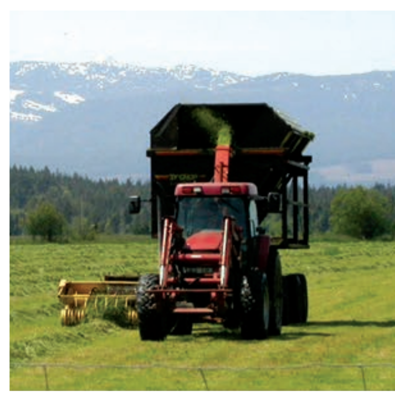
Vancouver Island
Coast Regional Agriculture

Framework for Action



Island Coastal ECONOMIC TRUST

BRITISH COLUMBIA

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Vancouver Island Coast Regional Agriculture Framework for Action

Island Coastal Economic Trust

British Columbia

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EXECUTIVE SUMMARY

The Province of British Columbia has identified agri-foods as a key growth sector in the BC Jobs Plan. As well, many regions have identified agriculture as a priority to diversify their economies. Working together and independently, local and regional governments and farm associations have drafted plans, reports, scoping documents, strategies and recommendations to support agricultural development. However, they face significant challenges in implementing plans on a regional basis.

Less than one third of agricultural land is actively farmed and opportunity exists to increase the intensity of current farming.

The *Vancouver Island Coast Regional Agriculture Framework for Action* is an attempt to push through many of those challenges. It provides an overview of the agricultural industry in the Vancouver Island Coast region – the mandated area of the Island Coastal Economic Trust. It covers Vancouver Island north of the Malahat, the Northern Gulf Islands, Powell River and the Sunshine Coast, and is based on a comprehensive review of local and regional agriculture plans, analysis of Census statistics, consultation with stakeholders and the experience of the consultants and committee members. The goal is to highlight common themes in local agricultural plans, inspire discussion around cooperative strategies and provide recommendations to strengthen regional agricultural business development and cooperation across the region.

Sector Overview

The agriculture sector in the Vancouver Island Coast region contributes about $112 million in direct annual revenue to the regional economy. The sector is very diverse in terms of agricultural products and the scale of farm operations. Well-established farms, 10% of the total, generate 80% of the revenue. Most farms are small, producing less than $10,000 per year, but a vibrant and growing number of farms are expanding their business in response to consumer demand for high-quality, sustainable and locally grown food.

The sector produces 8 - 10% of the food consumed in the region. Less than one third of the agricultural land is actively farmed and the farmed area is not used as intensively as it could be. The average revenue is $1,106 per hectare in the ALR, compared to $12,550 in the Fraser Valley. The livestock industry in the region has declined in the past two decades because of high local input costs, especially for fertilizer and feed grains and, to some extent, reduced consumption. However, increases in horticultural crops (fruit, berries, vegetables) have more than made up for the drop in livestock revenue. The soils and climate in the area will support a very wide range of products, and there is very significant potential to grow the industry by both expanding into land not currently used for agriculture, and better utilizing farmland already under cultivation.

There are three types of farms in the Vancouver Island Coast region, generating $112 million in economic activity (2006):

- 62% of farms earn less than $10,000 per year. Owners are motivated by lifestyle, not economics. These farms generate less than five per cent of the agriculture revenue in the region.
- 28% of farms are developing businesses, earning between $10,000 - $100,000 per year. They generate 14 per cent of the agriculture revenue in the region.
- 10% are established commodity farms, earning more than $100,000 per year. They generate almost 80 per cent of the agriculture revenue in the region.

Local and regional reports highlight the fact that there is significant potential to increase production by using more of the agricultural land base for food production, improving the land through irrigation and growing higher value crops.

28% of farms are developing businesses, earning between $10,000 - $100,000 per year. They generate 14% of the agriculture revenue in the region.

Recommendations and Next Steps

This Framework for Action supports the significant work already completed in communities by highlighting regional priorities in existing plans. It identifies 10 recommendations and suggests an Action Plan to spark discussion on moving forward at a regional level.

The recommendations in this report focus on:

- Strengthening farm organizations
- Recruiting and supporting new farmers
- Reducing operating costs
- Improving access to and use of capital
- Improving productivity of farmland
- Maintaining and encouraging growth of forage-based livestock products
- Expanding consumer education and outreach
- Improving marketing of regional agricultural products
- Improving access to the mass distribution system
- Protecting the environment

Many of these suggestions are straightforward, inexpensive and highlight coordination and education. They cross local borders, stimulating ideas and discussion, showing what is possible and how it can be achieved.

There is tremendous opportunity for growth in the agricultural sector in the Vancouver Island Coast region. It can create more jobs in small business, provide fresh, local produce to replace food that is imported and transported, and contribute to the overall economic health and quality of life in our communities.

INTRODUCTION

This report identifies a significant growth opportunity for the industry as a whole, and especially for the 28% of farms currently generating annual revenues between $10,000 and $100,000.

Communities in the Vancouver Island Coast region have identified agriculture as a priority in diversifying regional economies. Many local governments have invested significant time and energy in drafting Agricultural Plans, Agricultural Economic Development Plans and reports that identify and recommend actions to support agricultural development. Many recommendations are being implemented, while others are regional or provincial in nature, and cannot be implemented by single communities or regions.

In 2011, the Island Coastal Economic Trust, the Ministry of Jobs, Tourism and Innovation and the Ministry of Agriculture launched a review of local and regional agricultural plans. Common issues and opportunities were identified and a statistical analysis conducted to ensure that the information is consistent across the Vancouver Island Coast region.

The result is the *Vancouver Island Coast Regional Agriculture Framework for Action,* an overview of the agriculture sector in the region and economic development opportunities that could be implemented on a regional level. This report identifies a significant growth opportunity for the industry as a whole, and especially for the 28% of farms currently generating annual revenues between $10,000 and $100,000. The *Framework:*

- provides an overview of existing area agriculture plans;
- lays the groundwork to develop regional cooperative strategies that can strengthen and expand agricultural business development;
- begins the process of consulting and brainstorming with communities across the region.

The *Framework for Action* makes 10 recommendations and identifies specific, targeted actions to move regional agriculture planning forward.

PROFILE:
THE AGRICULTURE SECTOR IN THE VANCOUVER ISLAND COAST REGION

The Vancouver Island Coast Regional Agriculture Framework for Action covers the Island Coastal Economic Trust's mandate area. It begins north of the Malahat and includes the Regional Districts of Cowichan Valley, Nanaimo, Alberni Clayoquot, Comox, Strathcona, Mount Waddington, Powell River, the Sunshine Coast and the Upper Gulf Islands (Figure 1).

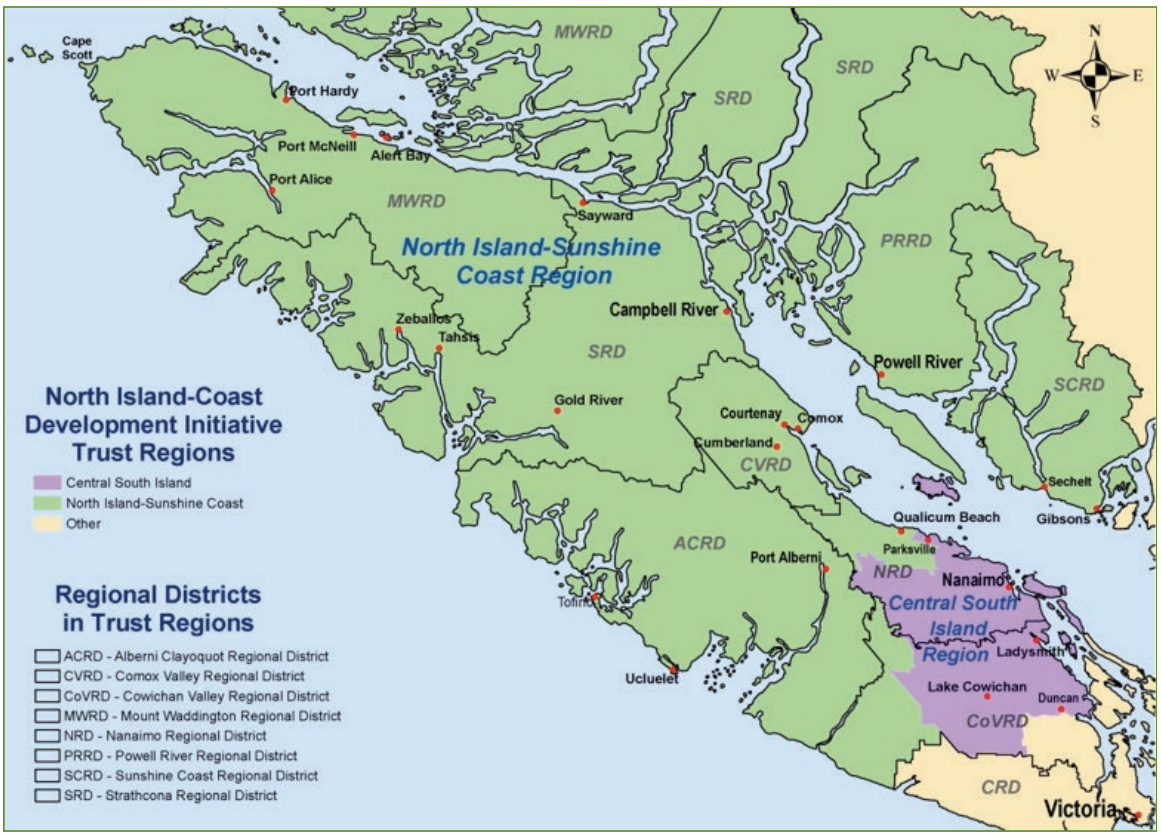

Figure 1: Island Coastal Economic Trust

While agriculture is a relatively small sector in the economy of the region, it is steadily growing. The area has the climate, soils and water to produce a diverse mix of agricultural products, and there is a large amount of underutilized or unused agricultural land. The industry tends to be more organic than other areas, and consumers actively support local food producers.

