case of location theory with demand maximization the focus shifts to different demand functions that the regions face. Regions now compete based on some degree of monopoly power which allows them to undercut their competitors in certain markets. Customers are assumed to purchase from the region which can deliver at the lowest price (delivered price including transport costs).

Location theory does recognize the importance of comparative advantage in a regions level of development, a factor largely ignored by the theories of incremental growth. It also recognizes transport costs explicitly as a component of comparative advantage that is important when examining development in regions isolated from markets.

The links that develop between firms within a distinct region is the focus of a recent study titled “The Role of Manufacturing Clusters in the Pacific Northwest Forest Products Industry” (Braden *et al*, 1998). Manufacturing clusters are groups of firms in the same region that have developed links to aid in production or marketing of products. Through these links the cluster can provide a basis for competitive advantage in a region which was not competitive prior to the cluster being developed. Through an examination of clusters in the US Pacific Northwest (PNW) forest industry, the authors identified a number of factors that are critical to successful development of a manufacturing cluster, including:

- proximity and easy access to regional markets,
- plentiful supply of raw materials and customers, and
- the availability of a skilled labour force.

This list does point to key weakness a manufacturer in an isolated region such as the QCI must overcome, access to markets. This is more than just the costs of transportation, although transportation costs are a critical aspect with bulky, low-margin commodity products. However, isolation from markets also refers to the inefficiency of information transfer from the market back to the producer.

Although there are a number of theories on regional development, none of them are particularly good in themselves at either explaining why regional differences in economic conditions exist or in prescribing policy measures to aid less developed regions. Indeed, Marchak (1982) and Bradfield (1988) contend that historic Canadian development policy has been based on largely untested models based on very questionable assumptions.

Selected Case Studies of Regional Development

An interesting comparison to the situation in the QCI is the economic decline in the importance of the forest industry in the PNW and southeast (SE) Alaska. Both areas have had to face structural change in their forest industries as a result of large harvest declines due to reduced access to federal timberlands. The PNW has been able to offset some of

its harvest losses through increases in secondary manufacturing, while SE Alaska has had to find new employment opportunities outside of the forest sector. These regions might provide some useful insights for the QCI.

Pacific Northwest

Both Washington and Oregon experienced major reductions in timber harvest volumes since the late 1980s. The total harvests from 1989-96 are given in Table 7.

Table 7: Timber Harvests, Lumber Production and Log Exports, Washington and Oregon, 1989-1997

	1989	1991	1993	1995	1997
Million board feet, Scribner					
Timber Harvests					
Wash	6,788	5,101	4,330	4,393	4,221
Oregon	8,420	6,080	5,294	4,304	4,081
Total	15,208	11,181	9,624	8,697	8,302
Million board feet					
Lumber Production					
Wash	4,274	3,820	3,863	4,095	3,851 ^a
Oregon	8,512	6,595	5,448	4,953	5,589
Total	12,786	10,415	9,311	9,048	9,440
Million board feet, Scribner					
Log Exports					
Seattle	2,357	1,548	958	999	599
Columbia-Snake	1,257	994	750	606	443
Total	3,614	2,542	1,708	1,605	1,042

^a Beginning in 1997 this does not include hardwood production.

Source: Warren, 1997.

Timber harvests in Washington and Oregon have dropped by over 50% between 1989 and 1996. The drop is much greater in Oregon than Washington. Lumber production declined by only 27% over this same period. Again, the decline in lumber production is greater in Oregon (37%) than in Washington State (8%). Combined log exports from the Seattle and Columbia-Snake Customs Districts showed an overall decrease of just under 60% between 1989 and 1996.

Firms in the PNW have reduced log exports and lumber production but have expanded production in secondary wood products. This focus on secondary manufacturing is evident in employment numbers for Washington and Oregon between

1989 and 1995. Total employment in logging fell by 28%, in the primary wood products sector by 27%, but increased in the secondary wood products sector by 8% (Braden *et al*, 1998). Employment in secondary manufacturing in 1995 comprised 34% as a share of total logging and wood products employment, up from 26% in 1989.

Secondary wood product exports from the PNW also increased dramatically over this period. Between the years 1989 and 1995 exports of these products from the Seattle and Columbia-Snake River customs districts increased 184% (Cintrafor, 1996).

The PNW has some clear advantages in terms of developing secondary manufacturing: integration with and proximity to large domestic markets in the western US and ready access to large pools of both entrepreneurial talent and skilled labour. These advantages were complemented by a package of federal initiatives intended to support the regional transition inherent to the introduction of The Northwest Forest Plan (or Option 9) in July, 1993 and the consequent reduction in timber harvesting on federal lands in northern California and the PNW (Tuchmann *et al*, 1996). Markets for secondary manufacturing are highly competitive and access to fibre is only one condition for success and not necessarily the most important condition.

The economic assistance components of the Northwest Forest Plan included the Northwest Economic Adjustment Initiative, federal payments to compensate counties for lost revenue from federal timber sales, the withdrawal of federal incentives for log exports, and assistance to encourage growth and investment in secondary manufacturing. Secondary manufacturing is also supported through The Small Business Timber Sale Set-Aside Program that is designed to secure a 'fair proportion' of federal timber-sale volume for small-business timber purchasers. Much of the programming is delivered through community teams which combine federal, state, local and tribal stakeholders in the identification of economic adjustment problems and opportunities, and then in the design of appropriate solutions. Funded initiatives include; capital infrastructure improvements, rural development strategies, worker training, rehabilitation of salmon habitat, the commercialization of underutilized species, and secondary manufacturing expansion. The range of programming is similar to that contained within FRBC and the SBFEP.

Southeast Alaska

Southeast (SE) Alaska is situated near the QCI and has a similar species mix, dominated by western hemlock and Sitka spruce, with a small amount of cedar.⁷ SE Alaska has been forced to cope with harvest reductions and associated mill shut-downs and closures throughout the 1990s (Brooks and Haynes, 1997). The only pulp mills in Alaska, one in Sitka (1994) and the second near Ketchikan (1997) have both closed in the past few years. The changes in employment levels are given in Table 8.

Table 8: Southeast Alaska Industry Employment in Thousands, 1990 to 1997

Sector	1990	1997	% Change
Total Non-agricultural Employment	33.6	36.1	7.4
Lumber and Wood	2.6	1.3	(50.0) ^a
Pulp	0.9	0.3	(66.7)
Service Sector	27.0	30.6	13.3

^a Negative values are in parenthesis

Source: Alaska Department of Labor, Research and Analysis Section, 1998.

SE Alaska has faced large reductions in forest sector employment, but these reductions have been more than offset by increases in service sector (e.g., lodging, restaurant and recreation-related services).

Recent regional harvests in SE Alaska have been evenly distributed between the Tongass National Forest and private lands, principally native corporation lands. Harvests from the private lands are not subject to local manufacturing rules and virtually all the timber harvested has been directly exported as logs.⁸ The Forest Service is the exclusive supplier of logs for local manufacture (Allen *et al*, 1998). Over the period 1981-1995 production from SE Alaska consisted of (roundwood equivalent basis) 43% export logs, 36% for pulp wood and 19% saw logs for local mills.

The principal markets for SE Alaska forest products has been Asia, especially Japan and South Korea. Almost all of the logs and most of the sawmill output (often

⁷ The species breakdown on commercial timberlands in the Tongass National Forest is approximately 63% hemlock, 30% Sitka spruce and 7% cedar (Morse, 1998).

⁸ There has been very poor management on these native corporation lands with much high-grading of export quality logs. This has led to the anticipation of huge reductions in harvest levels over the next 10 years (Brooks and Haynes, 1997).

cants) produced are exported to these two countries. The Asian economic slump has greatly affected demand for timber in SE Alaska. Many of the timber sales in the fall of 1998 did not have any bidders (personal communication, Rachel Baker, Alaska Department of Labor, January 1999).

There is very little secondary manufacturing done in SE Alaska, although this has been identified as an area of future interest. Local government and business leaders are trying to develop a veneer plant in Ketchikan, and sawmills are looking at adding secondary manufacturing to their operations.

The issue of pulpmills disappearing from the forest sector in Alaska is critical to the future structure of the industry. The Tongass National Forest inventory is made up of approximately 42% low grade and utility logs (Morse, 1998). These, along with residues from the local sawmills, were purchased by the local pulpmills, providing a market for low grade logs and adding to the profitability of sawmill operations through the sale of chips. A market for these low-grade logs and sawmill residues is a key component to the continued feasibility of primary manufacturing (Brooks and Haynes, 1997).

Increases in tourism activity in SE Alaska have come as a result of expanded cruise ship traffic and, to a lesser degree, an increase in the number of visitors to sport fishing lodges. As an example, between 1990 and 1996, Juneau saw an increase in cruise ship traffic of 136,000 people, a 60% increase over that time. Air traffic also increased by 46,000 (25% increase) while those visiting using the state ferry system declined.

This increase in cruise ship traffic has been a major driver of increased economic activity and employment associated with tourism services. Local businesses in SE Alaska are increasing the opportunities for tourists with expansion in cultural tours, sightseeing cruises, organised trail tours and adventure expeditions (Tromble, 1997).

Many tourism jobs are seasonal (cruise ship season is May through September) and some are quite low wage jobs, especially compared to jobs lost in the resource sector. Jobs associated with meals and lodging are relatively low wage jobs, but many jobs have also been created in the much higher paying transportation sector. Employment created in the charter sport fishing sector has played an important role for displaced workers from both the commercial fishing and forest sectors (Tromble, 1997).

Potential for and Challenges to Economic Development in the QCI/Haida Gwaii

Although regional development theory and case studies don't provide a recipe for furthering economic development in forest-dependent regions, they do give some insights into how development occurs and complements the identification and examination of options to which policy and institutional adjustments might serve to enhance sustainable regional development.

There are examples of small-scale initiatives based upon the inherent strengths in the QCI that have successfully created local employment. The QCI strengths include scenic and wildlife resources and wilderness isolation for tourism and recreation; non-timber products within the forest ecosystem; and high quality timber for manufacturing and export. In this section examples of small-scale strategies dependent on timber and non-timber forest resources are discussed. It is also important to note the need for an objective assessment of the QCI potential for marine-based activities such as aquaculture, expanded saltwater angling, boat tours and whale watching. In many ways these options are also linked to basic forest management decisions.

