Background Report for the RDCK Agriculture Plan

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- Deirdrie Lang (Nelson Area/ Kootenay Co-op Country Store General Manager) / Ben Morris, Alternate (Produce Manager)
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Section

INTRODUCTION

This Background Report provides the context and rationale for the RDCK Agriculture Plan. The document includes an overview of the agricultural capabilities, history, climate, and demographics, as well as the successes, issues, and needs of the farmers and food producers of the region. Input received from the community consultations, survey results, and other submissions to the Project are also included and incorporated into the description of the food systems of the region. By providing this scope and depth of context in the Background Report, the Agriculture Plan can focus solely on the actual plan and recommendations.

Vision

The vision of the Agriculture Plan is "to ensure that the agricultural capability of the area is realized and protected as part of a secure food supply for the region" (RDCK 3). The mechanisms within the control of the RDCK will be examined to determine how to better support farmers in the region. The explicit inclusion of the goal of a secure food supply for area residents adds an important element to agricultural planning.

A truly secure food supply depends on addressing the essential nutritional needs of the population (see, for instance, the work of Peters et al, and of Ostry and Morrison). This can only be done by analyzing the productive and carrying capacity of our land base and water systems against the population needs and the distribution, storage, and processing infrastructure necessary for a year-round supply. Such a detailed analysis is beyond the

scope of this project, but a preliminary review and direction on future research and data management is not. It must be stated that the goal of a secure food supply presupposes sufficient farmers and expertise to grow and raise the necessary products. At this present time, with less than 1.5% of the RDCK population actively farming, achieving this goal is a long way off (Statistics Canada, 2006). This should not, however, deter us from exploring the possibilities for increasing the number of farmers in the RDCK.

The intent of the Agricultural Area Plan project is to "define the District's role with respect to agriculture and identify priority actions necessary to support the viability of farming in the District, which takes in the regional context and anticipates future changes" (RDCK 3).

Many of the factors that strongly impact the viability of farming are beyond the purview and influence of the RDCK. There is, nevertheless, an important role for the RDCK in agriculture. By thoroughly reviewing the activities, services, and priorities of the RDCK, its role in the context of farming and secure food supply considerations can be made more explicit and efficacious.

"An Agricultural Area Plan is the first step to improving the quantity and quality of agricultural production in the RDCK." (RDCK 2010. pg3)

Scope

It is common practice when creating an agricultural plan to focus on a specific area, or sub-region, as the scope of the plan. The RDCK has deliberately included the entire region in the scope of this agricultural planning exercise. Many agencies both internal and external to the region tend to assume that agriculture only really takes place in the Creston Valley. And while the broad expanses of flat land there, anomalous in the RDCK, do result in a higher volume of agricultural production in the Creston Valley, the agricultural activities and potential of the entire region are noteworthy and are explicitly included in this planning exercise.

The RDCK is by no means the largest Regional District in the province, but the size of the region and the mountainous nature of the area pose very real challenges to travel and to the distribution of product. The Region is also home to many microclimates, each with their own strengths and weaknesses across the range of agricultural sectors. This all underscores the wisdom of maximizing the agricultural capability across the region, wherever possible, as one means to address the security of the food supply for the many small communities scattered across the RDCK.

While the vast majority of agricultural activities are rurally-based, municipalities play a vital role in a viable food system. Municipalities are where there is a critical mass of people to support the markets essential to so many farm operations. These markets impact both sides of farming - the input side (such as seeds, feed, and equipment, also used by urban gardeners) and the output side (markets for fresh produce, processing facilities, aggregation sites for storing and shipping).

A region wide-approach to planning for agriculture and a secure food supply enables a collaborative effort that can maximize the capabilities across the RDCK. It also supports planning that recognizes the distinct nature of each community while ensuring a consistent and efficient delivery of RDCK services. The project includes a review of the RDCK's template for Official Community Plans and will suggest changes to that template and the associated land use bylaws that can better support farming and a secure food supply for residents.

The Global Picture

Income Levels

Farming rarely attracts those looking for a "get rich quick scheme". Yet it is when food systems are functioning and the population is well-fed that cultures around the world and through the ages have been able to flourish. There is a good reason that food is positioned at the bottom of Maslow's hierarchy of needs, along with shelter and water.

Despite this, farmers around the world struggle to be economically viable. Over the past four decades, food systems around the world have become more and more integrated, throwing the majority of farmers into the same global marketplace. Competition for a stake in that global marketplace is fierce and includes farmers located in parts of the world with much longer growing seasons than ours, a larger labour pool, and possibly lower environmental and labour standards. The globalized food system in no way represents "a level playing field" for all those trying to access it as suppliers.

However, long supply chains have become the norm and have brought benefits to the average consumer in the form of year-round availability of most food stuffs and lower prices. These benefits are possible because many of the costs of a globalized food system are externalized. These costs include an increase in intensive and large-scale production that is now wide-spread across North America in, for example, the production of poultry, pork and beef. And whether it is acres and acres of slurry pits from confined animal operations or horizon-to-horizon corn or soy fields, the negative impacts on the environment are well documented. These include the large "dead zone" in the Gulf of Mexico and the depletion of non-renewable aquifers around the world (Brown).

The benefits of the global market have also come at high cost to the farmers who are an essential part of it. The Canadian National Farmers Union has warned of an income crisis amongst Canadian farmers that is heading for its third decade. When completely unsustainable income levels persist down through generations the crisis becomes a pathological "norm". The irony is that over the past three decades, farm production and exports have increased, as farmers have increased their efficiency, despite all the odds (NFU).

Consolidation

Consolidation in the agri-business, distributor and retailer sectors over the past decade or so has contributed to lower incomes at the farm level and higher prices for consumers. (Food & Water Watch) They also limit market options for farmers by requiring expensive certification and assurance systems such as GlobalGap or Hazard Analysis Critical Control Points, most commonly known by its acronym, "HACCP" (De Schutter 5).

Consolidation in the food systems has been followed and analysed by academics like Philip Howard, Mary Hendrickson and William D Heffernen for more than a decade, over which time they have documented ever greater levels of consolidation. This consolidation has not only reduced the leverage power of the farmer in any negotiation but has also eliminated some market options altogether. Provincially licensed meat is an example of a product with limited market options. Despite the fact that the meat is produced under provincial licensing and inspection, most grocery chains will not carry it since they do not want to have to worry about provincial boudary issues when ordering and shipping their products across the country.

Food Shortages

Food shortages have come and gone for as long as humans have walked the earth. Historically they were localized and generally due to war or weather challenges. With globalization not only do we all learn about any localized famine or crop failure, we are often impacted by food shortages in distant parts of the world because of the length of the supply chain of most of our food stuffs.