Farm Revenues

Farms in the Vancouver Island Coast region are predominantly family owned and operated, and most grow to the point where the workload can be managed by the family. Most are not full-time farmers and do not intend to grow their business.

Comparison of Vancouver Island farms (year 2005)

Area	Farm numbers	Gross receipts	Operating expenses	Gross margin %	Gross margin $	Ave GM $/farm	Ave Gross receipts/farm
Cowichan Valley	700	$47,554,455	$43,503,736	8.5%	$4,050,719	$5,787	$67,935
Nanaimo	461	21,186,317	21,274,867	-0.4%	-$88,550	-$192	$45,957
Alberni-Clayoquot B	89	5,491,456	5,068,237	7.7%	$423,219	$4,755	$61,702
Comox Strathcona	497	32,975,655	30,237,884	8.3%	$2,737,771	$5,509	$66,349
Powell River	85	1,921,378	2,253,346	-17.3%	-$331,968	-$3,906	$22,604
Sunshine Coast	96	$2,583,742	$2,486,876	3.7%	$96,866	$1,009	$26,914
Total for Study Area	1,928	111,713,003	104,824,946	6.2%	$6,888,057	$3,573	$57,942

Figure 2: Gross and Net Returns of Study Area Farms by Regional District (2006 Census)

On average, farmers keep only 6.2 cents from every dollar of sales.

Figure 2 shows the contribution of the agriculture sector to Regional Districts. Gross margins are relatively small and, in areas with a large number of small farms, negative[1]. On average, farmers keep only 6.2 cents from every dollar of sales.

While margins are low, the value of land continues to rise. For example in Cowichan, the average net operating income from 1986 - 2006 was only $219 per hectare – a very low rate of return. The average increase in farm assets, mainly land appreciation, over the same period was more than $2,000 per hectare per year.

Regional Economy

The agriculture sector in the Vancouver Island Coast region contributes about $112 million in direct annual revenue to the regional economy. The sector is very diverse, producing more than 200 different agricultural products. The scale of farm operations is also diverse. There are almost 2,000 farms in the region:

- Ten per cent are well-established, full-time commodity farms, generating 80% of the revenue. Their margins are stable or declining, and many are expanding to achieve more profit through economies of scale. These farms generate more than $100,000 per year.

1 While it may not seem logical for farms to continue to operate with negative margins, there may be taxation or lifestyle benefits or non-farm income that are not represented in these statistics.

- About 28% of the farms generate 12% of total revenue. Anecdotally, many of these are farms purchased by early retirees with capital, post-secondary education and management experience. These farms are growing in number and in their contribution to overall revenue. They are owner operated or family operated, have a clear business focus and generate between $10,000 - $100,000 per year.
- The majority of farms (62%) generate less than 8% of total revenue. In some cases, these provide important part-time income or tax benefits, but most are not motivated by income. They generate less than $10,000 per farm per year.

0.524 ha is the area required to produce a healthy diet for one individual – roughly the size of a football field.

Food Production

Producing food for residents in the Vancouver Island Coast region is at the heart of discussions about food security and the growth potential in the agricultural sector. In 2006, the average household (2.4 persons) in British Columbia consumed $8,000 in food per year. While a total of $1.4 billion in food was consumed, the total value of farm production was only $111.7 million.

Level of Self-Sufficiency	Current (2006): 10.9%	Target: 20%
Revenue generated - gross ($millions)	$112	$175
Revenue generated - per ALR ha	$1,106	$2,135
Water requirements (acre ft)	13,376	23,347
Greenhouse area (ha)	17.3	26.0
Cleared land (for food) required (ha)	23,224	42,992
Cleared land as % of ALR	28%	52%

Figure 3: Estimated current level of food self-sufficiency (10.9%) and the changes required to increase capacity to 20% self-sufficiency in Vancouver Island Coast region

Many Vancouver Island residents are interested in growing their own food, and community and kitchen gardens provide important lifestyle and educational opportunities for individuals. However, producing enough food to feed 781,313 residents in the Vancouver Island Coast region requires a sophisticated farming industry, one that can make the most efficient use of resources (land, water, fertilizer, labour, etc.) and still produce the volume of produce required. Encouraging movement of supply-managed quota allocations to the region would improve island food self-sufficiency and reduce unnecessary transport of some food products.

About 24% of the Agricultural Land Reserve is being actively farmed and opportunity exists to increase the intensity of current farming

The Vancouver Island Coast region has the soils, water and climate to produce a very wide range of product. About 24% of the Agricultural Land Reserve is being actively farmed and opportunity exists to increase the intensity of current farming. The average revenue is $1,106 per hectare in the ALR in the Vancouver Island Coast region, compared to $12,550 in the Fraser Valley.

Utilization of ALR Land

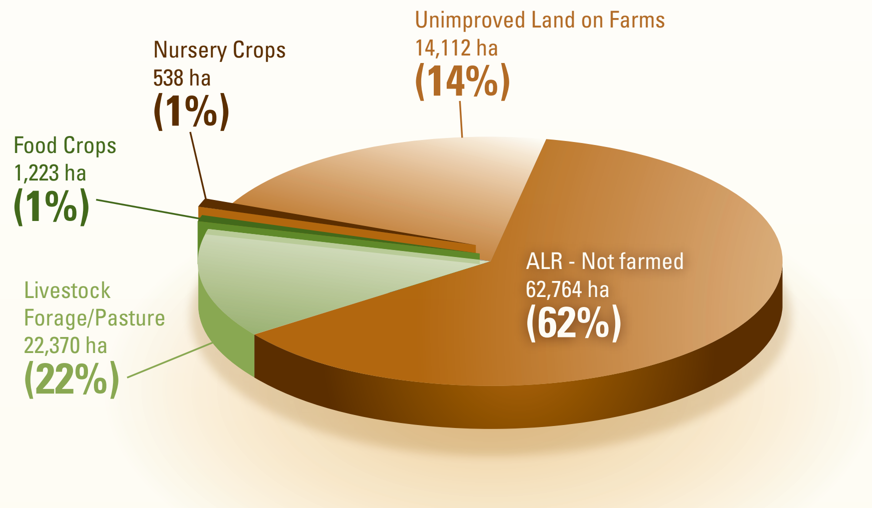

Figure 4: Agricultural land use in Vancouver Island Coast region. (Source: Reported land use by enterprise from 2006 Census vs. Total ALR Area from BC Agricultural Land Commission). Note: the vast majority of the ALR land, not farmed, is privately held forest land.

Production has shifted over the past decade. In 2001, 60% of industry revenue came from livestock and 38% from horticultural crops. By 2006 (Figure 5), livestock revenue dropped to 53% and horticulture crops (food and nursery combined) increased to 47%.

The livestock industry has been declining since the mid 1990s due to the high cost of feed, fuel and fertilizer, and changes in subsidy programs. Remaining farmers are consolidating to take advantage of economies of scale, moving to niche market products such as grass-fed beef or specialty poultry, or converting to higher-value horticultural crops.

2 The total area of all farms, according to the 2006 Census, was 38,243 ha (equivalent to 37.9% of the ALR land). However, only 24,131 ha (23.9% of ALR area) was reported to be used for agricultural crops of any kind (Figure 4). The other 14,112 ha of land within the land base of the Census farms was reported as "other or unimproved" implying that it has not been developed or is not actively used as part of the farm operation.

In contrast, the horticulture sector has grown with increases in berries, vineyards and wineries, direct farm markets and other niche market enterprises. This increase has more than offset the decline in livestock, and overall agriculture revenues are increasing.

Area Actively Farmed	Area (ha)	Revenue
Livestock forage/pasture	58%	53%
Horticulture - food crops	3%	30%
Horticulture - nursery crops	1%	17%
Other (unimproved) land	37%	0%
Total	100%	100%

Figure 5: Area used for livestock and horticulture production compared to estimated revenue (Source: 2006 Census area for crops; revenues are estimated based on average revenues per unit of production for crop and livestock enterprises)

Role of Government

Historically, the B.C. Ministry of Agriculture supported a developing agriculture industry in the form of extension services offered by a district agriculturalist. As the industry matured and diversified, extension activities became more targeted. They now include environmental farm plans, production insurance, risk management programs, farm business management activities, and food safety and traceability.