Forest-Based Development

Allowing that sustainable regional development needs to be based on the region's fundamental strengths, it is productive to consider development options based on the QCI resources, particularly options that include economic activity incremental to basic harvesting. In the forest sector it is likely that any future strategy must be based on substantially reduced overall harvest volumes. The estimated employment impacts of a 25% reduction in harvest levels (see Table 6) illustrates that, in the absence of structural change in the forest sector of the QCI, significant job reductions, especially off the QCI result from decreased harvests.⁹ Niche markets for products that rely on special characteristics of QCI forest products should be examined, along with ways to better utilize non-timber resources that may be enhanced by reduced harvests.

⁹ The apparent impacts of reduced harvests are the job losses, business closures and community stress. However, the impacts include reduced community ability to fund infrastructure, the willingness of workers to acquire new skills, and a reduced ability to attract private sector investment into the region.

Incremental Silviculture Activities

Value-added activities are not confined to the manufacturing side of the forest sector. Value can be added at any stage in the process of planting, growing, harvesting (or not harvesting if that is the alternative which yields the highest level of social gain), and marketing those products, as well as manufacturing timber into final products.

A number of studies have examined the economic feasibility of investing in silvicultural activities in BC, with a range of results depending on the assumptions employed. Given the time-horizon to realize the benefit from many silvicultural investments (except mid to late rotation fertilization), few activities on poor to medium sites yield positive net present values (NPV) (Stone 1993; Massie 1995; McWilliams and Carter 1998).¹⁰ This is especially true if risk premiums are included in discount rates. A number of studies have, however, shown that treatments can generate a positive NPV on good coastal sites. The QCI does possess very good timber growing conditions, making it a good candidate for silvicultural activities.¹¹

An example of a comprehensive study on the economic feasibility of silvicultural treatments in BC can be found in Massie (1995). The study utilizes capital budgeting techniques and a 4% discount rate to examine the feasibility of various treatments on different interior and coastal species. For coastal hemlock, only spacing was examined. In the case with no assumed price changes, it was not economically feasible to space at any density with poor sites (SI=20), marginally feasible in select cases at SI=25, but it was feasible with the better sites examined (SI=30).¹² Stone (1993) examined commercial thinning coastal Douglas-fir under various scenarios of final density with and without pre-commercial thinning. Again, few scenarios were economically feasible at lower site indices (SI=24), but on the best sites examined (SI=36) commercial thinning provided a positive NPV over the control with no incremental silvicultural activities.

¹⁰ In fact, in the McWilliams and Carter study it was suggested that a cost minimization approach to forest management should be used on sites with SI<24.

¹¹ Many of the studies on silvicultural activities for coastal BC are based on data for Douglas-fir, not a commercial species on the QCI.

¹² Massie simply reported the level of costs that would result in positive net returns to the practices in question. As a comparison, spacing costs of \$900/acre were used (Stone, 1993).

A benefit of incremental silviculture, not often fully reflected in capital budgeting exercises, is the ability to reduce time to operability, and the impact this can have on maintaining an even flow of timber (and thus employment). This reduced time to operability can result from thinning, which makes scarce forest resources available to fewer trees, or fertilization, which increases certain resources. This effect has been touted by silviculturalists, and may be important in the case of the QCI given the large proportion of inventory in very young and old age classes.

Both the financial and institutional setting for silviculture investment fundamentally challenges the relatively strong timber growth conditions in the QCI. The public sector has, at best, a record of random commitment to spend on silviculture and fiscal reality suggests public spending on forestry will not compete against health, education and social program demands. Corporate investment by the forestry sector is difficult due to the financial under-performance of the sector, the poor rate of return on silviculture expenditures, and the uncertainty of actually capturing the silviculture gains. This lack of certainty on capturing any gains from silviculture is partly a product of the current tenure system.

Uncertainty in being able to access timber on which silvicultural investment has been made is especially important in the QCI because forestland has recently been lost to timber harvesting due to the creation of parks and more recently due to efforts to provide for the Haida protected areas. The ongoing transition in land use decisions suggests that improved security of tenure or adequate compensation provision will be a significant determinant to private silvicultural investment on the QCI.

Log Exports

Japan is an important potential market for the direct export of sawlogs from the QCI and although Japanese prices for all forest sector imports have been depressed in recent years, there is generally a significant premium paid for high quality sawlogs. Coastal companies, often lacking adequate softwood lumber quota to the US market and faced with increasingly competitive Japanese lumber markets, utilized this log premium to maintain harvest levels and employment in their woodlands operations through the latter

part of 1998 and early 1999.

Asia is a market for which the QCI is not at a competitive disadvantage with respect to transport costs. Coastal ports, like Prince Rupert and Kitimat have a shipping time advantage of 1-1.5 days in exporting to Asia if significant volumes can be generated. The QCI species composition is a particular asset for the Asian market: large spruce and hemlock logs are highly desirable in the Japanese market. Indeed, it is likely that local processing of these particular logs results in lost value. One option to increase economic activity from the QCI harvest would be to combine labour intensive logging practices, such as selection harvesting and the direct export of logs. There may be additional value to positioning these logs by 'labeling' as sourced from sustainably managed forestlands. Considering the international recognition of the Haida culture, direct Haida participation might provide additional market benefit. The additional economic rents generated by such a strategy could be placed into a special fund dedicated for investment in the under-developed infrastructure on the QCI.

This sort of a strategy would require more in-depth analysis and institutional changes. It also does not get away from the fact that a market must still be found for lower quality logs not suitable for export. An area in which further research is required is the potential use of lower quality logs harvested in the QCI. This becomes even more important if high quality logs are used on the QCI, or exported offshore, as the majors currently ship pulp grade logs out of the QCI with sawlogs. Examples of uses of small logs from elsewhere in the province include log furniture production, and the construction of small buildings. In a selection system it is certainly not sustainable to 'high-grade' for export. One need only look to the harvest rates and practices on private lands in SE Alaska to see the potential problems.¹³

Competitive Log Sort Yard

One of the key constraints identified by existing and potential wood processors on the QCI is the lack of fibre supply. One option to improving local fibre supply is to market a

¹³ In fact projected private harvests from Alaska are expected to fall from 560 million board feet in 1995 to 156 million in 2000 and 75 million in 2005 (Brooks and Haynes, 1997).

portion of logs harvested on the QCI through a competitive log sort yard. It is possible that a community log yard creating a regional log market might serve to capture more value from scarce forest resources on the QCI (Mitchell Banks, 1999).

This is the approach taken in a pilot project in Lumby, just east of Vernon. The MoF established the Lumby log market in 1993, and volumes in excess of 50,000 m³ have been sold each year. A recent study examined the effects of the Lumby log sort yard on the local value-added (secondary manufacturing) industry (Shadendorf and Chiocca, 1997). Through a survey of the local secondary wood processors it was found that 25% sourced fibre from the Lumby yard. The yard is only useful for secondary business types who use roundwood as input, including those manufacturing log homes, poles, shake and shingles and chopsticks. The study found that the secondary manufacturers were most interested in high value logs rather than sawlogs, for which small independent operators have difficulty outbidding the major operators.

The Lumby log sort is supplied by the Ministry of Forests' Small Business Forest Enterprise Program (SBFEP) harvests from a number of the TSA's in the area. It might be possible to generate a sufficient log supply from local SBFEP harvests in the QCI to operate a successful log sort as well. It would also be an avenue for the majors to deliver on to their commitments of marketing some logs locally (per the Addendum to the MOU between the ICSI and MoF). An objective assessment on the financial viability of such a log sort would be required prior to the initiative.

Transportation

A key issue for any manufacturing alternative in the QCI is transportation. Being a remote, island economy, the region faces significant transportation costs for moving goods in or out. Options for bulk transportation are limited to either barges or back-haul on trucks using the ferry system to get back to the mainland. Goods, such as fresh market mushrooms, which have a much higher value per unit of weight also have the option of air freight.

Examples of transport costs available to wood product manufacturing are back-haul trucking costs of \$1,500 per load or approximately \$90/mbf (assuming a load of

16,000 to 17,000 board feet). Alternatively, if sufficient volume is being shipped to fully utilize a barge, transport costs fall to approximately \$40/mbf. This does require a considerably larger load size than a truck however, and there is only one local manufacturer that can make up a full load for barging at present.

Island manufacturers who have shipped to Asia utilize the ports down south in Vancouver or Seattle rather than Prince Rupert, which is both closer to the QCI and Asia. The reason is again load size, QCI manufacturers have not been able to generate sufficient volume to ship from Prince Rupert.

Primary Wood Products Manufacturing

There are two relatively small primary mills and a number of micro-mills in the QCI. This section discusses strengths and challenges of the QCI as it relates to primary production, examining the potential to expand this sector. Transport costs, as a key challenge to any QCI manufacturing has been examined above. A second problem faced by any significant processing facilities is the availability and cost of electricity from the diesel generating stations on the QCI.

Commodity Lumber Production

Producing commodity lumber for sales off the QCI would be extremely difficult. There are a number of constraints that a mill in the QCI would face. The first markets. The major market for commodity lumber is the US, and the current quota system in the Canada/US Softwood Lumber Agreement virtually eliminates this market for producers who do not already have export quota. A second constraint is a lack of local markets for low-grade logs and sawmill residues. BC mills have historically generated up to an additional \$100/mbf of lumber through the sale of chips to pulp mills (H.A. Simons and ProForMA, 1996). The closure of Alaska pulp mills has been identified as causing economic hardship on the remaining sawmills in SE Alaska due to the loss of a market for residues in that region. The problem of no local market for chips was also identified in a report submitted to MacMillan Bloedel (now Weyerhaeuser Canada Ltd.) concerning on-island manufacturing in 1996 (Dobson, 1996).