In 2007 the world witnessed food riots in various locations around the world based on crop failures. From Haiti to Mexico and Bangladesh there were wide-spread riots as food shortages and price hikes threatened the survival of communities. Yet, according to the Food and Agriculture Organization of the United Nations, in 2010 there were 925 million people around the world who were undernourished. The United Nations recognizes that food shortages may be here to stay, at least for the foreseeable future, and proposes actions in response to this situation in their 2010 publication entitled "The State of Food Insecurity in the World: Addressing food insecurity in protracted crises".

The majority of the world's undernourished people live in Asia and the Pacific and Sub-Saharan Africa. Shortages in the global cereal harvest most severely impact people in the global south whose diets are closely tied to the whole grains. In Canada in 2008, the average Canadian consumed 7 kg of rice, 43.7 kg of wheat flour and 4.1 kg of breakfast cereals (Statistics Canada 2009). However, Canadians consume significanty more grains "pre-processed" for them by the cattle, chickens, and pigs that provide milk and milk products, eggs, and meat for us. And as the Food and Agriculture Organization points out, while they expect the 2011 grain harvest to increase over the previous year, they warn that cereal production is barely meeting consumption and will not be able to replenish world stocks (FAO Cereal).

Climate Change

Whether you call it climate chaos, change or global warming, it is being addressed by more and more mainstream organizations recognizing the need to take action to prepare for and mitigate the consequences of this global phenomenon. In the RDCK in 2010, the City of Castlegar and Kaslo / Area D both undertook climate change adaptation projects with support from the Columbia Basin Trust. Each project identified impacts and strategies that could be put in place to help their communities remain resilient. Brynne

Consulting urges the RDCK to support the implementation of these important Plans. Many of the recommendations in the two Climate Change Plans match or complement those of the Agriculture Plan.

Farmers and others who spend a lot of time outdoors year on year can't help but observe changes in weather patterns. It is not uncommon to hear people propose that with "global warming", we may eventually be able to grow hot weather plants like bananas and avocadoes in our area. While an increase in temperature levels may indeed open up some crop options that did not previously exist, these future crops will be subject to the same extreme and unpredictable weather events that are becoming more freqent.

Agriculture works best with relatively predictable weather and there are only so many measures that farmers can put in place to try to reduce the damage from extreme weather. Hail at the wrong time can wipe out a cherry crop or destroy a field of greens. Warm winters and sudden temperature drops in the spring can wreak havoc with breeding patterns and vulnerable young livestock.

Fossil Fuels

Fuels costs are undeniably rising. With a finite supply of fossil fuels, it is inevitable that the prices will rise, following the long-proven market pattern of supply and demand. Agriculture as we know it today is synonymous with enormous inputs of fossil fuels and has even been described by Richard Heinberg as a process of using soil to turn oil and gas into food. It takes ten calories of fossil fuel to produce one calorie of food. Oil drives our farm equipment, powers our irrigation pumps, delivers and processes much of our food, is the root ingredient of many pesticides and herbicides while natural gas is the feed stock of our nitrogen fertilizers (Heinberg).

The amount of fossil fuel use in agriculture is dependent on the production practices of each farmer and will certainly vary. However, where combustion engine machinery is involved in farming it is pretty difficult to avoid fossil fuels. Even small equipment such as rototillers require fuel to operate. While some farmers are adjusting their production practices to reduce their reliance on fossil fuels, the majority of the food consumed by residents of the RDCK will have fuel costs associated with it - at the very least in the means of transporting the food to market.

There are no quick or easy solutions. The recent policy measures taken by various governments in the global north to promote biofuels has meant that there is stiff competition for crops - for feeding cars not people. While there are efforts to produce biofuel from plant matter that would not normally be destined for the human food chain, the programs that support biofuels have had their inevitable impact of diverting food crops from human food chains. In 2009, 119 million tons of the 416 million ton grain harvest in the United States went to ethanol production. Had it remained in the human food supply, that same proportion of the harvest would have fed 350 million people for a year (Brown 2011, 1).

Water

Water is disappearing at an alarming rate as aquifers are depleted, lakes and rivers run dry and glaciers recede at increasing speeds. While 70% of our global water supply is

used for agriculture, intense urbanization and industrial growth are competing fiercely for the same resources. From the suburbs of Denver to the cities of northern China, water is being steadily diverted from agriculture, placing growing strains on the world's food supply. Critical water shortages are being felt worldwide, with some of the hardest hit areas being southern India, Pakistan, Australia, northern China, south-western and south-eastern United States, northern Africa, Mexico and most of the middle east (Brown 3).

Collaboration

Given the complexity of the system and the host of factors that impact farm viability and food security around the world, it can seem rather daunting to tackle any of it. However, there are many other initiatives currently underway that are striving to address at least some portion of the complex puzzle that is our food system.

On a provincial level, the MLA representing many of the RDCK communities, Michelle Mungall, undertook a study of the Kootenay Lake food systems that resulted in a report launched on February 21st, 2011. The study focused on what the provincial government can do to support the food systems of the Kootenay Lake region. Given that the timing of this study overlapped with the agriculture plan project, many of the issues and needs identified in the Kootenay Lake Regional Food Systems Report overlap with those we heard in communities.

The Province also has a BC Agriculture Plan that was released in 2008 and provides a vision and direction for sustaining farm families and improving profitability. Many of the Strategies in the BC Agriculture Plan match those in the RDCK Agriculture Plan, addressing the province's role in supporting agriculture. This will be elaborated upon later in the document.

On a national level, our local Member of Parliament, Alex Atamanenko, has been heavily involved in agricultural issues and policy since he was first elected in 2006. He led the national NDP project to gather input from Canadians on a national food policy, resulting in the launch of a "Food for Thought" report in June 2010. Mr Atamanenko continues to sit as a member of the House of Commons Agriculture Committee.

All of which points to the possibilities inherent in the RDCK Agriculture Plan. We don't have to do it all ourselves, other agencies and levels of government are also identifying their priorities and elaborating their strategies.

Section 2

CLIMATE OVERVIEW

The Kootenay region has three mountain ranges (Columbia, Selkirk and Purcell) and is bordered by two others (Monashee and Rocky), making it a land of peaks and valleys connected by rivers and lakes. Climate conditions vary according to each community's altitude and nearness to water. The geography creates rain shadows, where one side of a mountain may get a lot of rain or snowfall and the other side gets little or none. It also creates microclimates, where temperatures may be warmer in valleys than at higher elevations.

The four-season climate of the Kootenay region has snowy winters and warm summers. The average temperature in winter is -10 °C, and in summer it is 20 °C. In the southern part of the region summers are warmer and drier, with temperatures climbing to 30 °C. The average snowfall in the southern part of the region is about 170 centimeters, or 67 inches, and in the northern part it is about 200 cm, or 80 inches. The valleys to the west (Grand Forks) and to the east (Cranbrook) are considered semi-arid, because they get less precipitation than the mountains and other valleys in our region.