The horticulture sector has grown with increases in berries, vineyards and wineries, direct farm markets and other niche markets.

In 1996, the provincial government introduced the Farm Practices Protection (Right to Farm Act) to protect farmers' ability to farm while balancing concerns of the increasing urban population. The Ministry also supports industry-specific strategies and sector initiatives, including factsheets, production guides, workshops and web-based information, and is using new media technologies to help farmers find up-to-date and locally relevant information.

The Ministry of Agriculture and the Provincial Agricultural Land Commission continue to develop policies to strengthen farming. They offer assistance with business and environmental planning as well as income stabilization, which is generally co-funded with the federal government. In 2011, the province introduced property assessment and increased tax exemption amendments to encourage more intensive agriculture operations and provide property tax relief for retired farming families in the Agricultural Land.

Federally, the Canadian Food Inspection Agency (CFIA) and Agriculture and Agri-Food Canada (AAFC) provide programs related to food safety and trade. Provincially, the BC Ministry of Health is the lead agency for food safety in British Columbia. The Health Protection branch, working with the Centre for Disease Control and the health authorities under the authority of the Food Safety Act and the Public Health Act, helps ensure the safety of food products beyond the farm- in processing facilities, food premises and markets- through legislation, inspection, policies and programs. The Ministry of Environment oversees regulations governing the use, management and disposal of waste materials on farms under the Environmental Management Act.

Since 2000, many local governments in the Vancouver Island Coast region have taken the initiative to support the agricultural sector. The Comox Valley, North Cowichan and the Cowichan Region, Powell River, Denman Island, Campbell River and the Alberni Valley have agricultural plans, and the Regional District of Nanaimo is in progress. Some local governments and/or economic development offices continue to provide economic development services and industry specific targeted workshops.

This Framework builds on the agricultural plans completed by local governments. It is an example of how collaboration between the Ministry of Jobs, Tourism and Innovation, the Ministry of Agriculture, the Island Coastal Economic Trust and local governments can support the development of the agricultural industry across the region.

The Vancouver Island Coast Regional Agricultural Framework for Action is a timely initiative. The BC Jobs Plan, released in September 2011, identifies agrifood as a key component in growing the provincial economy with the goal of expanding into emerging markets, particularly on the Pacific Rim. B.C.'s new agrifoods strategy, released in March 2012, charts a path forward to increasing local food production and processing, while supporting job growth and healthy communities.

Opportunities and Challenges

The review of existing agricultural plans and interviews with regional districts highlights the following opportunities and challenges facing the agricultural industry in the Vancouver Island Coast region.

OPPORTUNITIES

The area has the suitable soils, climate and water to produce a wide range of products, and there is significant development potential for farms in the region. Only about 24% of the existing farmland base is actively farmed, and most land could produce higher-value products. There is significant room to increase production by improving irrigation and drainage on existing farmland, and clearing additional ALR land of overgrowth.

The value of food production can be increased from $1,106 per hectare in the ALR to more than $10,000. This would bring the production value of the region closer to the rest of South Coastal B.C. For example, the Fraser Valley's food production level is $12,500 per hectare.

There is significant room to develop the consumer market. Only 8-10% of the food consumed in the region is produced by Island farms – 90% is imported. Residents support farmers in the region and are interested in buying more locally grown foods, reflecting concerns around food security and carbon footprint, a desire for organic foods and support for local food producers.

There is also tremendous opportunity for farmers who want to move into the business full time. Currently, the vast majority (62%) of farms generate less than $10,000 per year. When these underdeveloped farms are sold, new owners often bring fresh capital, management, ideas and energy, converting them into thriving businesses, generating more revenue, creating more jobs and growing more produce.

Only 8-10% of the food consumed on Vancouver Island is produced by Island farms – 90% is imported.

CHALLENGES

One of the biggest challenges facing farmers in the Vancouver Island Coast region is the absence of a single organization with the capacity or mandate to lead the development and implementation of a regional agriculture strategy. Many related organizations exist, but they have a specific focus based on geography, a commodity, scale of operations (small lot), production system (organic) or marketing system (Farmers' Markets).

Low profitability is a major issue for farmers. Farmers, especially new farmers with little equity, struggle to find capital to expand, improve the land or get better access to markets. On average, farmers in the region keep about 6.2 cents from each dollar of sales. A small increase in prices or reduction in costs can have a significant impact on the bottom line.

STRATEGIC FRAMEWORK FOR ACTION

The following 10 recommendations and accompanying action items are based on area agriculture plans developed by local governments in the Vancouver Island Coast region. These actions are suggested because they have a regional focus and are beyond the jurisdiction of any one community to implement effectively.

The Strategic Framework for Action is intended to generate discussion and creative thinking to strengthen farm businesses in the Vancouver Island Coast region. It does not address specific interests, such as dairy or organic farming, but identifies opportunities to develop the Vancouver Island Coast's agricultural sector from an economic development perspective. Communities are encouraged to identify the activities that they can introduce and implement, laying the groundwork to expand the agricultural economy.

General Support

1. STRENGTHEN FARM ORGANIZATIONS

Most agricultural areas in the Vancouver Island Coast region have a farmers' institute and many have agricultural advisory committees and farmers' markets, the majority of which are largely volunteer-led and have limited resources. Other organizations exist, but they usually focus on local issues or local marketing.

Many common issues could be addressed by collaboration and cooperation in the industry. Developing projects that have a regional focus and can be delivered by the local farm groups may bring diverse organizations together on common projects. It would improve access to local knowledge, which is especially important to new farmers, and helps farmers use production methods and varieties best suited to local climate, soils and markets.

Even with government programs in place, modest amounts of assistance could generate significant improvements to agriculture. Specifically, support is needed to organize activities and events that support the many diverse and small commodities that make up the region's agriculture sector.

1.0	Objective	Action	Stakeholder
1.1	Provide more support to existing farm organizations	Develop a list of organizations, roles and contact info involved in agricultural support activities	Vancouver Island Coast Economic Development Association
1.2		Survey the identified organizations to develop a needs assessment, identify priorities and develop delivery models. For example: identify key courses, workshops, etc. for delivery throughout the region, and develop an overarching educational program and suggestions for new courses. This would highlight gaps and reduce duplication	
1.3		Invite organizations to participate in events such as the Islands Agriculture Show in February 2012. These events could be the natural opportunity for an introductory facilitated planning session	
1.4		Identify opportunities for strategic partnerships among organizations, areas of mutual interest and benefit, subjects for joint projects and work	Vancouver Island Economic Alliance (VIEA)
1.5	Increase communication, knowledge and technology transfer	Assess existing web-based portals as a tool for connecting the industry and facilitating information and technology transfer with local content	
1.6		Determine value of developing a website dedicated to farmers in Vancouver Island Coast region	
1.7		Encourage new farmers and new arrivals to the region to join existing farm organizations and networking groups so they can benefit from the knowledge and the experience in the community	Farmers' market associations, farmers' institutes

Recruiting new farmers is key to the survival and growth of the agricultural industry in the Vancouver Island Coast region.

2. RECRUIT AND PROVIDE SUPPORT FOR NEW FARMERS

Recruiting new farmers is key to the survival and growth of the agricultural industry in the Vancouver Island Coast region. Farmers are getting older (average age 52 years) and the number of new entrants (under the age of 35) is declining. This trend is consistent throughout British Columbia and across Canada.

Many farmers do not operate as businesses and may not want to. Many agricultural plans note that often, farm operations shift when there is a new owner, or when there is a dramatic change in the lifestyle or career of the existing owner – i.e. retirement or a layoff.

Many new farmers do not have experience in agriculture, and local agricultural plans clearly indicate that there is a need for easily accessible and relevant local information. This could be addressed by strengthening farm organizations and improving access to online resources (see Recommendation 1).

2.0	Objective	Action	Stakeholder
2.1	To recruit new farmers	Develop a program to actively recruit new farmers from other areas based on the agricultural advantages of Vancouver Island Coast region. Messages could focus on relatively inexpensive and very productive land, available water, strong markets, good climate, etc.	Economic development officers, local realtors, chamber, forest companies
2.2	Training for new farmers	Develop a business leadership program targeted at farmers in the $10,000-$100,000 revenue category (See 1.2)	Financial, business and accounting institutions, educational institutions
2.3		Encourage economic development officers with websites to promote local farm organizations and their activities	Economic development officers
2.4	Encourage young people to become aware of career options in agriculture	Encourage and support community gardens and incubator farms as a way to provide practical education for future producers	Community food groups, Ag in the Classroom

Financial

Simply put, improving profitability is the most significant issue facing the agriculture industry in the region. If farming is more profitable, most other issues will solve themselves.