Given the isolation of the Islands, primary manufacturing for local consumption makes a great deal of sense--local consumption referring to both the on-island market for commodity grade lumber and input into the secondary manufacturing sector. The planned increase in local kiln capacity will support local sales (kiln dry lumber is currently imported from the mainland). However, the on-island market for lumber is quite small.

Due to the modest local market opportunities, transportation is the key issue for primary lumber manufacture on the QCI. Logs are currently barged south to the Lower Mainland or Vancouver Island at a cost of \$13/m³. It has been argued that a 'haul allowance' in the stumpage formula encourages the transport of logs off-island by subsidizing southern shipments.

Cant/Flitch Production

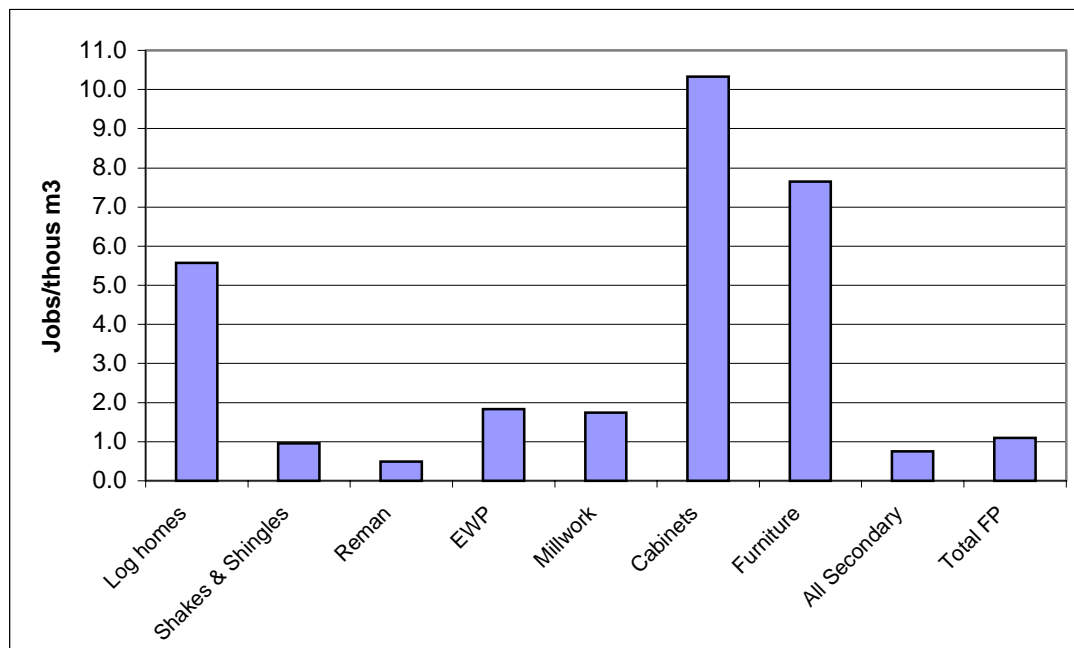
Local mills have had some success with cant and flitch production, especially with cedar. Timber, obtained through SBFEP timber sales, is milled into cants for further processing off the QCI, often being custom cut for QCI firms into value added cedar products. The mills focus on cedar, with much of the white wood present in these stands being traded to the major license holders for additional cedar.

Specialty Sawmills

The major market for mills in SE Alaska, which faces a similar species mix and geographical isolation to the QCI, has historically been Asia. The current situation for export to Asian markets has recently improved but remains a challenge for Coastal producers. Asian demand has not recovered completely and increased competition from other suppliers (including Interior BC mills) means that specialty mills would have a difficult time. Based on statistical performance measures, Japan has just recently declined into a new period of recession and this is expected to further aggravate lumber market conditions.

Secondary Wood Manufacturing

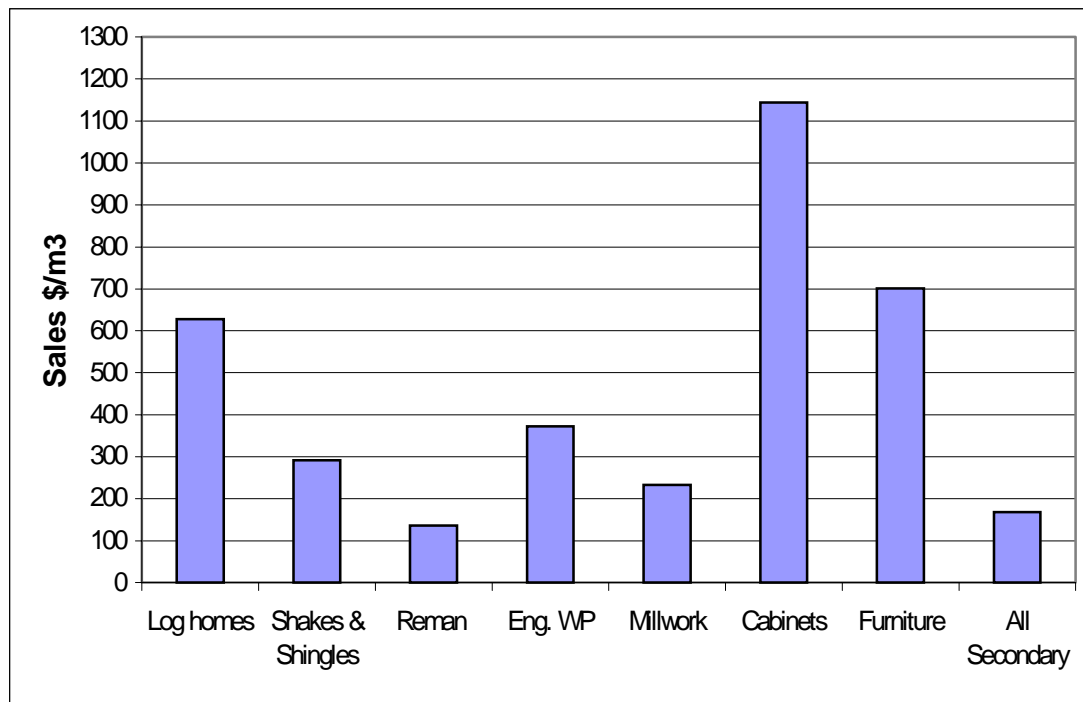
Many jurisdictions in Canada and abroad are actively working to promote value-added or, the more accurate term, secondary wood manufacturing. Secondary manufacturing is an attractive alternative to policy-makers as a vehicle to mitigate the job loss resulting from reduced access to timber (as is the case in the QCI). Figure 3 provides a summary of direct employment levels derived from a standard volume of round wood equivalent across types of forest sector activity. The jobs in secondary manufacturing are incremental to those in harvesting, handling and primary processing. Thus, the same timber creates jobs in all those activities.



Source: Wilson, Stennes and Wang, 1999; Delcourt and Wilson, 1998

Figure 3: Direct Employment per Unit of Round Wood Equivalent by Activity

As with the employment coefficients provided earlier in Table 5 there is also indirect and induced employment associated with direct job. These multipliers range from 0.80 to 1.11 indirect and induced job per direct job for most secondary wood manufacturing (Horne, 1998). Figure 4 summarizes the value of sales in dollars per unit of round wood equivalent in various secondary manufacturing activities.



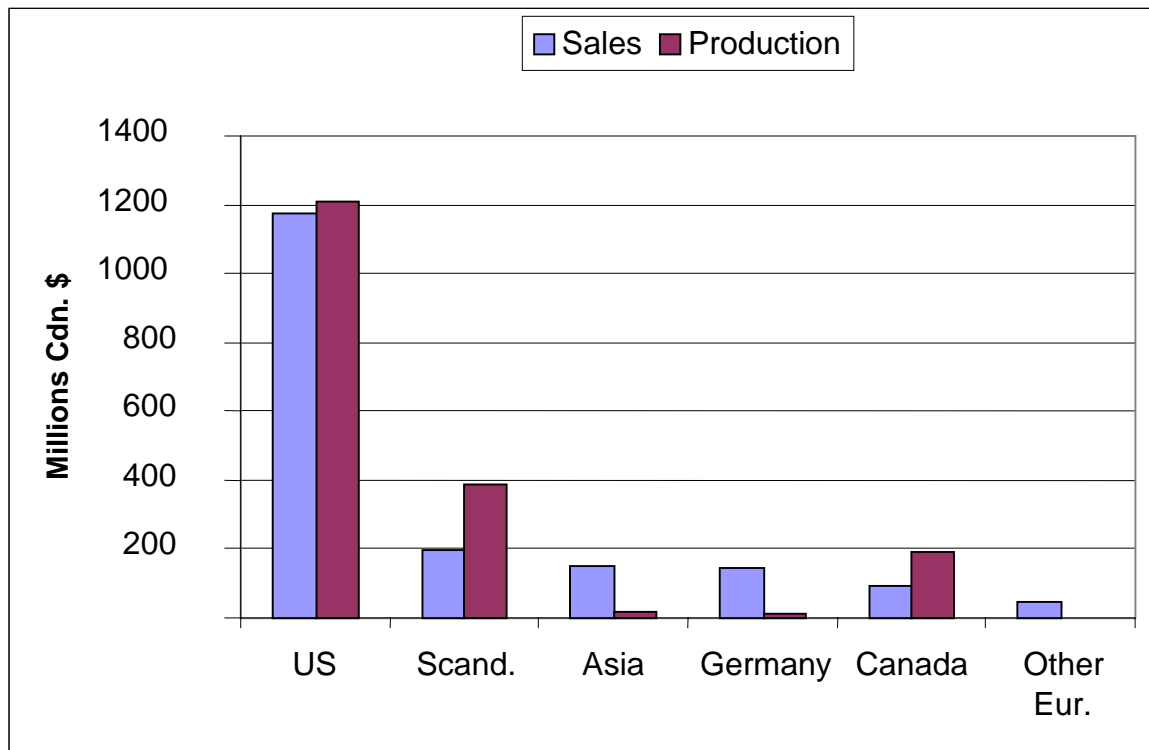
Source: Wilson, Stennes and Wang, 1999

Figure 4: Sales per Unit Round Wood Equivalent for Select Secondary Wood Manufacturing Activities, 1997

Typically secondary wood manufacturing firms obtain primary wood materials and further manufacture them into secondary products. The limited primary wood processing on the QCI and the very high cost of importing such products onto the QCI constrain the opportunities for secondary manufacturing, particularly remanufacturing activities. Remanufacturing is the major source of secondary manufacturing in BC and it is a high volume, cost-minimization type activity. Access to fibre and location are significant competitive factors in remanufacturing. In a recent study on clustering in PNW secondary manufacturing, a key feature to successful clusters was being located in close proximity to the final market (Braden *et al*, 1998). Clearly, the QCI is challenged by its isolation from markets. Thus, it will be difficult to compete in traditional secondary manufacturing in southern BC and western US markets. Instead, secondary manufacturing might need to concentrate on niche-market products for which the QCI has

some unique features that afford some comparative advantage. Examples of this are operations making use of Sitka spruce for musical instruments, and artisans creating traditional Haida art. In addition, the region does possess high quality timber which is an important factor for secondary manufacturing activities, especially those based on round wood inputs such as log home manufacturing, shakes and shingles, or veneer slicing.