Map 2–1. Climatic Regions of RDCK

Note: The data available is not detailed enough to break the grey areas down into the humid sub-categories.

Average Frost Free Period

It is interesting to note, that the average frost free period around the Creston agricultural area is shorter or the same as the frost free periods in other areas of the RDCK.



Map 2-2. Average Frost Free Period

There are obviously some micro-climatic variations in this - but effectively the Creston region has a shorter growing season than a lot of areas in the RDCK.

It is likely that most areas in the RDCK could be as agriculturally productive as the Creston area, but on a smaller scale.

Average First Frost in the Fall

The average first frost date is also similar across most of the producing areas of the region – again micro-climatic variations have to be taken in to consideration.





Growing Degree Days

The Growing Degree day chart indicates that the availability of heat to grow crops is the same in the Creston area as it is in the Nakusp and Slocan areas of our region.



Map 2-4. West Kootenay Growing Degree Days

Consequently the crops that can be grown in Creston can also be grown in the Slocan and Nakusp regions.

Crops requiring more warmth can be grown in the Harrop to Nelson corridor, the Nelson to Castlegar corridor and southern areas of that region.

Micro-climatic variations have to be taken in to consideration.

Conclusions

An examination of the climate data for the region indicates that although the Creston region is good for agriculture, there are other areas of the RDCK that would be better, both in terms of the frost free period and in terms of the growing degree days. The constraint on agriculture for most parts of the RDCK outside of the Creston Valley is the limited availability of valley bottoms or flat land. Therefore there is a good opportunity to expand the agricultural output of the region.

Note: Data in these charts has been extracted from the Atlas of Canada (5th Edition), scaled to fit a standard map of the area, with the data colour-coded as shown in the accompanying legend to the chart.

Maps used:

mcr4036 - First Fall Frost Date, mcr4037 - Frost Free Period, mcr4096 - Climate Zones

Monthly Temperature Charts

Temperature largely determines what can be grown in a particular area. Photosynthesis (the conversion of solar energy for use by the plant) and respiration (the using of stored energy compounds in the plant for growth and development) are regulated by temperature. Each plant has an optimum temperature for growth and development. There is a maximum temperature where plant growth stops and permanent injury to the plant occurs. Likewise, there is a minimum temperature where plant growth stops and freezing or chilling injury occurs ¹.

The temperature charts in this section provide the daily average as well as the daily and extreme maximum and minimum for seven representative communities across the RDCK for which this level of data is available.



Castlegar Monthly Temperatures

Figure 2–1. Monthly Temperatures Castlegar, BC

¹ Growing in the Kootenays, http://www.growinginthekootenays.ca/enviro_plants.html



Creston Monthly Temperatures



Kaslo Monthly Temperatures



Figure 2–3. Monthly Temperatures Kaslo, BC



Deer Park Monthly Temperatures



Nakusp Monthly Temperatures



Figure 2-5. Monthly Temperatures Nakusp, BC



New Denver Monthly Temperatures



South Slocan Monthly Temperatures



Figure 2–7. Monthly Temperatures South Slocan, BC

Note: Data extracted from the Environment Canada, Weather Office Climate Normals or Averages 1971–2000, data and charts provided by the Kootenay Local Agricultural Society from their Growing In the Kootenays website.



The 10 Hour Grow Line

Figure 2-8. 10 Hour Grow Line

(Source: J Lack, 2010)

The 10 hour line indicates the point where there is sufficient daylight for crops to grow properly. In the location depicted above (Castlegar), the background colour indicates the frost free period as well. The 10 hour line is pretty much the same throughout the region.

It is interesting and important to note that there is sufficient light for growth well prior to the start of the average frost free period. Therefore use of season extensions techniques and structures could easily extend the growing season at the start of the year by approximately 2 months.



Section 3

HISTORY OF AGRICULTURE IN THE RDCK

The first wave of European settlers arrived in the Kootenays following the discovery of gold in the 1860's and the subsequent construction of the Dewdney trail linking the Kootenays to the Pacific coast. From the 1880's on, mining had become such a vital and rich industry that by 1893 a rail line was built connecting Spokane to a northern terminal 5 miles west of Nelson, taking ore south for smelting and importing supplies. The CPR had been given exclusive rights to the Nelson waterfront and with the completion of the Crows Nest railway (and a grant of 750,000 acres of land adjacent to Kootenay Lake and the Columbia River) they acquired the Kootenay Steam Navigation Company and gained control of transportation in the region.

The subsequent subdivision and sale of CPR land allowed real estate agents to make extravagant and romantic claims to Easterners and British citizens prompting a steady influx of new settlers. Portraying the Kootenays as being fertile with plenty of water and a benign climate, promoters lured newcomers (many of whom had little or no farming experience), emphasizing that prices were much more favourable than the already popular Okanagan Valley. In the Nakusp region, promotion for the Edgewood Estates suggested daily fruit pick up by steamers and an abundant market on the prairies.

Despite the region being less favourable than suggested, many of the early pioneers cleared and planted the first fruit orchards in the region. One of the most successful

early pioneers, James Johnstone, homesteaded across the lake from Nelson writing that the Kootenays was "the place I looked for all over throughout Canada and the US and having found it, you could not drive me away" (Lang 21).

At the same time, early settlers were establishing homesteads in the Creston Valley, many having migrated north from Idaho and Montana. The first commercial apple growing operations were established at the turn of the century and by 1909 apples were being shipped out of the valley by the trainload. Vegetables and soft fruits were often planted between the rows of fruit trees to produce a harvest while the trees matured, with some of these becoming important crops in their own right. In 1912, several grower co-operatives were founded with Creston, Erickson, Wynndel and Canyon all having their own packing associations.

The livestock industry began to supply dairy products and meat which supported the growing of forage crops. In time Lister was to become one of the largest hay producing areas in the province. From the time settlers arrived in the valley, there had been a wish to claim the fertile Creston flats that were annually submerged due to spring runoff, and the first effort to build dikes and reclaim the rich valley bottom land was initiated in 1893. These first dikes were destroyed by the flooding of 1894 forcing people to settle on lands above the valley floor, but this was only the start of successive efforts to tame the annual flooding.

By the early part of the twentieth century orchards covered many of the flat river deltas and benches in the Kootenay region and along with mixed farming the fruit industry became commercially viable. As production grew and the supply outpaced local demand, growers started shipping to the Prairies, made possible by the new rail and water transportation network.

Co-operation was critical for survival in these early days. In 1897, with funding from the BC government, the first Farmers' Institutes were established offering great support for training in all aspects of commercial farming, while collectively purchasing grain, seed, fertilizer and equipment for its members. Concurrently, "Women's Institutes" were established which fostered important support for the family enterprises. As was emphasized by Nakusp rancher and farming consultant J.C. Harris, while presenting to the Nakusp Farmers Institute, "If you want to know what I think is the very first step to take in planting an orchard, it is this: get married" (Lang 66).