3. REDUCE OPERATING COSTS

Producers who can reduce costs or increase revenues, even by a small percentage, can dramatically improve a farm's profitability. A farmer who sells $100,000 with a 50% margin keeps as much as a farmer with $1 million in sales and a 5% margin. Joint purchasing of seed and fertilizer, for example, or increasing the scale of operations by leasing land instead of buying it, can help reduce operating costs.

Improving profitability is the most significant issue facing the agriculture industry in the region. If farming is more profitable, most other issues will solve themselves.

One of the long-standing issues for agriculture in the region is the lack of volume to support processing. Processing facilities will not be built until there are enough farmers to support them, but without more processing facilities, farmers will not increase production. For example in addition to lack of volume, the seasonal nature of livestock processing also poses a considerable challenge to both the farming and processing industries. Livestock production and livestock slaughter are co-dependent industries, but their objectives are not always aligned. In many regions livestock farmers cite a need for more slaughter facilities at peak times during the year, while processors cite a need for more livestock during the rest of the year. A fine balance is required in order that businesses in both industries can stay viable and serve each others' needs.

Island Agri-Food Initiative, an initiative of the Investment Agriculture Foundation of BC, has supported feasibility proposals. However, it is a challenge to develop a successful collaborative business model that provides processing capacity at prices that allow a reasonable return to farmers.

Many local plans highlight the potential for cooperation and joint use of processing facilities, community kitchens and incubator facilities as possible solutions.

Other challenges for small operators include meeting requirements for food safety and traceability, and the cost of organic certification.

3.0	Objective	Action	Stakeholder
3.1	Reduce operating costs	Bring financial experts and farmers together to identify specific inputs and/or assets that could be purchased or pooled to reduce production costs for local producers (See 1.2)	Farmers' institutes
3.2		Bring industry experts and farmers together to identify potential for beneficial re-use of waste products as energy sources on farms (See 1.2)	Economic development officers, BC Ministry of Agriculture
		Consult with government agencies and local government regarding the regulatory requirements	Ministry of Environment
3.3		Identify and prioritize a list of feasibility studies that could benefit custom operators at all levels of production, processing and marketing	Farmers' institutes and economic development officers
		Develop a Strategic Plan that prioritizes and links potential feasibility studies, identifies champions and/or sponsors and coordinates the study and outcomes	
3.4		Identify the need for workshops on existing programs: Agri-invest, Agri-Insure, Agri-Stability, Advance Payments Program, BC Food Safety Systems Implementation Program, etc. If there is a need, add workshops to overarching educational program (See 1.2)	Farmers' institutes with help from BC Ministry of Agriculture and Agri-Food Canada

Undercapitalized businesses have a higher risk of failure, and most local agricultural plans identify access to capital as a significant issue.

4. IMPROVE ACCESS TO AND USE OF CAPITAL

Undercapitalized businesses have a higher risk of failure, and most local agricultural plans identify access to capital as a significant issue. On-farm capital improvements (land clearing, drainage, buildings, equipment, etc.) may not be available unless farmers borrow against equity, and many are reluctant to do that.

In many cases, this is a management or risk-aversion issue, something careful business planning can address. Financial tools that can help farmers include:

- a viable business plan;
- leasing (to access land, buildings, equipment, etc.);
- patient capital loans; and
- cooperative uses of capital assets (equipment pooling, community kitchens/gardens, etc.).

4.0	Objective	Action	Stakeholder
4.1	Improve access to capital and/or free up capital for other uses on the farm	Promote business-planning workshops as a valuable tool for accessing capital (See 1.2)	BC Ministry of Agriculture (Farm Business Advisory Services program), lending institutions
4.2		Identify a team to research the feasibility of a micro loan program for farmers (see 3.1)	Farmers' markets, lending institutions, Western Economic Diversification Canada
4.3		Develop a lease registry to give new farmers access to land and existing farmers the opportunity to expand	Web portal, farmers' institutes, economic development officers
4.4		Research the potential use of underutilized infrastructure from other sectors, i.e. vacant cooler, freezer and storage space	Economic development officers
4.5		Work with the Ministry of Agriculture and Agricultural Research and Development Corporation to convey the advantages of Environmental Farm Plans; profile how the program provides access to capital for related improvements	Newsletters, testimonials, VI Agriculture Show

Productivity

Local agriculture plans identify the need to develop the agricultural resource base (land, capital and management) to increase production and/or efficiency.

5. IMPROVE THE PRODUCTIVITY OF FARMLAND

Access to water is identified as an issue in all agricultural plans in the region. Irrigation increases and stabilizes crop yields, increasing the income per acre and reducing the risk for farmers. It is critical when growing higher-valued crops. However, more outreach is needed to bridge the gap between increasing irrigation to expand agricultural development, and protecting water sources for environmental reasons.

More outreach is needed to bridge the gap between increasing irrigation to expand agricultural development, and protecting water sources for environmental reasons.

Production can also be increased by improving drainage, a relatively low-cost effort that extends the growing season, increases yield, and promotes deeper root systems that better access nutrients and water in the soil. Other approaches include management improvements, use of greenhouses, housed livestock, improved use of inputs (fertilizers), identification of opportunities to convert locally-produced waste to fertilizer, and planting more productive and higher value crops.

Soils along the east coast of Vancouver Island from the Malahat to the Oyster River and the Alberni Valley, were mapped at 1:20,000 scale in the 1980s, and the information has been very useful for planning land use and farm operations. These maps identify the main limitations on soil capability (too wet, too dry, too rocky, etc.), describe the soil characteristics, types of crops that can be produced and the inputs (seed, fertilizer, etc.) required. Several areas in region have not yet been mapped: Vancouver Island north of the Oyster River, Powell River and the Sunshine Coast and the Gulf Islands. Mapping these areas would provide critical information for future planning, expansion and agricultural development.

A survey of First Nations leaders has revealed that many Bands are investigating agricultural opportunities. Band resources, cultural focus and human capacity will influence how quickly these resources are developed.

5.0	Objective	Action	Stakeholder
5.1	Increase water available for irrigation	Encourage local governments to allow Agricultural Advisory Committees to represent the farming community in water management planning processes, including: • participating in water allocation discussions • planning upgrades to water delivery systems • planning development of new infrastructure	Local governments
5.2	Improve drainage of agricultural lands	Encourage local governments to appoint farmers to represent the agricultural community in water management planning processes, including: • making recommendations around stormwater management (do not flood lowland agricultural land) • developping policies that permit farmers to connect drainage improvements (tiles and ditching) to municipal and road ditch systems	Local government, Ministry of Transportation
5.3	Increase quantity or productivity of land used for agriculture	Map soils in unmapped areas (Powell River, Sunshine Coast, Gulf Islands, Campbell River)	Local government and economic development officers
5.4		Meet with forest companies to discuss potential for converting low elevation privately held “forest” land (much of which is in the ALR) with high agricultural value to agricultural use	

5.5	Investigate ways to lower the cost of production	Work with all levels of government and industry to investigate ways to develop island resources, lowering the cost of inputs such as nutrients and energy	Local governments, farms and BC Ministry of Agriculture
5.6	Create affordable land opportunities for new farmers	Support the use of incubator farms and link with urban organizations that support alternative land holding and tenure systems	BC Land Conservancy, Land Trusts local food groups, Island Agricultural Show
5.7		Work with First Nations to identify potential farming opportunities	Economic development officers, BC Ministry of Agriculture, First Nations team

6. MAINTAIN AND ENCOURAGE GROWTH OF FORAGE-BASED LIVESTOCK PRODUCTS

The livestock industry is declining because of poor profitability. Livestock operations generally need more land and land costs are higher than for horticultural operations. Revenues per hectare are lower and costs – especially feed grain, fertilizer and fuel – are increasing. If there is no economic use for forage, some of these lands will not be maintained for agriculture, making them more difficult to put back into production at a later date.

Dairy and poultry production is controlled by quota allocations. Quota producers work with a known value for their products regardless of where they locate. As a result, the only enticement to a particular area is a lower cost of production. A thorough analysis may help address the notion that it costs more to produce agricultural products on the Island and encourage more quota allocation back to the Island.

Another option is to develop a value chain or cooperative: a large cow calf operation could provide young animals for small farms to grow out to market weight, or small lot producers could produce calves for a community pasture, using home lands for winter feed. A cooperative could:

- allow producers to benefit from economies of scale;
- produce a consistent uniform product – such as grass-fed, grass-finished beef – to be marketed as a specialty product;
- maximize the dollars of product produced per hectare using a management intensive grazing system.

All of the local agriculture plans note the need for more consumer awareness about the contribution of local agriculture to the economy and environment.

6.0	Objective	Action	Stakeholder
6.1	Increase the scale of production of forage-based red meat	Support a feasibility study to look at opportunities to support the livestock and forage industries on the Island (See 3.3). Identify infrastructure, educational and stakeholder needs	Farm and industry organizations, processors, retailers Ducks Unlimited, economic development officers
6.2		Research the potential for community pasture operations with large landholders – private, forest companies and First Nations with suitable land available for this purpose (See 1.4)	Industry organizations with support from local government and economic development officers

Marketing

7. EXPAND CONSUMER EDUCATION AND OUTREACH

All of the local agriculture plans note the need for more consumer awareness about the contribution of local agriculture to the economy and environment. Public education campaigns can increase support for growing fresh, local foods in the region. Initiatives by the Ministry of Health, Ministry of Agriculture and other agencies make the link between healthy eating and environmental stewardship, drawing attention to the benefits and availability of locally grown food.