Log home manufacturing is an activity that has had success on the QCI. A recent study (Westcoast CED 1999) examined market opportunities for log home production in BC. Figure 5 gives estimates of both annual sales and production for log homes in the key international markets.



Source: Based on Information in Westcoast CED, 1999

Figure 5: International Demand and Production of Log Homes

The US is by far the largest consumer of log homes, but is also the largest producer, with production exceeding domestic sales. Much of BC's current production is exported to the US. This is an area in which demand can be expected to expand for the

near term. Europe is also an important market, but is largely supplied by Scandinavian production.

Markets in Japan, and to a lesser degree South Korea and Taiwan, have been important for North American log home producers through the 1990's. As shown in Figure 3, this is one region with large "net imports" of log homes. Log homes in Asia are generally purchased as second homes or recreational lodges, are small scale (< 1,200 ft²), and are typically pre-built to stock plans (Westcoast CED, 1999). Asia is not currently a large market for custom hand-crafted log homes.

The most likely potential export markets for a QCI-based log home manufacturer would be either the US or Asian markets. However, Asia will be a difficult market in the absence of economic recovery. In the Asian market log homes are a luxury item and the recent history of tough economic times has greatly reduced conspicuous consumption spending in these markets and has produced a soft re-sale market in recreation property. The existing log home manufacturer on the QCI had success in the Asian market prior to the economic downturn.

In addition to the market opportunities, log home manufacturing is an attractive option to consider because log home production is suited to second growth timber, the required capital investment is not a major barrier to entrepreneurial entry, and the production skills are a relatively good fit with the regional labour market.

A lack of current infrastructure on the QCI may provide some opportunities for increased log building manufacture. There is clearly a need for increased lodging facilities on the islands if increased tourism is to be developed. As an example, a \$10 million development was recently announced for Moberly Lake (northeastern BC) consisting of a lodge built from logs and associated log cabins. Similar facilities on the QCI would fit well in a strategy to increase tourism in sectors such as eco-tourism, or locally delivered sport-fishing operations.

Economies of scale in production and/or marketing gained through cooperative efforts could be key to the feasibility of expansion of QCI manufacturing. For instance, there may be possibilities for the woodcrafts/artisan community to work together in the purchase of equipment and supplies as well as the formation of an association to aid in

product marketing. Cooperative efforts could also minimize transport costs for wood manufacturers if sufficient volumes could be generated to ship products using the most efficient methods (i.e., barge versus truck).

Non-Timber Forest Products

Another means of generating additional economic activity in the face of declining timber harvests is to develop forest-based goods and/or services that do not rely on timber harvests. At the provincial level non-timber forest products are becoming increasingly important, with recent 'reported' gross sales of \$25 to \$45 million for wild food mushrooms and \$55 to \$60 million for floral greenery products (Wills and Lipsey, 1999).

Wild edible mushroom harvesting in the QCI has focused on the yellow chanterelle and to a lesser extent the king boletus. Harvesting begins in August or September and typically lasts through to November. Neither of these species are commonly exported to Asia (as is the case with the well-documented pine mushrooms), but rather to European and US markets. The QCI is not generally considered a harvest site for pine mushrooms, although a small number of pine mushrooms were exported from the region in 1999.¹⁴

Chanterelles are an ectomycorrhizal forest mushroom species, forming a symbiotic relationship with certain tree species. A key question is how forest conditions and mushroom productivity correlate with one another (Pilz *et al*, 1998)? A recent study on chanterelle production on Washington's Olympic Peninsula identified, through interviews with commercial and recreational harvesters, the most common sites for harvest (Love *et al*, 1998). It was found that most harvesters preferred 30-60 year-old second-growth stands. Mushroom production drops off immediately after harvest, when the thick underbrush prior to crown closure makes access quite difficult. Little mushroom harvesting was done in old-growth stands, although the main reason was difficulty gaining access to the remaining old-growth left in the Washington study area.

¹⁴ In fact, pine mushrooms have been found in small numbers as long as commercial harvesting has been ongoing, but 1999 is the first year that sufficient quantity was picked to make it worthwhile to ship off-island.

The results of this study suggest that harvesting decisions do have an effect on chanterelle productivity.

The impact of harvesting on mushroom productivity is important in the QCI at this time. A large proportion of edible mushroom harvesting in the QCI occurs near Skidegate Lake on Moresby Island, a site that regenerated following a fire approximately 50 years ago. This same area is slated for timber harvest in the near future. It would be interesting to study whether the opportunity costs of lost mushroom production due to timber harvesting would change the economics of harvesting the site (i.e., rotation length, harvesting systems if mushroom productivity could be maintained with partial cutting systems).

Crude estimates of the size of the wild mushroom industry on the QCI indicate that as many as 100 people are involved in the harvest (Clarke *et al*, 1998) and total revenues are in the neighbourhood of \$750 thousand to \$1 million (Personal Communication, Brian Eccles, MoF, Feb. 1999). Using an average price to the picker of \$3.75/lb this would mean that 200,000 to 270,000 lbs of mushrooms are annually harvested in the QCI.¹⁵

The wild mushroom industry is characterized by cash-basis operation and little regulation with some portion of picking by transient harvesters moving around the province. This makes it quite difficult to ensure local employment or economic benefits are derived without some further regulation of the resource. There is also concern that unfettered access has the potential to destroy prime mushroom harvesting sites through over-harvesting. This is a common problem with free access resources, there is no incentive to harvest in a sustainable fashion if the benefits are likely to be captured by someone else.

Strategies to maximize the local benefit from wild mushrooms must first focus on developing some form of property rights for the resource. This would provide the incentive for both sustainable harvest and potential cultivation/inoculation of sites to improve growth. In the case of a common property good, as with wild mushrooms in BC,

¹⁵ This is the estimated average price in recent years. However, there is considerable price volatility: in 1999 the price of chanterelles was much higher, ranging from \$6.50 to \$7.50 per pound.

these incentives are greatly reduced. Regulation will introduce documentation and this information is expected to allow for taxation of receipts and earnings.

The other possibility for increasing the local benefit of mushroom production is through the development of local value-added activities such as grading or processing, and marketing. Economies of scale, especially on the marketing end, could be gained if a sufficient portion of locally picked mushrooms were locally graded and packaged for final sale through a marketing cooperative. This would also allow for brand recognition of QCI mushrooms, facilitating target marketing efforts. With sufficient scale, it may be possible to improve on current transportation links out of the QCI, therefore reducing the time to markets and improving final quality.

The feasibility of value-added processing activities must also be examined for the mushroom varieties harvested on the QCI. Further processing of wild mushrooms includes activities such as drying, freezing, pickling or canning.¹⁶ A company on Vancouver Island has been canning chanterelles and including these in gift packages along with smoked salmon, oysters and other local products. The bulk of boletus mushrooms exported from Canada are either dried or frozen, and Canada exported 2,000 kg of dried chanterelles to France in 1996 (Draeseke, 1998). These exports indicate that a market for further processing of the species found on the QCI does exist. Options for additional processing would provide an outlet for product which is not of sufficient grade to make the fresh market. Further market research is required to determine value-added strategies for such processing activities.

A recent study on non-timber forest products identified medicinal and nutraceutical botanicals as economically more important, on a global scale, than wild food mushrooms (Wills and Lipsey, 1999). A report on BC identified twenty-six medicinal and pharmaceutical products harvested in forestlands: almost all of these on a personal scale (de Geus, 1995). While these products may turn out to be important in coastal BC, it should be noted that discovering valuable pharmaceutical products in the world's forests has not been particularly successful thus far. America's National Cancer

¹⁶ There has been drying of chanterelles and boletus at a small scale with portable dryers in past years on the QCI.

Agency and the Department of Agriculture collected tens of thousands of root, bark and fruit samples between 1960 and 1980 and again between 1986 and 1996 (The Economist, February 20, 1999 pg. 77). From these vast collections only three significant products were discovered, Taxol, Camptothecin and homoharringtonine.

Taxol was originally derived from the bark of the western yew (*Taxus brevifolia*) tree found throughout forests of the Pacific Northwest region of North America.

Widespread demand for this product soon led to Taxol shortages, and it became obvious that this slow growing tree would not be able to meet future demand (Foster, 1995; de Geus, 1995). Research efforts first led to a semi-synthetic means of generating Taxol from the needles found in all Yew species and later a means was developed for complete synthesis of Taxol.

In addition to medicinal botanicals that have been integrated into Western medicine there are a host of products that have been part of traditional healing for local indigenous people. Although there may be a market for these products, any commercialization of products traditionally collected and used by the Haida people will be stridently opposed by Haida people in the QCI.¹⁷ Historically, the distribution of any financial gains from ethno-botanical medicines has not rewarded the aboriginal people.

Generating market interest for BC grown product, often relatives of popular Asian species, requires research on the efficacy of native BC species. This type of research is beyond the scale of regional interests, and would have to be part of overall provincial initiatives.