In these years local fruits won many prizes in local and international competitions for their exceptional quality. In Burton City, farmers formed a Co-operative Association in 1911 building a packing house and cannery. While Burton and Fauquier were known for their quality strawberries, Wynndel north of Creston had been dubbed the Strawberry Capital of the World. Over 17,000 cases of strawberries were shipped to the US each year. In the Creston Valley there were approximately 1500 cattle and 300 horses by 1920 and 2500 tons of hay were being harvested from the river flats. At the same time, in the West Arm, Harrop farmers organized a Fruit Growers Co-operative in 1920 and built a substantial packing shed and storage facility. In Nelson, the Macdonald family had established their jam factory in 1911 and became an institution employing over 100 people at times.

While much of the region was settled by individual families, there were also group settlements, the most significant being the Doukhobors in the Castlegar and Kootenay

Lake region, along with the Mennonites who settled in Renata on the Arrow Lakes. A second Mennonite community from Alberta had been lured to settle in the Whatshan Valley but misrepresentation and unfavourable conditions led to the dissolution of the colony within five years. The Doukhobors, as a spiritual collective with strong, hierarchical leadership were remarkably effective under Peter Verigin. In a few short years starting in 1908, they settled over 10,000 acres planting extensive orchards, building saw mills and brick factories, creating their renowned jam and preserving factory in Brilliant, and supplying additional labor to support the independent farmers. In 1913 they were recognized by the Blackmore Royal Commission for their contribution to the West Kootenay fruit industry. During the First World War, while many young men headed overseas, the Doukhobors, who were exempted from fighting, provided great support harvesting fruit throughout the region. At the same time their jam and preserving operation provided an outlet for surplus production.

While the fruit industry showed potential in the years leading up to the Great Depression, there were always the constant challenges of weather, soil fertility, pests, the relatively small scale of operations, and transportation. But the biggest challenge was always one of marketing, much of which was driven by conditions well beyond the region. As was stated in an Arrow Lakes Farmer's Institute gathering "the farmer's problem is not what he can grow but what he can sell" (Lang 87).

During these years there were a series of local, collaborative marketing and distribution initiatives that resulted in frequent mergers, splits, moves, and closures. Furthermore, the federal and provincial governments often intervened with tariffs, embargoes on imported produce, royal commissions, and obligatory marketing systems. While there were modest successes, the external conditions (World Wars, the Depression, huge surpluses in Washington and Oregon) caused markets to frequently collapse, motivating individual growers to revert to selling independently. During this same time frame, the once thriving Doukhobor communities steadily declined as internal challenges combined with the Depression years fractured their cohesion and by the mid thirties many families had dispersed and established their own homesteads.

In 1936 the BC government enacted the "Natural Products Marketing Act" that established "BC Tree Fruits" as the exclusive agent for fruit sales with the exception of local markets, fruit stands, and off-farm sales. While the new arrangement worked for the more efficient and larger growers in the Okanagan, it marked the end for many small scale family enterprises. The last enclaves to sustain themselves in the western part of the region were the orchards in Robson and Renata. Burton and other farming communities on the Arrow Lakes were flooded by the High Arrow dam construction in the early 60's, claiming 90% of the best agricultural land in the Arrow Lakes region.

In Creston, the fertile valley bottomlands had been reclaimed from another devastating flood in 1935 and large scale grain cultivation produced 165,000 bushels of wheat leading to the construction of several grain elevators. A variety of crops including soy beans, sugar beets, mint, canary seed, barley, oats, new varieties of wheat, corn, and various vegetables were all planted and tested for suitability. Peas for both seeds and soup became a very successful crop for a number of years with several thousand acres in production. Thousands of tons of potatoes were grown by "Swan Valley Foods" and processed into pre-cooked, ready-to-eat meals.

In 1938 the dikes were breached once again and 14,500 acres of land was flooded. At a cost of \$150,000 the dikes were quickly repaired and the Creston Flats were soon productive once again. A creamery had also been established in the area by this time producing a range of dairy products while a cannery and apple-juice processing facility was opened to serve fruit growers in the region. In the 1930's, farming and the secondary industries it spawned supported two thirds of the area population. Government agricultural stations and agricultural groups in the schools were also established including a branch of "The Future Farmers of Canada".

Unlike in the western parts of the region where the fruit industry was in serious decline by the Second World War, it managed to survive while facing many of the same challenges in the Creston Valley. The creation of BC Tree Fruits, as the exclusive marketing agency for all fruit, had its share of problems for growers. In years when prices were poor, farmers were often left with crops that could not be sold. As a reaction to market conditions, over the years there has been a tendency for primary fruit production to swing between apples and cherries in the Creston Valley. Despite all the challenges, maintaining a more up to date processing infrastructure, being more concentrated as a growing region, as well as having more direct transportation routes to eastern markets gave the Creston growers a big advantage. Moreover, the creation of the Libby Dam in Montana in 1972 reduced if not eliminated the threat of flooding in the valley, while the best and most fertile land in the Arrow Lakes region was lost to farming (as part of the Columbia River Treaty). Together, these events turned out to be a blessing for Creston.

Section

FARM CHARACTERISTICS IN THE RDCK

Farms in the Regional District of Central Kootenay are generally small diverse farms with an average size of 49 acres, but ranging in size from small intensive vegetable farms with an average size of under 4 acres to large ranches of over 1,000 acres. The tables below detail the characteristics of farms in the RDCK. Data and figures in this section listed under the 2006 columns are derived from the 2006 Census of Agriculture, and the data and figures under the 2001 columns are derived from the 2001 Census of Canada.

Overall, the number of farms in the region is shrinking:

Total Number of Farms in the RDCK		
	2006	2001
Total number of farms	562	609



Of these farms, the legal structure of the individual farms is classified as follows:

Legal Structure			
	2006	2001	
Sole poprietorships	333	346	
Partnerships	168	200	
Family corporations	54	49	
Non-family corporations	7	12	
Other		2	
Total	562	609	

Table 4-2. Legal S	Structure of	⁻ Farms
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Partnerships are general partnerships between marital partners or family members and thus the breakdown shows that the vast majority of farms are family farms (99%).