However, there is no coordinated approach among organizations to design and operate an effective public education and marketing campaign for the region, and most agri-food funding programs will not support marketing initiatives.

7.0	Objective	Action	Stakeholder
7.1	Build relationships between food producers and retailers	Host a meeting between the retail, restaurant sector and farmers to promote understanding of needs and issues	Industry and economic development officers, Vancouver Island Health Authority
7.2	Raise public awareness about local food producers	Support local festivals to celebrate local foods – include as many local agrifood and fish products as possible	Local groups

8. IMPROVE MARKETING OF REGIONAL AGRICULTURAL PRODUCTS

Direct marketing allows farmers to sell their product at retail or, in some cases, premium prices. This allows smaller scale farms to access consumer markets and enables consumers to connect directly with producers. Support for farm product and growers guides and online mapping of Direct Farm Markets and Farmers' Markets are valuable tools to increase sales. This, in turn, should lead to more intensive farming, greater sales and potential for profit.

8.0	Objective	Action	Stakeholder
8.1	Brand Vancouver Island Coast region as a producer of quality agrifood products	Hold a joint meeting of key stakeholder groups to discuss the viability of regional branding. Investigate existing provincial initiatives (See 1.4)	Farm organizations, Vancouver Island Coast Economic Development Association, tourism
8.2		Develop a plan to brand the region based on its unique characteristics for agriculture	Chamber activity, tourism, economic development officers
8.3	Expand and increase distribution of local Growers' Guides	Present a marketing workshop to discuss the "how to" of product guides. Deliver a course in social media and internet sales (See 1.2)	Economic development offices with support from educational institutes and industry
8.4	Farm Market and Growers' Guides	Identify areas without local growers guides. Work with local print media to develop print copy for distribution in local paper	Economic development officers, farmers' markets, farmers' institutes
8.5		Develop an online version of the Farm Market and Growers' Guides with farms mapped and profiled	Work with islandfarmfresh.com, economic development officers
8.6		Create an online farmers market-website that links suppliers to customers	Economic development officers, farmers' markets, farmers' institutes

Retail, food-service and institutional markets typically source very little food from smaller-scale producers in the Vancouver Island Coast region.

9. IMPROVE ACCESS TO THE MASS DISTRIBUTION SYSTEM

The support systems and infrastructure for collecting, storing, processing and distributing food to these markets have been established over many years, and operate efficiently at the national and often global level. Producers in the region have significant difficulty accessing this system because:

- many producers are too small to contemplate producing for or meeting requirements of established marketing and distribution systems;
- many producers in rural and outlying areas cannot efficiently transport product to a distribution point or center;
- producers do not fully understand distributor requirements. There are information gaps around labeling, quality control, traceability and food safety.

There are at least four major opportunities to build markets for farmers in the region:

- direct farmer-to-consumer sales (farmers' markets, farm gate, internet sales);
- retail sales (grocery stores);
- food-service sales (restaurants); and
- institutional sales (dining services in hospitals, college, schools and seniors centres).

9.0	Objective	Action	Stakeholder
9.1	Increase direct market sales on the Island	Offer courses to improve direct marketing at Farmers' Markets based on input from FMAs (See 1.2)	Economic development officers with support from education institutes and industry, based on farmers' markets
9.2		Research feasibility of establishing local grading and packaging facilities for local farmers and supply managers (See 3.3)	Local groups
9.3		Research the feasibility of small-scale food distribution approaches, such as U.S Food Hubs (See 3.3)	
9.4		Research electronic systems to link consumers and suppliers	Economic development officers
9.5	Develop ongoing short course type education programs for farmers	Work with farm groups and Island Ag Show organizers to identify high calibre speakers on marketing, distribution (See 1.2)	Economic development officers, Islands Agricultural Show, farm groups

9.6	Expand local-food job-training opportunities	Work with cooking and chef programs to educate students about local and seasonal products	Post-secondary institutions such as North Island College and Community Futures Development Association Vancouver Island Coast region
9.7	Create networking opportunities for farmers and the food industry	Support showcase events such as regional food and wine festivals to draw attention to the benefits of working collaboratively with farmers and the food industry	Economic development officers, farmers' institutes

Environment

10. PROTECT THE ENVIRONMENT

The agriculture sector on the Vancouver Island Coast region faces high feed, fertilizer, energy and transportation costs. Farmers have responded by focusing on the positive, replacing chemical fertilizer with locally produced organic fertilizer. The agricultural industry has developed as a niche, "near organic" sector, producing food that environmentally aware consumers demand.

Farmers in the region also use Environmental Farm Plans to improve disposal of organic nutrients and make better use of water resources.

The agricultural industry has developed as a niche, "near organic" sector, producing food that environmentally aware consumers demand.

10.0	Objective	Action	Stakeholder
10.1	Water	Support mapping at the regional district level that quantifies agricultural water needs	BC Ministry of Agriculture, Local governments, ag advisory committees
10.2		Sponsor workshops that promote the water-use calculator and irrigation efficiencies (See 1.2)	BC Ministry of Agriculture and ag advisory committees
10.3	Recycling, disposal and reuse efforts	Support local and regional recycling and disposal efforts for agricultural waste (plastic, pesticides, crop and wood)	Local government waste, farm organizations and NGO's
10.4	Water quality	Highlight farms with environmental farm plans that improve riparian protection or protect water quality	BC Agriculture Council, economic development officers, farm organizations
10.5	Wildlife	Identify, profile and support local, regional and provincial initiatives that manage wildlife impacts on agriculture	Farmers' institutes, BC Agriculture Council, wildlife organizations, BC Ministries of Environment and Agriculture

APPENDIX I: ADDITIONAL STATISTICS

Agriculture Land Reserve

The majority of agricultural land is on the coastal plain surrounding the Gulf of Georgia. From a regional perspective, the central east coast of Vancouver Island contains most of the land in the Agriculture Land Reserve (ALR).

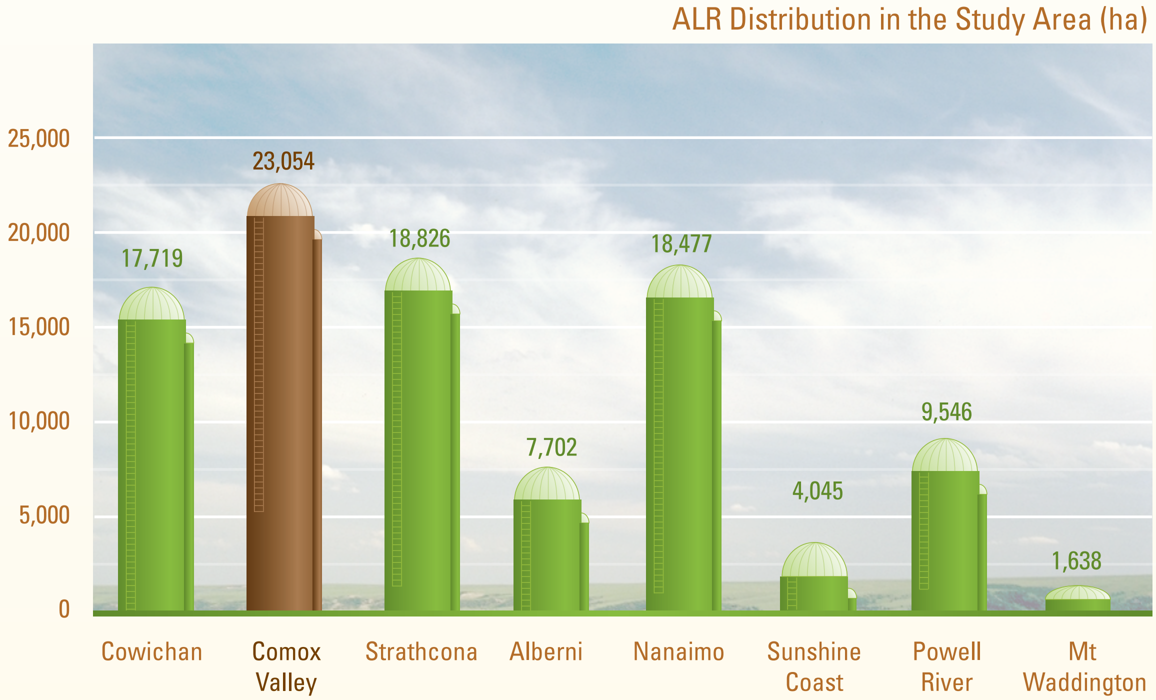

Figure 6: Distribution of agricultural land in the Vancouver Island Coast region - Hectares in the Agricultural Land Reserve (ALR) (Source: www.alc.bc.ca)

Population

Population in all jurisdictions of the Vancouver Island Coast region is increasing. From 2006 to 2010, population has increased by 92,807 or 7.8%.