A group of non-timber forest products that has been successfully developed elsewhere in the province and the US PNW is floral and greenery products (Thomas and Schumann, 1998; Vance and Thomas, 1997).¹⁸ In fact, province-wide, estimates of revenue from floral and greenery products are higher than for edible mushrooms. These

¹⁷ This issue was raised at a local public presentation in Masset, September 1999. A large number of local Haida people expressed anger at the concept of commercialization or regulation of any non-timber forest products traditionally used by Haida people.

¹⁸ Research on greenery sales to wholesalers in BC and the US PNW estimates total sales at US\$129 million in 1989: \$13 million for salal and \$11 million for beargrass (Schlosser *et al*, 1991). A second study estimated 1991 global sales of salal, sword ferns, beargrass and huckleberry at US\$72 million (Mater in Vance *et al*, 1997).

products can be categorized into five groups: greenery, conifer boughs, aromatic oils, flowers and basketry filler (de Geus, 1995). The QCI has potential in products such as salal, moss, ferns and a number of others that have emerged as commercial products elsewhere. However, most of these products are readily available closer to final markets, and being quite bulky, transportation costs would be challenging to QCI products.

Another potential non-timber forest product that the QCI could have some success in marketing is bottled water. Bottled water is shipped long distances but margins appear to remain attractive given the range of new entrants, promotion budgets, and the acquisition strategies of some major corporate players. The global market for bottled water has grown rapidly and the image of a pristine, wild place could be effectively utilized in marketing the product.¹⁹ The linkages to wilderness and Haida culture could prove a potent marketing tool in select markets.

Recreation/The Wilderness Experience

Increasing the level of tourism activity is another means to add value to forest-based natural resources on the QCI. Clearly, one of the key strengths possessed by the QCI is the unique combination of wilderness and First Nations cultural heritage. As is the case with SE Alaska, much of the economic activity lost in the forest sector could be effectively captured by strategically designed efforts in the recreation/tourist industry. One must look at strategies to increase awareness of what the region has to offer, reduce problems with access to the QCI, and improve infrastructure to meet the needs of tourists upon arrival.

Potential visitors to the QCI can be split into different groups. The first is a traditional tourist, generally an off-island resident visitor who would arrive via ferry from the mainland, often intent on camping in the islands. The second are so-called eco-tourists, who would fly to the QCI, most likely to visit Gwaii Hanaas. A third 'potential' group would be those on organised cruise ship holidays originating in Vancouver or the Western US.

¹⁹ For example, sales in the US market totaled US\$4.3 billion in 1998: a year over year increase of almost 10% (see www.bottledwaterweb.com).

The first group of visitors would currently be drawn to Naikoon Provincial Park. A second area of the QCI identified for improvements is the North part of Moresby Island near Sandspit (Spruce Roots, 1996). This area, called the “North Moresby Loop”, is already used by local residents for camping (forest sites) mountain biking, hiking, swimming and fishing. With general improvements to the road, better boat launch facilities, interpretive signs and, most importantly, marketing to off-island residents, this area could draw additional QCI visitors.

Eco-tourists are a different group from the traditional tourists. These visitors are interested in being educated while they travel, interested in such issues as nature, native culture, conservation and local wildlife (Wills and Lipsey, 1999). The draw in the QCI for eco-tourists is clearly Gwaii Hanaas. Considering that current use of Gwaii Hanaas is far below “the cap”, which was identified in 1996 by the AMB (Gwaii Hanaas Backcountry Management Plan), strategies to increase the number of eco-tourists would be beneficial. This could best be accomplished by targeted marketing of Gwaii Hanaas in important eco-tourist markets such as Germany.

Tourism for the third group would be increased greatly if the small or “pocket” cruise ships could access renovated harbour facilities at Sandspit. A targeted marketing effort and some infrastructure improvements (in addition to those in the harbour) would be required to create demand by the tour companies to add a stop in the QCI to their schedules. In an effort to promote cruise ship traffic to the QCI, work must be done to create activities that attracts the interest of the cruise lines and to work to maximise the length of stay for these tourists. These activities need to consider the physical impacts on the QCI and the financial contributions. The combination of fishing, wilderness experience and the Haida culture can be packaged into a very appealing destination visit.

The completion of a comprehensive business plan is a key step in the meaningful assessment of any development option. Such a plan provides the potential investor with an objective vehicle to measure the viability of the option and to consider the various factors influencing this viability. A template on creating a business plan is provided with this report (see Annex A).

Summary and Conclusions

The economy of the QCI, as is the case with many forest-dependent communities in BC, the PNW and SE Alaska, must adjust to the structural change which is inherent to reduced timber access in order to maintain a reasonable level of regional economic strength and stability. Dramatic current and future reductions in the traditional resource extraction sectors and the loss of CFS Masset mean that economic diversification and new employment activities are key to minimizing future economic erosion.

Theories of regional development do not provide solutions on how to develop regions such as the QCI. In fact, the most commonly used development theory in BC, the “Staples Theory” has failed to predict how development occurs in forest-dependent regions. However, despite these limitations development theory does provide some useful direction to identify and examine development challenges and options.

Two US west-coast regions were examined to see how they coped with timber supply reductions and major structural changes in export markets. The PNW faced timber harvest reductions of 40% between 1989 and 1995 from the application of Option 9 on US federal lands. Despite the dramatic reduction in harvest volumes, or perhaps because of the reductions, over the same time period secondary wood products direct employment increased by 8 percent. Companies in the PNW responded to the timber supply reductions by shifting to less timber intensive and more labour intensive secondary manufacturing of wood products. The PNW was in a position to tap into a large pool of entrepreneurial talent and to capitalize on close proximity to final markets.

In contrast, SE Alaska, which has a geographical location and species mix similar to that in the QCI, also faced declining harvests and still greater reductions expected in the near future, but unlike the PNW, companies in SE Alaska did not respond with secondary manufacturing.

Forest industry direct employment has declined dramatically in SE Alaska (in excess of 50% from 1990-97). However, overall regional employment is up and the reason for the increase is growth in tourist and recreation related services has outstripped the decline in forestry employment. An advantage that SE Alaska has in tourism versus

the QCI is the presence of cruise ship traffic through the summer season. Increases in tourism and recreation have allowed the regional economy to mitigate the pronounced harvest reductions and mill closures.

Harvest reductions, both current and future, are resulting in job losses in the logging sector on the QCI. More labour intensive forest management, secondary wood processing and an increased role for non-timber forest products could replace many of the jobs lost through reduced harvests.

The small population base, and isolation from major markets, means that the QCI must look to activities for which unique characteristics give it some form of advantage. The QCI would have great difficulty competing in commodity lumber markets. The main strength of the region is its blend of natural and unique (and identifiable) cultural resources. Marketing efforts for a number of both timber and non-timber products could draw on this image in a number of ways.

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Annex A: Secondary Manufacturing in Wood Products

A Guide to Writing a Business Plan²⁰

This publication was completed to assist individuals and companies interested in assessing a new business investment, expanding an existing business, or developing a new product line or market within the BC wood products industry. The publication is designed to provide a structure to answer and test ideas using basic business principals and to illustrate some of the financial questions involved in making investment decisions in secondary manufacturing in wood products.

In addition, this publication will complement the efforts of various public agencies that are working in concert with private sector investors to assess forestry business opportunities

Financial investment is a demanding task with inherent risks. The development of a comprehensive business plan is a useful means to identify, assess and plan for these risks. However, it is important to recognize that a proper business plan is only a component to and not a formula to a successful business.

This publication is intended to assist interested parties in rigorously assessing and presenting the options. There is no magic path.

Why Produce a Business Plan

A business plan is an essential tool for launching and managing a new forest products business and for managing an expanding company. It is a means of gathering ideas and information on the potential and feasibility of a new venture and a good monitoring device once it is established. A business plan is mainly for your own benefit but it is also your primary instrument in trying to inform people, such as bankers, investors, potential partners, business advisors and consultants, and government agencies. A business plan is most effective when developed for a five year time horizon. This requires the use of realistic projections and assumptions and that the plan be updated as new information becomes available. A business plan should be flexible and an annual update will prove to be a valuable source of information.

This business plan guide is targeted to people who want to be or are already involved in secondary manufacturing in the forest products industry. The user of this guide should not expect that this is the best or only formula for their business plan but should instead use as it as an aide to completing a meaningful business plan. Many sections of a business plan will require information and expertise, which the individual entrepreneur may not possess, it is important that professional expertise be drawn upon in these sections. Included at the end of this guide are a glossary of terms, a package of worksheets and list of additional sources of information. The worksheets are designed to help organize the elements and content of and to simplify the preparation of a comprehensive business plan. The worksheets are intended to support the efficient preparation of a comprehensive business plan.

What Are the Components of a Business Plan

Any good business plan must contain several key components. You should adapt each component to the types of products and services your company provides. Below is a list of the key components you

²⁰ The Annex was originally published by the Canadian Forest Service (CFS) as Working Paper 96.03. The paper is available on the CFS electronic 'Bookstore' at www.pfc.forestry.ca

need to include. The degree of detail in any component will be based on the specific needs of your company. However, it is a good idea to develop each section so it can be drawn upon to produce a tailored plan for presentation to specific audiences.

The following is a standard structure to a business plan.

- a. Title page and statement of purpose
- b. Table of contents
- c. Executive summary
- d. Introduction
- e. Industry description
- f. Business profile
- g. Sales and marketing plan
- h. Human resources plan
- i. Operating plan
- j. Financial plan
- k. Risks and weaknesses
- l. Planning for the longer-term

You may elect to add other sections such as timber supply licenses or arrangements, supply or service contracts, or environmental laws and regulations which play a key role in your business. In addition, you might want to add information such as resumes, financial data, market data, maps, graphics, and tables in appendices in order to provide detailed information without compromising the flow of the main business plan.

Developing a Business Plan

Section A Title Page and Statement of Purpose

The title page should list the name of business, the principals, address and phone, the name of who prepared plan, and the name of the recipient of the plan. The statement of purpose should include reflect the target use of the plan. If the plan is intended as strategic analysis for internal use then the statement of purpose would simply be the company's mission statement. However, if the plan is part of a financing proposal you should answer questions like why and how much money is needed, what is the risk to the lender, why does the loan or investment make sense.