The investment made in the farms, as is consistent with the rest of Canada, continues to go up, making it more difficult for new farmers to enter the field, bearing in mind the financial commitment required:

Farm Capital			
	2006	2001	
Under \$100,000	23	37	
\$100,000 to \$199,000	59	139	
\$200,000 to \$349,999	137	223	
\$350,000 to \$499,999	94	84	
\$500,000 to \$999,999	146	83	
\$1,000,000 to \$1,499,999	51	20	
\$1,500,000 to \$1,999,999	18	9	
\$2,000,000 to \$3,499,999	27	7	
\$3,500,000 and over	7	7	

Table 4–3. Farm Capital

Total Farm Capital			
	2006	2001	
Total Farm Capital	\$383,640,115	\$261,876,101	
Comprising:			
Farm machinery	\$45,041,320	\$37,303,486	
Livestock	\$9,176,326	\$15,563,079	
Land and buildings	\$329,422,469	\$209,009,536	
Total	\$383,640,115	\$261,876,101	

Table 4–4. Total Farm Capital

The total amount of capital tied up in the farms, across the whole of the Regional District of Central Kootenay rose from \$261,876,101 in 2001 to \$384,000,115 in 2006 - a huge (47%) increase in the capital requirements for farming – while the number of farms has fallen by 7.72%.

The classification of farms by Total Gross Farm Receipts shows that in 2006, 424 farms would clearly be secondary income / supplementary income businesses (75% of the total - down from 78% in 2001), leaving only a maximum 25% of the farms in 2006 able to support a farm family as a sole income source.

Farms Classified by Total Gross Farm Receipts			
	2006	2001	
Under \$10,000	323	378	
\$10,000 to \$24,999	101	100	
\$25,000 to \$49,999	45	54	
\$50,000 to \$99,999	34	26	
\$100,000 to \$249,999	34	24	
\$250,000 to \$499,999	12	16	
\$500,000 to \$999,999	8	8	
\$1,000,000 to \$1,999,999	4	1	
\$2,000,000 and over	1	2	
Total	562	609	

Table 4–5. Farms Classified by Total Gross Farm Receipts

Of the 562 farms listed in 2006, 855 people were involved in operating them (an average of 1.5 people per farm).

Farm Operators				
	2006	2001		
Total number of Farm operators	855	895		
Male	535	565		
Female	320	330		

Table 4–6. Farm Operators

The average age is also rising:

Average Age of Farm Operators			
	2006	2001	
Average age of Farm operators	54.4	52.1	

 Table 4–7.
 Average Age of Farm Operators

The amount of time worked each week by the region's farmers is also rising:

Average Farm Working Week				
	2006	2001		
Less than 20 hours a week	330	390		
20 to 40 hours a week	270	265		
More than 40 hours a week	255	240		
Total	855	895		

Table 4–8. Average Farm Working Week

Average Net Return Based on Gross Farm Receipts				
	2006	2001		
Average sales / farm	\$53,388	\$43,052		
Average operating expenses / farm	\$47,966	\$40,416		
Average Net Return	\$5,422	\$2,636		

Table 4–9. Average Net Return
We can therefore determine that in the Regional District of Central Kootenay we have an aging population of farmers, who work long hours, invest a great deal of capital in their businesses, and receive little return.

Primary Agricultural Activities

The Kootenays differ from other areas in British Columbia in that although there are primary agricultural activities such as ranching, grain growing, and orchards, the majority of agriculture is comprised of small scale, diverse, intensive agriculture due to the wide range of climatically variable areas scattered throughout our region.

There is nothing grown in other regions of British Columbia that cannot be grown in season, within our region. The maps below identify the areas in the RDCK most suited to the different product sectors, based on historical and current data.



Key Agricultural Concentration Areas

Map 4–1. Fruit Growing Concentration Areas



Map 4–2. Livestock Concentration Areas



Map 4–3. Vegetable Growing Concentration Areas



Map 4-4. Grain and Field Crop Concentration Area

(Field crops are any vegetable crop produced in an acre rather than sub-acre scale.)

Agricultural Land Area

In 2006, of a total land area of 22,131 square kilometers in the RDCK (2,213,100 hectares), the total area being farmed was 27,338 hectares or 1.24% of the land area.

In 2006, of the total area of the Agricultural Land Reserve (ALR) in the RDCK of 63,924 hectares, the area being actively farmed amounted to 27,338 hectares or 42.84% of the total. The area being actively farmed rose by 32 hectares from the 2001 census figures.

The State of the ALR in the RDCK

BC's Land Commission Act came into effect April 18, 1973. This new Commission, appointed by the Provincial government, established a special land use zone in partnership with local governments to protect BC's dwindling supply of agricultural land. This zone was called the "Agricultural Land Reserve" (ALR). ALR boundaries were based on the capability and suitability of the land, its present use, local zoning, and input from public hearings.

At the time of the designation, the ALR comprised of 71,539 hectares in the RDCK, as reported by the Agricultural Land Commission (Annual Report 2008/09).

Since the designation, there have been:

• Additional inclusions into the ALR: 803 ha.

• Exclusions from the ALR:

By Government application: 7,315 ha.

By Private application: 1,102 ha

This has resulted in a net ALR area in the Central Kootenays of 63,924 ha.



Figure 4–1. Stage of the ALR in the RDCK - 1974-2009

An examination of the type of land excluded from the ALR indicates that between 65 to 70% is designated as prime agricultural land, and the balance is secondary lands. However the type of land added to or included in ALR indicates that between 80 to 85% is designated as secondary agricultural land.

Map of the Agricultural Land Reserve





Image $\textcircled{\sc c}2009$ the Kootenay Local Agricultural Society

Number of Census Farms

In 2006, the total number of farms in the RDCK was 562, down from the 2001 census figures of 609 (a 7.72% reduction), however during the same period, the average farm size in the region rose from 45 hectares in 2001 to 49 hectares in 2006 – an 8.69% increase in average farm size.

Total area of farms							
	Farms reporting	Acres	Hectares	Average farm size			
2001 Census information	609	67,474	27,306	45			
2006 Census information	562	67,676	27,388	49			
Change	-7.72%	0.30%	0.30%	8.69%			

Table 4–10. Total Area of Farms

Agricultural Production - Land in Crops

It is difficult to judge the state of land in crops due to the fact that so many of the figures available from Statistics Canada have been suppressed. However, a general overview of the figures, coupled with input from the region's farmers indicate that the area given over to field crops has remained more or less static during the period from 2001.

Hay and Field Crops				
	200	6	20	01
	Farms	Acres	Farms	Acres
Total Wheat	11	S	15	2,064
Spring wheat excluding Durum	10	1,377	11	S
Durum wheat	0	0	3	S
Winter wheat	2	S	4	S
Oats	16	344	22	631
Barley	17	1,302	13	956
Mixed grains	1	S	4	S
Total Corn	13	766		S
Corn for grain		S	2	S
Corn for silage	13	766	10	555
Total Rye	12	105	10	48
Fall Rye	9	S	10	48
Spring Rye	3	S	0	0
Canola (Rape seed)	7	1,857	5	1,658
Soybeans	0	0	0	0
Flax seed	0	0	0	0
Dried field peas	2	S	2	S
Chick peas	0	0	0	0
Lentils	1	S	0	0
Dried white beans	0	0	0	0
Other dried beans	1	S	0	0
Alfalfa and Alfalfa mixtures	183	12,252	166	11,541
Tame hay and fodder crops	118	6,613	136	7,205
Forage seed harvested as seed	10	S	7	S
Potatoes	12	S	19	634
Mustard seed	0	0	0	0
Sunflower	2	S	0	0
Ginseng	0	0	2	S
Buckwheat	5	6	2	S
Triticale and other field crops	0	0	3	S

Note: s indicated that the information has been suppressed by Statistics Canada

Table 4–11. Hay and Field Crops

Livestock Operations

Livestock operations are very diversified in the Regional District of Central Kootenays. However, an alarming trend is surfacing, namely a reduction in the number of livestock being produced on our local farms.