Population by Regional District	2006 BCS	2007 BCS	2008 BCS	2009 BCS	2010 BCS
Cowichan Valley	78,471	79,564	80,967	81,796	82,871
Nanaimo	141,246	143,008	145,887	148,054	149,686
Alberni Clayoquot	31,078	31,141	31,438	31,582	31,635
Comox Strathcona	103,129	104,927	107,164	108,417	109,028
Mount Waddington	11,962	11,915	11,955	12,058	12,057
Powell River	19,694	19,793	20,028	20,234	20,455
Sunshine Coast	27,959	28,592	29,201	29,589	29,984

Figure 7: Population by Regional District (BC Statistics)

Population Distribution

The majority of the population (75%) is concentrated on the East Coastal Plain between Mill Bay and Campbell River (Figure 8).

When the distribution of ALR in the Vancouver Island Coast region (Figure 6) is compared to the population distribution (Figure 8), it reveals that potential consumers (population) are relatively close to the producers (agriculture sector). This provides a strong opportunity for direct marketing of fresh farm produce and products.

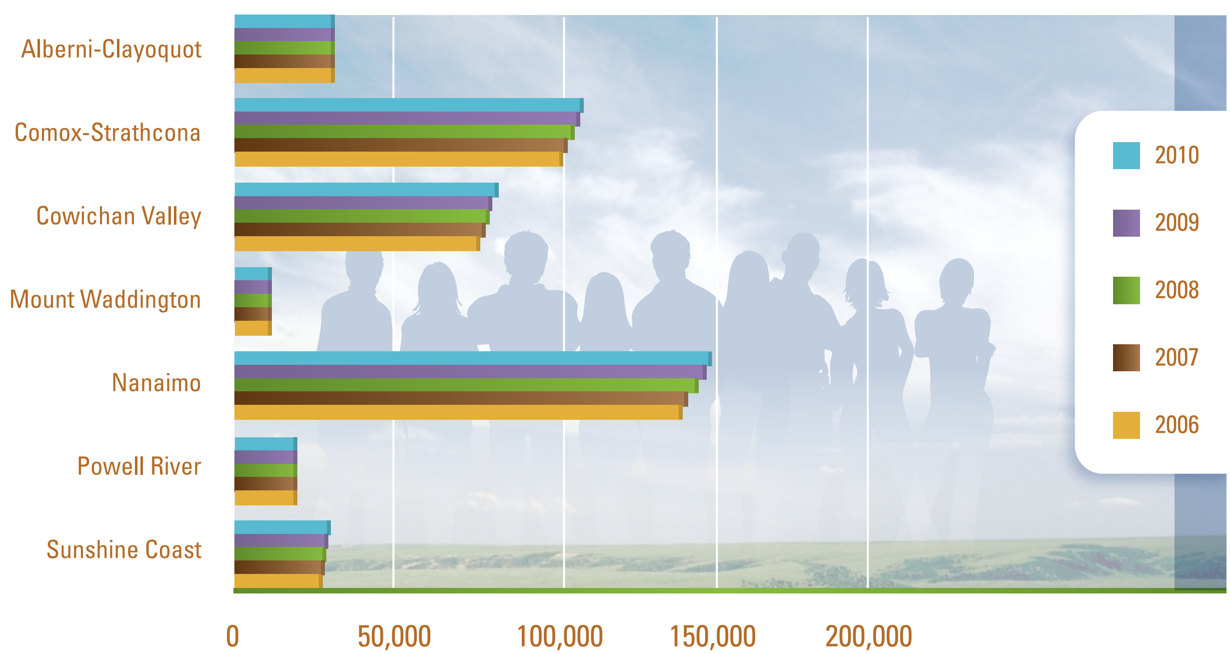

Figure 8: Current and past population distribution (BC Statistics)

For comparison purposes, the Capital Region population for 2010 is estimated to be 372,339; just 15% less than that of the rest of Vancouver Island and the Sunshine Coast combined.

Value of Food Grown and Food Consumed

The value of food produced in the Vancouver Island Coast region is 8% of the value of food consumed (Figure 9). About 91% of the production is in three Regional Districts (pie chart on the right in Figure 9): Cowichan, Nanaimo and Comox-Strathcona.

The vast majority of the food consumed is imported into the area, mainly by ferry, from distant markets. The opportunities to support and promote locally produced food will increase as cost and environmental impact of transportation continue to rise.

The average household (2.4 persons) consumes $8,000 in food per year. Based on 2006 statistics a total of $1.4 billion in food was consumed whereas total value of farm production for the same period was $111.7 million.

Note that the percentage of local food or the processed value of local food that is included within the $1.4 billion of food consumed on Vancouver Island is unknown.

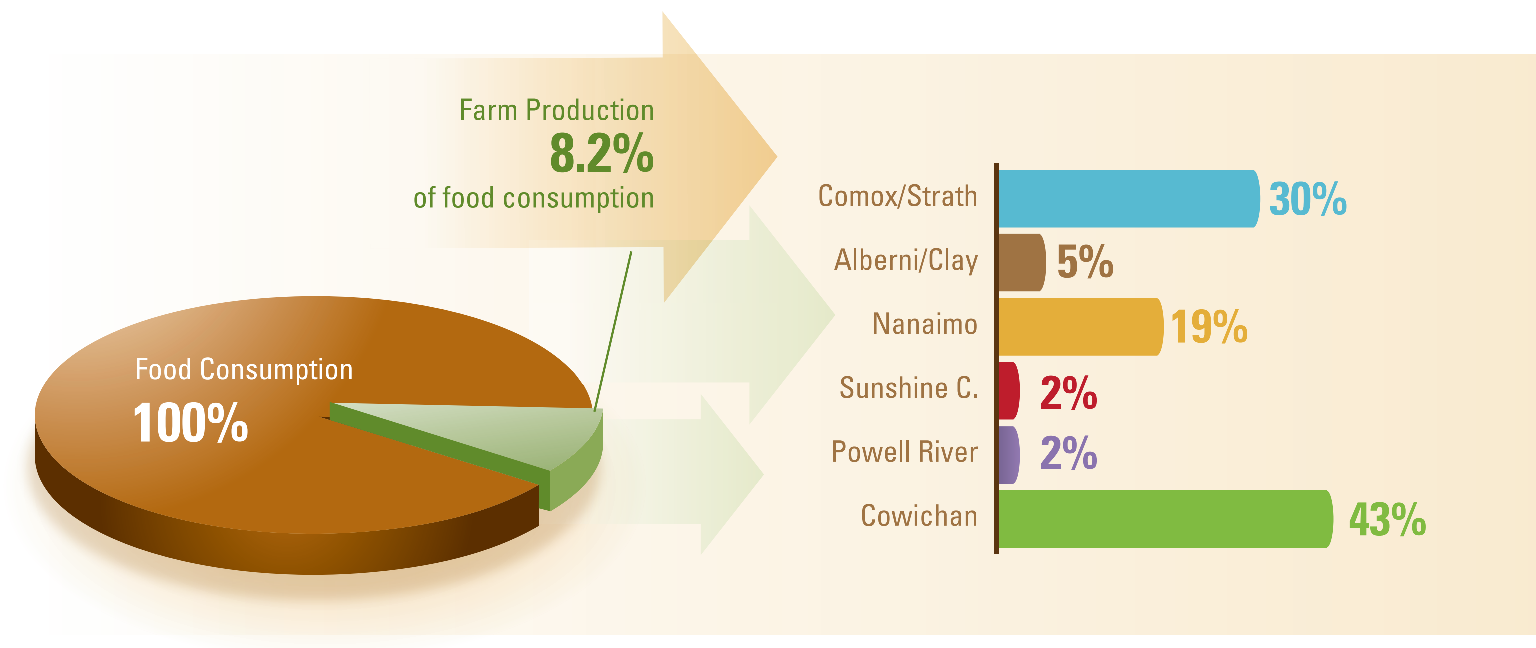

Figure 9: Local production by Regional District (2006 Census)

Annual revenue

The average farm in the Vancouver Island Coast region generates approximately $58,000 in gross annual receipts, or about $1,106 per hectare of land in the ALR (Figure 10). The most intensive farming is in the Cowichan Valley, where the average farm generates nearly $70,000 in gross annual receipts – equivalent to $2,684 per hectare ALR.

By way of comparison:

- Capital Regional District averages $54,754 per farm ($3,180 per hectare ALR);
- Central Okanagan averages $84,787 per farm ($3,307 per hectare ALR);
- Fraser Valley averages $306,932 per farm ($12,550 per hectare ALR).

Generally, the soils and climate in the Vancouver Island Coast region are similar to the Fraser Valley, indicating a clear potential to increase the value of food production.