This is an initial pitch to the document so make it short and effective.

Section B Table of Contents

This listing of the contents of the business plan, referenced by page, allows information to be located quickly. It is best to complete this after the rest of the document has been done.

Section C Executive Summary

The executive summary presents only the essential information to the reader in a fashion which makes the reader interested in considering your business plan. Position this section as a stand-alone to encourage the reader to invest time in your proposal.

Make sure all the information in the summary appears in detail in the body of the business plan. Be concise and include the following:

Company name and location

- Description of the business plan content
- Purpose of the business plan
- Company product or service description
- Financial resources (equity, debt, commitments)
- Financial projections and any investment funds sought
- Projected payback period and contingency plans
- Market description and potential
- Marketing strategy (nature of competitive advantage)
- Industry description (competitive analysis)
- Business goals and objectives
- Expertise of the management team
- Linkages to other private or public objectives (job creation)

Section D Introduction to Your Business Plan

The introduction should inform the reader on what the content is in the business plan, the purpose of the plan, and how the information is presented.

In this section consider including:

Purpose of the Business

- Company description
 - Clearly define your main business activity
- Description of the product or service
 - Clearly define the products or services
 - How do you plan to make money?
 - Explain why there is a demand for your product
 - Why will you succeed where others have failed?
 - What is so unique about you that will make you successful?
 - Who are you serving and why will they benefit?
 - How will you serve your market?
 - How do you fit into the market?
 - What are your strategic or competitive advantages?
 - What are the advantages of your products?
 - If you have several products or services how do they fit together?
 - Do they complement each other?
- Goal(s) of the company
 - Do you have a Mission Statement, i.e., what is your vision for this company?
- Company Management and Advisors
 - What special human resources are available to your company?
 - Include lawyers, accountants, consultants, friends etc. It is a good idea to attach resumes of you and your expert resources in an appendix.

Industry Overview

- Broad description of your industry
 - What are the sales trend?
 - What are the growth areas?
 - What kinds of products are being demanded and why?
 - What are the gaps in meeting consumer product demand in prices, quality or service?
 - What is the current industry structure? Any likely changes?
 - Are there lots of large firms, etc.?
 - Are there barriers to entry/exit? What are these?
 - Are many of the firms integrated?

What is the industry's main source of competition?
Does the industry make a competitive return on capital?
What is the distribution of profits in the industry?
What is the industry's bankruptcy rate?
Is this an export driven industry?
 What are the big export markets?
 What are the emerging export markets?

General market description

How big do you expect your market to be?
Which regions do you plan to do business in?
Which consumer groups do you intend to target?
What is your most important market?

Market Competition

Who and what is the competition?
Do any competitors come from non-wood based industries?

Environmental Issues

Describe issues, regulations, licenses, review processes
Describe anticipated compliance costs and ability to meet the requirements
technically and economically

Financial Summary

Financial requirements, sources and applications

What level of financing is needed (identify both fixed asset and operating needs)?
How do financial needs change with scale and scope of operations?
Where will financing come from? What are the methods of raising financial support?
Present financial goals (provide opening and projected balance sheet and income statements)

Section E Industry Description

This section should provide a detailed description of your industry and how your company fits into the industry. This section will help to track trends in the industry and your company's relative position. It will also provide valuable information to people with less knowledge of the industry (including target sources of investment funds).

In this section consider including:

History

Describe the industry background
Describe the current industry: size, structure, and level of integration
If your company already operates in this industry or a related industry it would be helpful to report the history of your company, name, date and place of formation, legal structure, discuss subsidiaries (also affiliated companies or predecessors) and degree of ownership and any involvement your company has had in the development of the industry.

Trends and Projected Growth

Describe important industry trends (e.g., price, concentration, integration, technological, regulatory, social, demographic, environmental, geographical, lifestyle, etc.)
Do trends change quickly or slowly in this industry? If so, why?

Describe industry growth

Do you have growth rate numbers?

What are your sources of information?
Are there barriers to entry? What are these (access to wood, capital, regulatory, institutional, etc.)?

Note relevant information from and access to research and development efforts

Does the available research suggest anything about future industry trends and opportunities?

Key Success Factors In This Industry

What will distinguish your product from the competition?
What competitive advantage do you have? Is this sustainable?
Do you have alternate markets? Are export markets an alternative?
What is the market demand?
What is the trend in consumer spending? Is the economy healthy?
Is the exchange rate favourable?
Does new technology offer you a competitive advantage?
Do you have a secure supply for your inputs? How are input prices determined?
Do you have any alliances related to purchasing inputs, manufacturing or marketing?
Describe any proprietary features: patents, exclusive rights, licenses, copyrights

Your Company's Market Niche

How will your company fit into the industry? How will the company differentiate/distinguish itself?
Describe your market niche. How will this respond to changes in demographics, population migration, and to changes in disposable income and taxes?
You need a detailed analysis of the competition to determine your company's market niche
What is the competition's size, market position, image, and business strategy?
Are competing products sold on price strategy, or quality of product, or service characteristics? Describe the price/product mix and where your product fits in.
What are the potential substitute products and how will these effect your market?
What are your competitor's strengths and weaknesses?
What are your strengths and weaknesses?
What information can you provide about your target customers and suppliers?

Section F The Business Profile/Product Service, Process

This section should provide a detailed description of your product, any services you provide, and the manufacturing process. Be clear and concise and use appendices where appropriate. Use diagrams, pictures, etc., to convey information efficiently and quickly. If your company only offers custom services, such as kiln drying, include this in the business plan.

In this section consider including:

Product Description

Include a clear description of the product
Describe important characteristics/attributes of your product

What is your target customer and why will they buy your product?
What is the target product quality and how will this be reached?
Describe anticipated performance and use for your product
Why will your product be demanded?
Describe important production technologies
What stage is your product at (design, prototype, development, established product, mature)?
For a multi-product firm outline the relative importance across products
How do they fit together? Are they complementary in production or marketing?
Describe any requisite legal, regulatory or approval requirements and their current status

Service Description

Describe any associate technical service to your product
Will you provide instructions on such things as maintenance, assembly to the retailer or wholesaler?
Describe marketing service
Will you provide sales support to retailer, wholesalers or customers by way of educating them on manufacturing process, construction materials, assembly, and product quality?
Will you provide catalogues, brochures, 1-800 number, e-mail, etc.?
Describe replacement and repair services
Will you develop field support policies (this can be key to exports)

Production Process Description

Explain the production process (including costs). Show unit production costs in relation to total cost of product in the income statement.
Describe production machinery and equipment (a flow chart can be useful)

Section G Sales and Marketing Plan

This section describes such things as the market, competition, product strategy, price strategy, promotion strategy, distribution strategy and sales strategy. For many purposes this is the most important section for both a new business venture and an established company. It is easier to have an idea and to develop a product than it is to turn this into a financially successful business.

In order to improve upon the financial viability of your investment it is imperative that good quality research of your intended market be completed. Relevant market information can be difficult to get and expensive. However, without this information it will be next to impossible to secure commercial financial investment and the viability of your own investment funds are exposed to unnecessary risks.

The importance of this section should not be underestimated. If you cannot adequately provide the information requested below it is doubtful your business venture is viable. It is also important that this information be presented effectively. The use of graphics, charts and tables can serve to greatly enhance the professional quality and appearance of a business plan.

In this section consider including:

Market Size and Trends

Show total market size and describe any market segments (these may be based on geography, price, product features, etc.)
Describe any target local or regional market
Show your forecast market share and explain why

Show industry growth rates (short and long term)
Describe market trends (volume, value, production cost, exports, etc.)
Describe your firm's market growth
Identify sources of information
Describe the anticipated impact of any relevant economic, demographic, social, political, technological, and regulatory trends
Is the industry entering the mature market stage? Are new entrants coming on stream? Are substitute products making gains?
What area of the industry is the most innovative?

Competitor Analysis

Discuss the competition (including expected future sources)
What makes them successful?
What are their pricing and non-pricing strategies? Discuss the expected response of competitors and how your business is prepared for this (e.g. losses during a start-up period). How will this response be financed?
Include information on competitive products, sources, production methods, costing, annual sales, markets, etc.
Discuss competitor business practices and investment trends
Are there any established manufacturers in other markets which have or are planning to move into your target market?

Target Market and Positioning Strategy

Describe your final market (final consumer)
Describe your direct market (wholesalers, retailers, etc.)
Discuss current customer base (names, locations, sales volumes)
Describe how your company will position itself to secure expand sales
Do your sales targets and volumes make sense for the logistics of your business?
Describe any links you have with industry associations or any strategic alliances and how you will benefit from such relations
Explain how your company distinguishes itself from the competition
Describe any contracts, licensing, and franchising opportunities
Identify your target market. Why is it the target?
Profile target market purchase decision factors
What are the buying habits?
Why do they want the product?
What is their buying criteria?
How important is price, quality, timeliness of delivery, reliability of service, financing, product selection, and sales and support staff to your customer?

Marketing Mix Strategy

Product Strategy

Describe your product
Describe how it differs from the competition
Will you be able to expand into new product ranges easily and will you be able to be innovative and flexible?

Price Strategy

How will you establish your pricing? How will this relate to the competition?

How will any related services be priced?
How will you provide for price changes in response to market signals?
What are the standard industry mark-ups
Discuss the relationship between price and demand for your product
Does demand reflect influences other than price? Do you have any influence on price.
If it does then have you asked your customer what features and benefits they are concerned with?
What are your customers needs?
What kind of cost savings are customers interested in?
Describe any payment discount strategies. How does this compare with the industry norm?