This is a direct consequence of the new Meat Inspection Regulations (MIR), introduced in 2004, that effectively put a stop to the traditional Kootenay meat production system by disallowing the on-farm slaughter of livestock for sale of the meat. The impact of this is so severe that, for each of the data sets below, we have graphically projected the expected impact to 2011 should there be no additional licensed slaughter options in the RDCK capable of serving livestock producers throughout the region.

Cattle and Calves

This data is somewhat skewed from the expected, as most cattle operations are much larger in size than the average Kootenay farms, and can thus either adapt to the new MIR by shipping their animals to central slaughter facilities, or continue their practice of shipping livestock for slaughter.

Cattle and Calves					
	2006		2001		
	Farms	Number	Farms	Number	
Cattle and calves	194	10,871	225	11,520	
Calves under 1 year	167	3,707	185	3,443	
Steers 1 year and over	81	827	87	1,243	
Total heifers 1 year and over	119	1,322	136	2,148	
Heifers for slaughter or feeding	63	354	35	814	
Heifers for beef herd replacement	60	344	99	504	
Heifers for dairy herd replacement	16	624	19	830	
Total cows on Census Day	164	4,822	177	4,517	
Beef cows on Census Day	148	3,240	154	2,782	
Dairy cows on Census Day	20	1,582	29	1,735	
Bulls 1 year and over on Census Day	108	193	106	169	

Table 4–12. Cattle and Calves



Figure 4–2. Total Cattle and Calves on Farm

Pigs

Pigs						
	2	006	2001			
	Farms	Number	Farms	Number		
Total pigs on Census Day	30	189	42	349		
Boars on Census Day	4	4	8	8		
Sows and gilts for breeding on Census Day	4	13	9	44		
Nursing and wiener pigs on Census Day	11	77	12	175		
Grower and finishing pigs on Census Day	19	95	28	122		

Table 4–13. Pigs



Figure 4–3. Number of Pigs on the Farm

The percentage change in pig farming in the Central Kootenays is dramatic:

- The total number of pigs being produced has fallen by 46% during the period 2001 to 2006.
- The number of breeding boars has dropped by 50% from 2001 to 2006.
- The breeding population of sows and gilts has dropped 70%.
- The number of nursing and wiener pigs dropped 56% from 2001 to 2006.
- The number of grower and finisher pigs dropped 22% over the same period.





Possibly the worst statistic is that the number of farms involved in raising pigs in the RDCK fell by 29%.

Sheep and Lambs

Sheep and Lambs						
	20	06	20	2001		
	Farms	Number	Farms	Number		
Total sheep and lambs on Census Day	36	826	39	685		
Total Sheep excluding lambs	36	355	39	340		
Rams on Census Day	28	41	26	38		
Ewes on Census Day	34	314	36	302		
Lambs on Census Day	30	471	29	345		

Table 4–14. Sheep and Lambs



Figure 4–5. Sheep and Lambs

The figure for the sheep and lambs does not seem significantly different from the census of 2001 and 2006. The main difference being the number of lambs on farms, which is a seasonal timing decision.

The number of ewes and rams (the breeding stock) did not change over this period. However at the end of 2006, two large sheep producers terminated their flocks – one of 30 breeding ewes plus 3 rams and the other of 50 breeding ewes and 8 rams. They tried to stay in business after the new provincial meat inspection regulation came into force, shipping lambs out to central slaughter, but terminated their business when the transport and slaughter fees combined were more than the value of the meat sold. A large number of small producers did the same. Although one new lamb producer started up in Creston in 2007, it is facing extreme economic challenges and does not expect to be in business in 2011.

Goats

Goats					
	20	06	2001		
	Farms	Number	Farms	Number	
Goats on Census Day	24	423	23	424	

Table 4–15. Goats



Figure 4–6. Goats

The number of goats in the region has remained static. This is not surprising due to the fact that the main function / income source from goats in the region is dairy and the meat inspection regulation has little to no effect on these operations.

Bees

Bees					
	2006 20			001	
	Farms	Number	Farms	Number	
Honeybees and other pollinating bees	21	912	3	3	

Table 4–16. Bees



Figure 4-7. Bee Hives

The majority of hives used for pollination in the Creston Valley, up to and including in 2001, were wintered in Yahk and are migratory, so depending on where they were on Census day 2001 they may or may not have been counted for our region. Thus there is considerable dispute amongst beekeepers as to the actual number of hives in the region.

That said, 2 commercial beekeepers commenced operation in Creston in 2001. One beekeeper (500 hives) ceased operation in 2010 and now maintains around 50 hives and is effectively retired. One beekeeper (350 hives) closed operations in 2009 and moved to the southern USA. One beekeeper (450 hives) is contemplating ceasing operation in 2011 due to disease pressures and low income levels.

There could be a serious pollination shortage for Creston fruit farms from 2011 onwards.

Live Poultry

Poultry					
	2	006	2001		
	Farms	Number	Farms	Number	
Total hens and chickens on Census Day	156	11,545	215	22,580	
Broilers, roasters and Cornish hens on Census Day	48	3,892	83	6,874	
Pullets under 19 weeks intended for laying on Census Day	40	1,851	65	2,604	

Poultry in the Regional District of Central Kootenay has taken a serious hit over the last few years.

Laying hens 19 weeks and over on Census Day	138	5,802	193	13,102
Turkeys on Census Day	25	418	28	359
Other poultry on Census Day	36	908	58	1,021

Table 4-17. Live Poultry





Between the census years 2001 and 2006:

- The total numbers of hens and chickens has been reduced in our region by 49%.
- The numbers of broilers, roasters and Cornish hens has been reduced by 43%.
- The numbers of pullets intended for laying has been reduced by 29%.
- The number of laying hens has been reduced by 56%.
- The number of other poultry (ducks and geese) has been reduced by 11%.
- The only type of poultry to increase is turkeys (16%), but as this is only 59 birds it is hardly significant.

Our mathematical projections for the period 2006 to 2011 paint an even worse picture, yet we will not know conclusively until the next round of census data is generated.