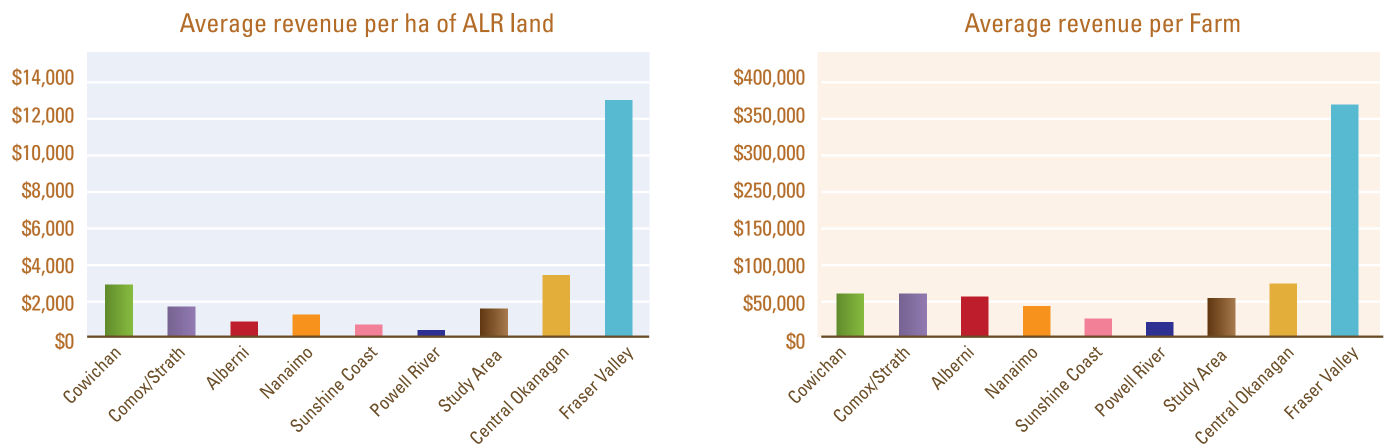

Figure 10: Production Intensity – Comparisons by Regional District (2006 Census)

As noted in Figure 9, the amount of food produced is 8% of the food consumed in Vancouver Island Coast region. To measure food self-sufficiency, the BC Ministry of Agriculture developed a model that estimates that 0.524 hectare of land (irrigated and non-irrigated) is required to produce a healthy diet for one person to live for one year. Using this model, the existing cleared agricultural land base can produce 10.9% of the food needed to sustain the population (Figure 10). Moving from 10.9% self-sufficiency to a target of 20%, for example, would require doubling current production. The amount of ALR land, of cleared land, and water required would also almost double (Figure 3).

Land Use – Crop Production

The types of crops being produced on ALR land within the Vancouver Island Coast region and the extent of farming activity in the ALR are reflected in Figure 11.

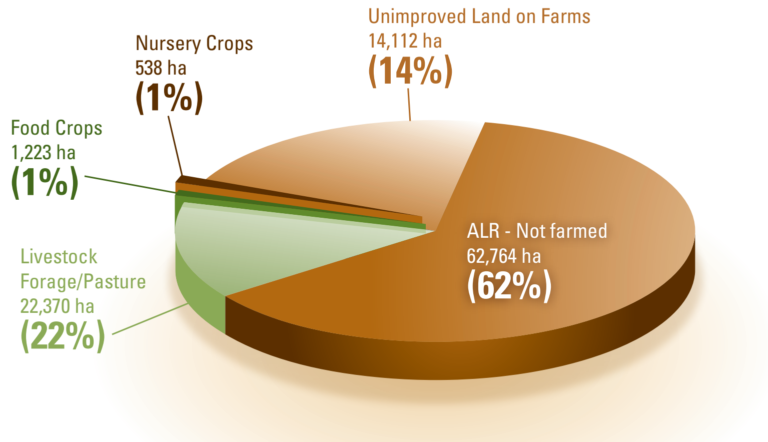

Figure 11: Agricultural land use in Vancouver Island Coast region (Source: Reported land use by enterprise from 2006 Census vs. Total ALR Area from BC Agricultural Land Commission)

The percentage of actively farmed area used to produce crops and the estimated total revenue from those crops in the study area is shown in Figure 12. The revenue is based on average yields and prices in the region. In the case of livestock, it is the estimated farmgate value of livestock products, including milk and eggs. About 58% of the actively farmed land, 22,370 hectares, is used to produce feed for the livestock industry. The livestock industry (especially dairy, pork and poultry) has been in decline because of the high cost of concentrated feeds (grain), which are brought from the Prairies. The dairy and beef sectors have shifted towards producing higher quality forages, locally, to cut costs and remain competitive.

Figure 12: Area actively farmed on Vancouver Island Coast region

Area Actively Farmed	Area (ha)	Revenue
Livestock forage/pasture	58%	52%
Horticulture - food crops	3%	30%
Horticulture - nursery crops	1%	17%
Other (unimproved) land	37%	0%
Total	100%	100%

Horticultural crops (fruits, vegetables, berries, greenhouses and nursery) use about 4% of the actively farmed area and generate 47% of the agricultural revenue. This sector is expanding fast enough to offset the loss of revenue from livestock production so overall revenue from the agriculture sector is increasing.

Size and Scale of Farming Operations

There is a wide variation in the economic scale of farms within the Vancouver Island Coast region (Figure 13). Most farms, 1,206 of the 1,928 farms (or 62%) generate less than $10,000 in annual gross revenue. Combined, these farms produce less than 8% of the $112 million generated by the sector. On the other end of the spectrum, 184 farms (<10%), with sales over $100,000 annually, produce 80% of the revenue. The middle group of farms, with sales between $10,001 and $99,999, includes 538 (28%) farms which, collectively, gross over $15 million in revenues – about 12% of total revenue.

For the purpose of this document, the farms described above fit into three categories of farming operations:

- Part-time Farm Operators – This group has annual sales of less than $10,000 in gross receipts per year. They represent 62% of the farms, but generate less than 8% of industry income. The number of farms changed by less than 1% between the 2001 and 2006 Census. These farms are not economically motivated; they are lifestyle based and/or may be benefit from agricultural tax benefits.
- Developing Farm "Businesses" – This group generates between $10,000 and $100,000+ in gross receipts per year. They represent 28% of the farms, but generate 12% of industry income.
- Established Commodity Farms – These are large, well-established farms producing for commodity markets and selling into the mass distribution system. They generate from $100,000 into the millions of dollars per year. They represent 10% of the farms, but generate over 80% of industry income. They are growing in size (acreage), scale (revenue) and number of farms.

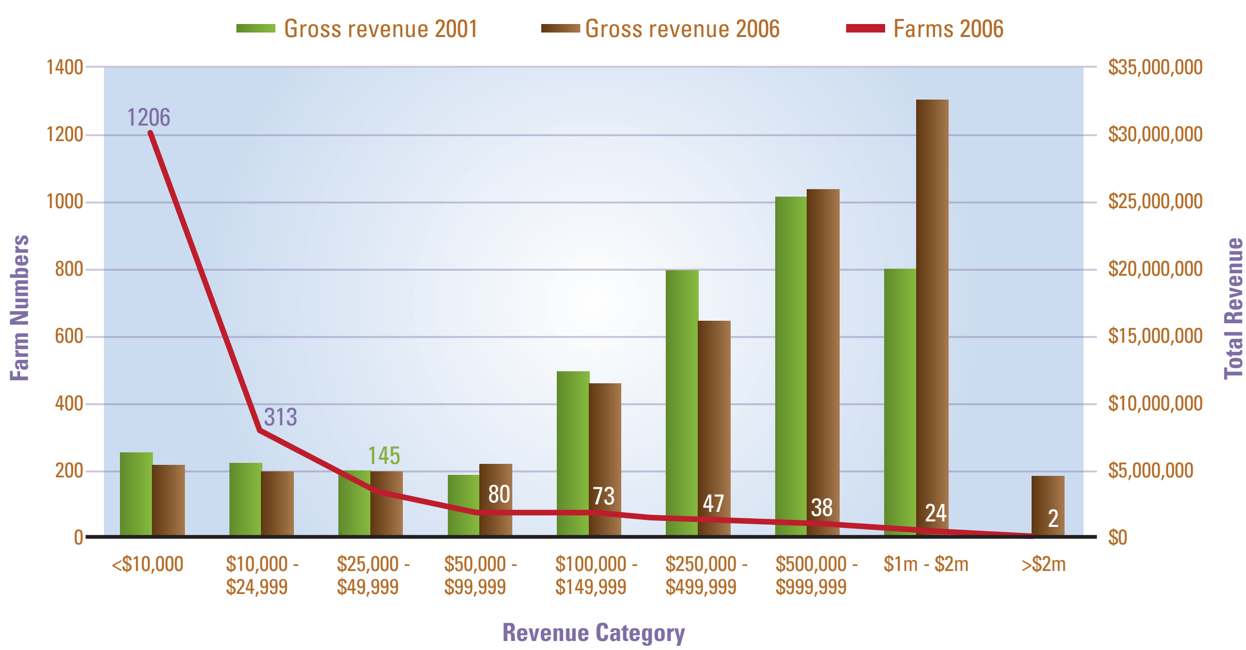

Figure 13: Variation in scale of farms compared to cumulative revenue based on farm size.