Promotion Strategy

Describe advertising plans How do these fit with the industry practice?
What are the priorities, strategy and costs of your planned promotions?
How will you evaluate the outcomes?
Describe any industry association memberships and other strategic alliances with relation to promotion
Describe planned direct sales calls
Describe any major market drives
Describe any in-plant showroom. Will this include on-site sales?
Describe any established forums which provide buyer contact
Describe the contribution of your sales force

Distribution Strategy

Describe distribution paths for your product. Discuss any planned incentives for distributors to carry your product.
Describe the competition distribution system
Comment on significant trends in distribution and what the implications are for your business
Describe your experience with established distributors
Describe territorial considerations
Discuss any planned or active distribution alliances for your product

Sales Strategy

Describe your sales force
Describe the function of your sales force
How will they contact customers?
What level of sales do you expect by each sales person, each product, and so on?
Describe how your sales strategies are designed to evolve
Describe how you identify and pursue new customers
Describe terms of sales
Describe anticipated delivery time periods
Describe typical or anticipated order size

Section H Human Resource Plan/Business Organization

This section should explain the initial or current organizational structure of the business and provide an outline on how this is planned to change as the company grows.

In this section consider including:

Organizational Form

Describe firm's organizational structure (include a chart)

Describe relevant tax and legal attributes of your structure (joint-venture, partnerships, subsidiaries, holding companies, etc.)

Management Team and Staff

Show organization of management and administrative staff

List key managers and describe contributions to your business (include resumes in an appendix)

Discuss the tasks of the labour force

How flexible is your workforce? What are skill levels?

How flexible is organization to utilize all the work force skills?

What is the supply situation for required labour and skills?

What is the wage and salary structure? Will the operation be union certified? What are the implications?

What is the benefits packages? What are all the employee-related costs (e.g. workers' compensation, pensions etc.)? How much will they cost?

Describe your human resource policies and procedures you plan to implement. Is there an employee training plan?

What are the planned hours of operation, shift-work schedule, and holidays?

Will you have part-time and full-time employees?

Describe any directors and business advisors and their talents (include any existing contract obligations)

Ownership

Name principal equity holders and their affiliation

Describe how owners are involved in management

In the case of public funding (federal, state, regional economic groups, city, etc.) explain their interest share of the business. If applicable, describe any stock situation

Section I Operating Plan

This section describes the physical aspects of the business such as the location of facilities, labour and management, materials and the production schedule.

In this section you should cover the short- and long-run plans for production and labour. This would include a description of all manufacturing sites, management and labour. This should be a narrative presentation of operations while numerical presentation will be displayed in the "Statement of Projected Operations and Cash Flows". This is also the best section to discuss sources and costs of raw materials although it is best to refer the reader to the Financial Statements for specific details as not to hinder the flow of your discussion. However, a tabular display of salaries and wages can be helpful.

In this section consider including:

Location

Describe location and the attributes of this location

Factors which influence location decision might include cost, consumer access, transportation facilities, production requirements, sources of inputs such as labour and raw materials, proximity to related industries, environmental considerations, etc.

Describe any special facility requirements

Have you considered what your employees find attractive about a particular

location (proximity to affordable accommodation, schools support services, recreation, etc.)?
How should your building(s) be designed? What is the function?
How about future expansion options?
Show costs for facilities, including total cost and cost per square foot
Will the location be a lease or purchase? What is basis for this decision?

Labour Force and Labour Costs

List entire management (include resumes in appendix)
Show annual compensation and any bonus provisions
List combined labour force or individual positions
Show annual labour costs (include future contract obligations)
Describe benefits package and their costs (include insurance, profit sharing, and pensions, etc.)
Describe workers' union(s)
Describe method of compensation, bonuses, stock options, etc.
Discuss stability of work force (is it seasonal or cyclical)
Describe any skills and training requirements

Materials Procurement

Identify sources of inputs
Is there more than one supply source available to you?
Include any long-term supply agreements
Show costs of materials
Is there any variation in quality of product, delivery, choice, reliability etc.?
Include anticipated freight methods and costs
Describe influences on materials availability
Does the supplier serve buyers with large demand swings?
Describe anticipated cost trends
Describe usual terms of purchase and lead times

Production Schedule

Describe anticipated production schedule
Describe any provisions for unexpected start-up delays
Compliance with environmental regulations, safety regulations etc.
Consider additional shifts to maximize returns to equipment/capital expenditures
Describe how you will account for production and work in process
Describe inventory control procedures

Long-range Plans

Breaking into an export market is typically a difficult thing to achieve. Often the biggest single barrier is to demonstrate that your company is a credible business venture. This barrier can be overcome through the development of a credible presence in the domestic market and drawing upon this financial base to pursue an often more competitive export market.

Describe a medium-term (e.g. five year) goal for the business
Describe steps to achieve that goal
Describe your business environment and work attitudes that will lead to success
Consider expansions, new product lines, diversification, and integration

Section J Financial Plan

This section describes the financial aspects of the business such as the capital requirements,

financing arrangements, projected balance sheets, projected operations and cash flow statements, and analysis of investments.

Generally accepted accounting demands can be expected to require a pro forma balance sheet, projected year-end closing statements, and annual balance sheets and income statements for five years.

This is the most technical section of your business plan and professional help, such as an accountant, is likely required. In this section many of the sub-sections should be presented in standard accounting form. Worksheets have been included in an appendix to this report. Note that some sections will be better presented in narrative form and that graphics and charts will be effective tools to display information. PC software is available to support the preparation of many standard accounting forms.

Reasonable information on prices and production figures and costs are required to adequately complete this section. The numbers used need to be referenced to the source (more than one source is better). It is extremely important to use good information in making your term projections. Include all assumptions used in preparing the financial statements.

It is also beneficial to discuss fiscal responsibility and issues of financial control. This might include any planned internal audit procedures and the cost accounting policies and methodologies be employed. Generally it is difficult to secure outside financing in the absence of the applicant bearing a degree of financial responsibility.

Finally, do best case, worst case, and most likely case scenarios when presenting any uncertain aspect of the financial plan. Identify the key levers/factors that drive the outcomes from these scenarios. This will serve to illustrate the degree of risk. Present any planned procedures to reduce this risk.

In this section consider including:

Capital Requirements

It is recommended that you provide a clear breakdown of your capital requirements. This is particularly important in negotiations with lending institutions as they often finance assets differently from operational loans (term versus revolving debt).

Show first year's capital requirements and its intended uses

Project capital infusions necessary for the next 5 years

Show requirements for land, buildings, construction, interest charges during construction, machinery, transport equipment, tools, supplies, and office furniture and equipment

Show working funds (cash, receivables, and inventories)

Note sources of information used in developing financial estimates and statements

Show capital requirements for replacement equipment and other capital acquisitions (note depreciation schedule against asset classes)

Allow for contingencies in your capital needs

It is recommended that you allow for at least a 15% discrepancy in your fund requirements. Start up costs can easily increase due to problems such as late delivery of key equipment, government license delays, environmental approval delays, exchange rate fluctuations, etc.

Include a reserve for payment of taxes and interest charges

Financing Plan

Describe all sources of funding for your business

Explore economic development loans and grants from public and private agencies

Explain what portion of total financial needs will be borne by you and your investors

Business plan advisors recommend a minimum contribution of 20% of your own equity.

Describe any confirmed or proposed equity support

Describe required loans (purpose, term, amortization period, interest rate, drawdown fees, etc.)

Identify grants from economic development sources for land, buildings, site improvements, tax assistance, worker training grants, etc.

Beginning Balance Sheet

Show pro forma balance sheet for first year of operation and projected balance sheets for subsequent years (5 year time span)

If you are presently in the business, include current balance sheet

Be prepared to provide your Personal Financial Statements (most lending institutions will require them)

Statement of Projected Operations and Cash Flows

Project cash flow for 5 years: monthly for year 1, quarterly for years 2 and 3, and annually for years 4 and 5. Reliable price information is crucial

Divide the statement into sales plan and financial plan

Explain any assumptions you make with footnotes (e.g. basis for pricing, basis for costs, mark-up rates). Discuss seasonal influences

Discuss how costs may fluctuate with production volumes

Describe cost system and budgets you will use

Provide sufficient detail to give reader a clear idea of scale and scope of operation

Do sensitivity analysis on estimates used in preparing financial statements

Identify government regulations and environmental constraints which may cause serious lags in operation plans and impact cash flows

Investment Criteria

Calculate internal rate of return and return on equity

Calculate payback period

Calculate break-even point

Calculate net present value of any investment decisions

Calculate the ratio of present net value to initial investment

Lending institutions often require debt itemization, an interest coverage ratio, and debt to equity ratios

Include a sensitivity analysis to indicate the strength of your figures

Section K Risks and Weaknesses

This section presents events and problems which could effect the conclusions presented in the business plan.

Aspects which should be considered include changes in the economic climate, demographic changes, the accuracy of assumptions, possible adverse market trends, changes in the exchange rate in target markets, and the effects of increased material, energy, transportation, and other costs.

Project your company out 10 years and provide long-term expectations. It is useful to include a sensitivity analysis around the assumptions used in developing your estimates. This will provide insight on the strength of the figures.

Section L Planning for the Future

This section outlines the strategies and measures needed to be taken to ensure continued success.

Use industry business-sector statistics to measure the success of your business relative to the norm. Use measures such as industry growth rates, sales levels, cost ratios and expense levels. Much of this information can be acquired from industry or business associations and various government agencies.

Identify industry trends and topics which will need to be monitored and how you will do this. Identify any areas which need special attention by management

Develop performance indicators for all aspects of your business

Such indicators are inventory turns, sales per employee, sales per product line, changes in the cost of goods, machine downtime, employee grievances, employee sick days

Develop a framework and plan to deal with possible negative events in the future such as strategies to deal with suppliers, acquiring human resources, or financial adjustments

Continue to update your business plan to insure that you stay on target to your goal

Closing Comments

Preparing a proper business plan is a demanding task but the rewards from the information produced will be considerable to those who invest the time to do the job properly. While there is no formula for success in the forest products business, the preparation of a proper business plan will serve to improve the ability of the investor to assess the true merit of the opportunity be considered.