Poultry Meat Production

Poultry					
	20	06	2001		
	Farms	lbs	Farms	lbs	
Broiler, roaster and Cornish hen production for calendar year prior to the census	35	43,800*	54	92,731	
Turkey production for calendar year prior to the census	25	8,951	29	14,286	

Note: * estimated





Figure 4-9. Poultry Meat Production

Between the census years 2001 and 2006:

- Chicken meat production fell by 53%.
- Turkey meat production fell by 37%.

Our projections for the period 2006 to 2011 paint an even worse picture.

Vegetables

Production of vegetables in the Central Kootenay Region has shown a significant increase between the census years 2001 and 2006.

This increase comprises two main sources:

- 1. A small influx of new farmers to an area that supports local agriculture.
- 2. Livestock farmers changing direction to vegetable production because of the effects of the new Meat Inspection Regulation.

Vegetables					
	20	006	20	01	
	Farms	Acres	Farms	Acres	
Total Vegetables	86	331	78	273	
Sweet corn	29	13	21	18	
Tomatoes	26	9	17	6	
Cucumbers	20	4	14	5	
Green Peas	9	S	11	3	
Green and Wax beans	15	S	11	S	
Cabbage	15	S	8	4	
Chinese cabbage	3	S	0	0	
Cauliflower	9	S	7	S	
Broccoli	12	S	6	S	
Brussels sprouts	2	S	2	S	
Carrots	25	S	25	12	
Rutabagas and turnips	10	S	3	S	
Beets	19	3	11	3	
Radishes	7	S	3	1	
Shallots and green onions	10	S	3	S	
Onions - dry	18	4	13	4	
Celery	3	S	3	S	
Lettuce	15	3	12	S	
Spinach	8	S	8	1	
Peppers	16	S	13	S	
Pumpkin, Squash and Zucchini	27	17	22	14	
Asparagus	6	S	6	S	
Other vegetables	52	45	0	0	

Note: * *s* on the above table indicates that the information is suppressed by Statistics Canada.

Table 4–19. Vegetables

During this period, the average vegetable farm size has gone up from 3.5 acres in 2001 to 3.8 acres in 2006. This may not sound significant but the farm size denotes high intensity operations and, since small operations are worked by hand, a third of an acre increase is very significant both in the amount of labour involved and in the amount and value of output.



Figure 4–10. Number of Vegetable Farms

Our projections for the period 2006 to 2011 shows a continuing increase, both in the number of farms and in the quantity and value of outputs.

Fruits, Berries and Nuts

Fruits in particular are a significant agricultural product, especially in the Creston area.

Fruits, berries and nuts					
	20	06	2001		
	Farms	Acres	Farms	Acres	
Total area (producing and non-producing) of fruits, berries and nuts	138	855	159	812	
Apples	61	210	83	334	
Pears	28	30	34	14	
Plums and prunes	30	14	36	20	
Sweet cherries	74	480	62	279	
Sour cherries	4	S	2	S	

Peaches	26	S	24	27
Apricots	13	4	17	7
Grapes	10	24	8	S
Strawberries	22	22	24	40
Raspberries	24	9	33	19
Cranberries	0	0	0	0
Blueberries	10	9	10	6
Saskatoons	3	S	2	S
Other fruits, nuts and berries	19	16		
Average farm size		6.2		5.1

Note: * *s* on the above table indicates that the information is suppressed by Statistics Canada.

Table 4–20. Fruits, Berries and Nuts



Figure 4–11. Number of Fruit Farms

During the period 1996 to 2006, the number of fruit farms has declined by 23% and our projections indicate that this trend will continue.





However, the total acreage of fruit production in the region has increased by 11.2%.



Figure 4–13. Average Fruit Farm Size

In addition, the average farm size has increased from 4.2 acres in 1996, to 5.1 acres in 2001, to 6.2 acres in 2006.

These figures show that the industry is consolidating and continuing to grow, though not across all fruits.

Organics and Sustainable Agriculture

During the period 2001 to 2006 there has been a small increase in the number of

certified organic farms, but there has been a far more significant increase in those farms that are uncertified, yet grow sustainably, from 0 in 2001 to 122 in 2006, based on census data.

Organic Production					
	2006	2001			
Certified Organic	24	23			
Comprising:					
Organic hay or field crops	7	3			
Organic fruits and vegetable	23	21			
Organic livestock	2	2			
Other Organic crops	5	4			

Table 4–21. Organic Production

Total number of farms producing organic products				
Certified	24			
Transitional	5			
Uncertified	122			

Table 4–22. Total Number of Farms Producing Organic Products

Potential for Agricultural Activity Expansion

The map below shows those areas that have the potential to expand agricultural activity based on climate, soil, and water capabilities. This comprises nearly all the ALR land. It should be noted that in 2006, only 43% of the ALR land was being actively farmed.



Map 4-6. Potential for Agricultural Expansion

It is interesting to note that there is sufficient land in the ALR within the Regional District of Central Kootenay to (properly) feed 100% of the population of the region. (See Appendix D)

Ranching: Ranching, or the grazing of livestock, is a good use of land that would be marginal for other production types, such as vegetables or tree fruit. An expansion of this activity could take place in the Lardeau, Meadow Creek and Argenta areas in the north, in the Salmo and Salmo – Trail – Nelway corridor, along with the area from South Slocan to Slocan and in the New Denver to Nakusp corridor.

Fruit growing: Bearing in mind the history of successful fruit growing in the Kootenays, a massive expansion could take place. Soft fruits could thrive in the Trail – Castlegar corridor, the Robson, Brilliant, South Slocan triangle, up the Arrow Lakes to Deer Park and along the West Arm of Kootenay Lake. Grapes would seem ideal for the Edgewood / Fauquier area and the region around Nakusp and Crawford Bay. Apples, pears, plums and cherries could also have a dramatic expansion – all the way from New Denver to Nakusp, the Argenta – Johnsons Landing area, the Crawford Bay to Gray Creek area, the area between Nelson, Balfour, Harrop and Procter. A region of peaches could easily occur in the Robson to Deer Park areas and the Creston region could expand their production of tree fruits as well. Vegetable production: This could be expanded in all regions marked on the map with the exception of the Salmo area, where a short growing season with unpredictable first and last frost dates constrain production. The Hills / New Denver area is particularly suited to Garlic and Asparagus cropping.

Grains and Field Crops: It would be sensible to move livestock off the prime land on the flats in the Creston area and increase grains and field crops. There is also considerable fallow land in the Creston region that would be easy to bring into production for field crops. Further areas for the expansion of grain and field crops would be the Slocan or South Slocan corridor, the Meadow Creek and Argenta areas, as well as the region around Nakusp.

Fish Farming: Fish farming could be a new agricultural enterprise for our region, either lake based (both the Southern and northern ends of Kootenay Lake, the Crawford Bay area and the West Arm of Kootenay Lake), or land based using the abundance of pristine water from mountain creeks.

The map below shows those areas identified as having some potential for lake-based fish farming.