Given that the number of developing farms is increasing and their contribution to the economy is increasing, it is suggested that the greatest potential for increasing industry income over time will come from the developing farm "business".

Employment in the Agriculture Sector

Statistics Canada reports the number of weeks of employment in the on-farm and off-farm worker (paid and un-paid). This calculation provides a reasonably accurate assessment of work performed on farms and in farm-related manufacturing.

The *British Columbia Labour Market Outlook 2009-2019* indicates that there are and will continue to be, more farm worker recruits than there will be demand for the workers. However, at times, farms requiring seasonal harvesters or workers access such resources as the Temporary Foreign Workers program.

The agriculture industry on Vancouver Island is dominated by owner-operators (family farms), which grow to the point where they can do most of the farm work within the family unit, augmented with temporary employees in peak season. Only 41% of farm operators earn their entire living from the farm; given that there is an average of 1.5 operators per farm, the number of farms with no off-farm income is likely less than 30%.

Figure 14 indicates a total of 2,875 persons are working in the industry – 68% of these are owner operators.

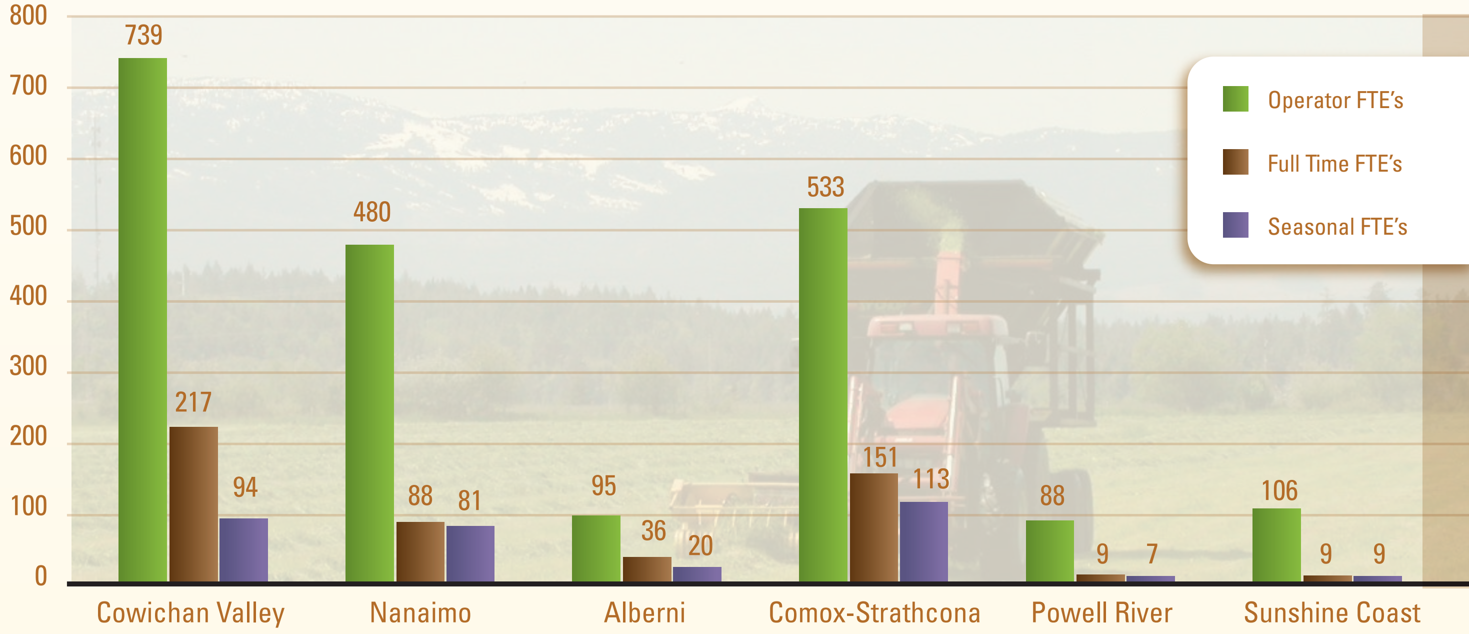

Figure 14: Source of farm employment in Study Area (Source: 2006 Census – weeks of paid labour converted to Full Time Equivalents (FTEs) based on 50 weeks per FTE)

APPENDIX II: METHODOLOGY

This document is essentially based on a review and comparison of the information contained in a variety of agricultural plans and reports completed in the past decade with a statistical analysis of the Census data. The authors of this report were involved in a number of the plans so, to be consistent, the analytical methods used in the previous reports were applied to this study.

- Comox Valley Agricultural Plan (2002)
- North Cowichan Strategic Agricultural Plan (May 2001)
- Cowichan Region Agricultural Plan (October 2009)
- Powell River Economic Development Plan for Agriculture (November 2009)
- Comox Valley Local Agri-food Development Project (2008-9)
- Denman Island Agricultural Strategy (2010)
- Agriculture Resource and Innovation Centre Feasibility Study, Vancouver Island University (2009)
- Comox Fertilizer Supply Feasibility Study (December 2009)
- Campbell River Agricultural Area Plan (draft)
- Alberni Valley Agriculture Plan (draft)
- BC Agricultural Plan "Growing a Healthy Future for BC Families" (2008)
- Focus on the Future: Developing the Agri-food Industry in British Columbia (2006)

The Ministry of Agriculture has a list of agricultural plans in BC:
http://www.agf.gov.bc.ca/resmgmt/sf/aap/Status_of_Ag_Area_Plans_and_Strategies_19_Sept_2011.pdf

Additional interviews, consultation, analysis and area tours were conducted, especially in the areas not covered by these plans, to ensure that the issues, opportunities and themes extended throughout the Study Area.

During the time this Framework was being developed, the Regional District of Nanaimo and the Sunshine Coast did not have regional agriculture plans. Consultants gathered information about these areas from a Nanaimo agricultural labour study, online farm directories, Google Earth and Street View. This information was confirmed through consultations with key people in the industry and a tour of farms on the Sunshine Coast.

In some cases, observations have been added based on the personal and professional experience of the authors who have both been involved in the agriculture industry for many years. An example of this is the categorization of farmers by revenue scale.

The characteristics, issues and opportunities that were common throughout the Vancouver Island Coast region were identified and used to develop the Strategic Directions in this document. Discussions with the Steering Committee and Advisory Committee have also helped to fine tune the overall direction.

Census Data

The data used in this report is primarily from the 2006 Census of Agriculture by Statistics Canada. The information, when compared to figures drawn from prior census reports, demonstrates the data reasonably reflect the state of the agriculture sector today.

Some data gathering protocols have changed since the 2006 Census. The changes create challenges in correlating and comparing some of the data. For example, in 2008, two regional districts were established from the former Comox-Strathcona Regional District. Where possible, the information has been separated for each Regional District.

Definition of Agriculture

For the purposes of this study, agriculture is defined as: *"The art and science of crop and livestock production. In its broadest sense, agriculture comprises the entire range of technologies associated with the production of useful products from plants and animals, including soil cultivation, crop and livestock management, and the activities of processing and marketing."* (Source: McGraw-Hill Encyclopedia of Science and Technology)

This definition is intended to indicate commercial viability and scalability, thus does not include backyard gardens cultivated for personal consumption, small scale livestock production or flower gardens, even though output may be found, in limited quantities, at the farm gate or in-season markets.

A census farm was defined (in 1996) as an agricultural operation that produces at least one of the following products intended for sale: crops, (field crops, tree fruits or nuts, berries or grapes, vegetables, seed); livestock, (cattle, pigs, sheep, horses, exotic animals, etc.) poultry, (hens, chickens, turkeys, exotic birds, etc.); animal products, (milk or cream, eggs, wool, furs, meat) or; other agricultural products (greenhouse or nursery products, Christmas trees, mushrooms, sod, honey and maple syrup products).

Therefore, for the purposes of this report, agriculture does not include production, processing, management and marketing of: aquaculture or mariculture products; non timber forest products; or timber products. Some segments of these activities are an integral part of the growing and processing sectors and may be included in statistics.

APPENDIX III: RESOURCES AND BIBLIOGRAPHY

Resources

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- BC Agri-food Knowledge Platform www.kmwpp.ca
- BC Agriculture Labour Market and Skills Development Initiative www.ardcorp.ca/index.php?page_id=31
- BC Jobs Plan www.bcjobsplan.ca
- Canadian Association of Farm Advisors www.cafanet.com
- Canadian Farm Business Management Council www.farmcentre.com
- Certified Crop Advisers www.prairiecca.ca
- Community Futures Development Corp www.communityfutures.ca
- Farm Credit Corporation www.agrisuccess.ca
- Food Security www.health.gov.bc.ca/healthyeating/foodsecurity.html
- Food Security www.phsa.ca/healthprofessionals/population-public-health/food-security/default.htm
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- Investment Agriculture Foundation of BC www.iafbc.ca
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Vancouver Island
Coast Regional Agriculture
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