Information Resources

General Business Information

The Canada/British Columbia Business Service Centre
601 West Cordova Street
Vancouver, British Columbia
V6B 1G1
Tel: (604) 775-5525 Toll Free: 1-800-667-2272

Business Info Centre
712 Yates Street, 2nd Floor
Victoria, BC V8V 1X4
Tel: (604) 356-5777 Fax: (604) 356-5951
Toll Free: 1-800-661-2891

Federal Business Development Bank
601 West Hastings, Vancouver BC V6B 5G9
Tel: (604) 666-7800
or
990 Fort Street, Victoria, BC V8V 3K2
Tel: (604) 363-0161

Resource Libraries and Statistics

Advisory Services
Statistics Canada
Sinclair Centre
Room 340F, 727 West Hastings Street, Vancouver, BC V6C 3C9
Tel: (604) 666-3691 Toll Free: 1-800-663-1551

BC Stats
Central Statistics Branch
Ministry of Government Services
553 Superior Street, Victoria, BC V8V 1X4
Tel: (604) 387-0327

Resource Library
Ministry of Economic Development, Small Business and Trade
2nd Floor, 712 Yates Street, Victoria, BC V8V 1X5

Resource Library
BC Business Information Centre
601 West Cordova, Vancouver, BC V6B 1G1
Tel: (604) 660-3900 Toll Free: 1-800-972-2255

Vancouver Public Library
750 Burrard Street, Vancouver, BC V6Z 1X5
Tel: (604) 665-2287

Greater Victoria Public Library
735 Broughton Street, Victoria, BC V8W 3H2
Tel: (604) 382-7241

University and College Libraries

Glossary

This is not an exhaustive list of the terms needed to complete a business plan. For more information on these and other financial planning terms refer to an accounting or business textbook.

Accounts Payable

The amount owed to suppliers as a result of credit purchases for inventory or services, other expenses (e.g. utilities), or taxes.

Accounts Receivable

Total of money owed to the business by its customers who purchased goods or services on credit.

Administrative Expenses

Operating costs incurred in the normal course of running a business, such as telephone, management and office salaries, professional fees, property taxes, and so on.

Assets

The entire resource of a person or business, tangible and intangible, such as accounts and notes receivable, cash, inventory, equipment, real estate, good will, and so on.

Average Age Of Account Payable Measure

The average period of credit taken in business transactions determines the extent to which the working capital of the business is supplied by credit obtained from trade suppliers. The use of this measure over successive accounting periods is helpful to determine whether current liabilities are being paid more promptly or less promptly than in the past (remember to take note of seasonal effects). The ratio can be calculated as follows:

$$\text{Average daily credit purchases} = \frac{\text{Credit purchases for the year}}{365}$$

$$\frac{\text{Outstanding accounts payable}}{\text{Average daily credit purchases}} = (\text{Days})$$

Balance Sheet

A statement of the financial position of a business showing what assets it owns, what obligations are owing to outside parties, and the owners' stake in the enterprise.

Break-Even Point

The level of operations of a business at which revenues equal expenses. This is usually expressed as the dollar volume of sales required to cover both fixed and variable expenses.

Capital

The owner's equity or financial interest in the business. It can be in the form of the proprietor's or partners' capital, or, if incorporated, in the form of common stock, preferred shares and retained earnings.

Closing Inventory

The value of the total inventory or the number of units that a business has on hand at the end of the period.

Corporation

A legal entity, with or without share capital distinct from those parties or individuals that own it.

Cost Of Goods Sold (COGS)

The total cost to the business of the goods sold during an accounting period.

Current Assets

Unrestricted cash or other assets that, in the normal course of operations, may be converted into cash, or consumed, into the production of income within one year from the date of the Balance Sheet.

Current Liabilities

Outstanding debts of the business that are expected to come due within one year of the date of the Balance Sheet. This is current payables and liabilities.

Current Ratio

The current ratio is a ratio of current assets to current liabilities. This ratio is also called the working capital ratio as it shows how much larger current assets are to current liabilities which by definition is working capital (see definition of working capital). For example, a current ratio of 2:1 indicates that current assets are twice the amount of current liabilities. A sound ratio is generally held to be at least 2:1.

Depreciation

A method of spreading the cost of a fixed asset over several accounting periods so that expenses are matched to the revenues they help produce.

Debt To Equity Ratio

The debt to equity ratio relates the capital funds contributed by the owners (owner's equity) to the owners of the funds contributed by other persons at a fixed rate of interest. The relationship as expressed by the ratio is referred to as the amount of financial leverage or capital gearing. The ratio is calculated as follows:

$$\text{Debt to Equity Ratio} = \frac{\text{Long - term debt}}{\text{Owner's Equity}}$$

Disbursements

Funds paid out of a business in settlement of obligations.

Drawings

Withdrawals of assets (usually cash) from a business by a sole proprietor or a partner

Equipment

All machinery and equipment used by the business to earn revenue.

Equity

The financial interest of the owner's of a business consists of their capital contributions plus the amounts of any profits which they have left in the business. This financial interest in the business is called the owner's equity.

Financial Statements

Formal reports (prepared from accounting records) describing the financial position and performance of the business.

Fixed Assets

Property or equipment of a tangible nature, owned by a business for use in its operations (not for sale)

and expected to have a useful life of several fiscal periods.

Fixed Costs

Fixed amounts that do not vary with changes in the volume of sales or production (i.e. rent, depreciation, interest payments). Note that some costs will have a fixed and variable cost component (see definition of variable costs).

Forecast

An estimate or prediction of a future happening (sales, expenditures, profits, and so on).

Gross Profit

The difference between Net Sales and the Cost of Goods Sold. Important in financial analysis, since it helps to evaluate sales performance, buying policies, mark-ups, and inventory controls.

Gross Profit Ratio

Gross profit is the difference between the revenue from the sale of goods (merchandise and/or services) and the cost of the goods sold. This margin between sales and cost of sales provides the funds out of which the business pays all its operating expenses and, if the operations are profitable, retains a surplus which represents the net income of the business.

The Gross profit ratio is calculated as follows:

Incorporation

The legal process of bringing a company into existence.

Interest Coverage Ratio

The interest coverage ratio, also known as the Debt Coverage Ratio, is an indicator used to assess the ability of a business to meet its interest payments on its loans. It is calculated by dividing net income before interest charges and income taxes by the amount of fixed interest charges for the accounting period.

Internal Rate Of Return

The internal rate of return, also known as the Discounted Cash Flow Rate of Return, is the rate of return which equates the present value of the future cash inflows generated from an investment with the present value cost of the investment (cash outflows).

Inventory

The dollar value (cost or market, whichever is lower) of all the stock of physical items that a business uses in its production process or has for sale in the ordinary course of doing business.

Inventory Turns

Inventory turns, also commonly referred to as the inventory turnover ratio, expresses the number of times that a business has sold, or turned over its average inventory. It is calculated by dividing the cost of sales (cost of goods sold) during the accounting period by the amount of the average inventory. The average inventory is calculated by taking the average of the twelve month-end inventory figures during the year.

Labour Expense

The total direct cost to the business for its employees during an accounting period. Includes in addition to actual wages paid the cost of all fringe benefits, unless listed separately.

Lease

A legal contract covering the use of property drawn up between the owner (lessor) and another (lessee) at a given rent, for a stated length of time.

Leasehold Improvements

Renovations and other improvements done to the leased property at the expense of the lessee.

Liability

An amount owed to another, not necessarily to be paid immediately. An obligation to remit money or services at a future date. Current liability is due within the year.

Long-Term Liabilities

The balance of outstanding term loans less the current portion (see definition of Current Liabilities)

Net Present Value

The calculation of the net present value is a time-adjusted method of evaluating capital investment projects when the benefits and costs of the projects occur at different times over the expected life of the investment. The net present value is the different between the present value of cash inflows (or benefits) from an investment and the present value of the cash outflows (or costs) from the investment. If the difference is positive then the project is viable but if it is negative then the investment project should not be undertaken.

Net Profit

This excess after all expenses of an accounting period are deducted from all revenue of the same period.

Opening Inventory

The value of the total inventory or the number of units a business has on hand at the beginning of the period.

Operating Forecast

The anticipated earnings of a business determined by estimating sales and subtracting expected expenses.

Operating Income (Or Profit)

The excess of revenue of a business over the expenses pertaining thereto, excluding income derived from sources other than its regular activities.

Overhead

Costs not directly applicable to production (e.g. administration, management salaries)

Partnership

An association of two or more partners in a business enterprise.

Prepaid Expense

An expense paid in advance during an accounting period (for example, a two-year insurance premium), part of which will be "used up" in the upcoming accounting period. The unused portion of the expense is considered a current asset and recorded as such on the Balance

Sheet.

Payback Period

The payback period is the time required to recover the original investment from the cash inflows generated by the investment. If the cash inflows are uniform over the life of the investment, the payback period is determined by dividing the net investment by the annual net cash inflow. When the annual cash inflows are not uniform, the payback computation takes a cumulative form. Each year's net cash inflow is accumulated until the amount equals the initial investment. Note that this measure ignores the time value of money and therefore should be used with caution and should be used

primarily as an indicator of the risk of the investment.

Profit

Total revenue less total expenses for a period of time calculated in accordance with generally accepted accounting principles.

Rate Of Return On Capital Employed

The rate of return on capital is a profitability ratio which measures the effective use of capital by relating the amount of income earned to the amount of capital used to earn that income.

Rate Of Turnover Of Raw Materials

This measure is not unlike the Inventory Turns ratio defined above except this measure is specifically concerned with the rate at which raw material inventories turnover.

Receipts

The amount of money received from sales or other sources.

Revenue

The gross proceeds received by a business from the sale of goods or services during an accounting period.

Sales

The total value of goods sold or revenue from services rendered. Returns and discounts must be shown as a reduction from total sales.

Sales To Employee Ratio

This is a measure which can be used to indicate the effectiveness of a business' marketing strategies.

Sales To Product Line Ratio

This is a measure which can be used to indicate the success of a product line and to indicate the effectiveness of a business' marketing strategy associated with the product.

Selling Expenses

Those operating costs directly related to the selling of the product or service (selling salaries, commissions, advertising, and so on).

Sole Proprietorship

An unincorporated business wholly owned by one person.

Term Loan

A loan having a fixed term of repayment greater than one year, and a monthly or seasonal principal reduction schedule.

Variable Costs

Expenses that vary directly with the changes in the volume of sales or production, e.g., raw material costs and sales commissions. Note that some costs will have a variable and fixed component (see definition of fixed cost).

Working Capital

The excess of current assets over current liabilities.