Map 4–7. Potential Lake-Based Fish Farming

Expansion or adaptation decisions are generally taken by farmers based on economic analysis of the risk to the farm and the strength of the market for the new component. These and other considerations (including knowledge-base and equipment required for the particular form of production) are factored into a determination of whether or not it will be worth the investment of time and money.

Contribution of Agriculture to the Economy of the RDCK

Financial Contribution

The direct financial contribution made by agriculture to the economy of the Regional District of Central Kootenay amounted to \$30,004,374 in 2006 up 14.5% since 2001.

Farm Gross Receipts				
	2006	2001		
Total gross sales	\$30,004,374	\$26,218,599		
Number of Farms	562	609		
Average total gross farm sales	\$53,389	\$43,052		

 Table 4–23.
 Farm Gross Receipts

Impact on the Local Economy and Economic development

The agricultural sector impacts the local economy and the economic development of our region in the following ways:

- 1. The expansion of markets for regional agricultural products implies that consumers are purchasing more of their food from nearby sources and that more of the money they spend remains in their local community. Hence, local food systems have the potential to positively impact the local economy.
- 2. Farmers' retention of a greater share of the food dollar by eliminating money going to the "middlemen" is a local economic benefit by contributing to the financial viability and security of the farm operation.
- 3. The most direct way that local agriculture and the expansion in local food systems impacts local economies is through import substitution. If consumers purchase food produced within a local area instead of imports from outside the area, sales are more likely to accrue to people and businesses within the area. This may then generate additional economic impacts as workers and businesses spend the additional income on production inputs and other goods and services within the area.
- 4. Shifting the location of intermediate stages of food production and direct to consumer marketing can also be considered forms of import substitution. For example, shifting processing activities (such as slaughtering and meat processing) to the local area may result in a larger portion of the value of the finished product remaining in the local area. Part of this effect may be due to producers retaining a greater share of the retail price of their products as they assume responsibility for additional supply chain functions (e.g., distribution and marketing).
- 5. Farmers' markets have been found to have positive impacts on local economies.

Otto and Varner (2005) estimated that each dollar spent at farmers' markets in Iowa generated 58 cents in indirect and induced sales, and that each dollar of personal income earned at farmers' markets generated an additional 47 cents in indirect and induced income (multipliers of 1.58 and 1.47, respectively). The multiplier effect for jobs was 1.45; that is, each full-time equivalent job created at farmers' markets supported almost half of a full time equivalent job in other sectors of the local economy. (See Appendix A "Input-Output Models and the Multiplier Effect". See Appendix B for further scientific studies.)

- 6. Local food markets may stimulate additional business activity within the local economy by improving business skills and opportunities.
- 7. For small vendors, farmers' markets operate as a relatively low-risk incubator for new businesses and a primary venue for part-time enterprises in a nurturing environment.
- 8. The presence of local food markets may also spur consumer spending at other businesses in a community. (The spillover spending effect).

Health and nutrition

The relationship between local foods and healthy food items, such as fresh fruits and vegetables, has led to claims that local food systems may provide health benefits including improved nutrition, obesity prevention, and a reduced risk of chronic diet-related disease.

These health benefits are a direct benefit to the local economy:

- 1. Local food systems offer food items that are fresher, less processed, and retain more nutrients (because of shorter travel distances) than items offered from outside the region.
- 2. Local food systems may increase the availability of healthy food items in a community and encourage consumers to make healthier food choices.
- 3. Introducing healthy food options in schools is a proven means of improving children's diets. Farm to school initiatives that increase availability, reduce prices, and provide point of purchase information have been found to be effective strategies to increase fruit and vegetable consumption in schools (see, for instance, The Edible Schoolyard project pioneered by Alice Waters in the 1990s).
- 4. Children exposed to a garden-based education curriculum report greater fruit and vegetable consumption, even when no effort is made to improve the availability of local foods at the schools. (McAleese & Rankin, as quoted in Martinez et al 46).

Food security

Local food systems have commonly been associated with efforts to improve food security, particularly at the community level. Food security means that all people at all times have access "to enough food for an active, healthy life," and is a necessary condition for a nourished and healthy population (Nord and others 2010). Those who are food insecure experience limited or uncertain availability of healthy and safe food, or have difficulty acquiring food through conventional retail channels.

Direct marketing has been an effective component of community food security programs,

with the goal of reducing community food insecurity and supporting rural communities by strengthening traditional ties between farmers and urban consumers. The potential for local food systems to improve food security is conceptually similar to claims related to health benefits. That is, expanding local food options may increase the availability of healthy food items, particularly in areas with limited access to fresh food. The prevalence of fresh, healthy food items may encourage increased intake of fruits and vegetables, and improved availability may reduce problems related to food access and uncertainty.

Food miles, energy use, and greenhouse gas emissions

Food is traveling further from farmers to consumers as the food system increasingly relies on long-distance transport and global distribution networks. Concerns about fossil fuel use and greenhouse gas (GHG) emissions have increased scrutiny of the environmental impacts of transportation in the food system and the distance food travels to consumers.

Distance is clearly a factor that determines energy use and emissions resulting from food transport. Given two otherwise identical supply chains, the supply chain with greater food travel distances will use more energy and emit more pollution.

Other benefits

It should be noted that local food systems have the potential to generate other public benefits:

- 1. Local food systems could reduce food safety risks by decentralizing production.
- 2. Development of social capital in a community.
- 3. Preservation of cultivar genetic diversity.
- 4. Promotion of biodiversity and environmental quality.
- 5. Production systems (on the farm and in processing) that are more closely aligned with the values, culture, and priorities of the consumers.

The plethora of initiatives across North America that promote buying locally or regionally points to the wide-spread recognition that there are many good reasons to support local farmers and food production. British Columbia's "Buy BC" program, run by the Ministry of Agriculture in the 1990's was amongst the early programs established to encourage consumers to include the provenance of their food in their purchasing decisions. *Le Quebec dans votre assiette!* was launched by the Quebec Ministry of Agriculture in 2008 to foster purchasing of provincially sourced foods. And many farm and food security organizations have created their own programs, from farm guides to farmers markets and collaborative initiatives aimed at breaking down some of the barriers that farmers face in getting their products into the larders of the consumers.

Section 5

AGRICULTURAL RESOURCES IN THE RDCK

Suppliers of Inputs and Services to Agriculture

Feed and other Inputs

There is little local supply of agricultural inputs in our region. The vast majority of inputs (excluding small scale supplies in animal feed) are brought in, from suppliers outside of our region, to fill specific orders. We have only nine towns in our region serviced with animal feed, and with the exception of the Creston area, these are all small scale suppliers, holding less than 4,000 lbs of feed in total for all livestock species. In addition to lack of supply, local prices for feed stocks are 42-45% higher than those in the lower mainland and 44 – 49% higher than the same products available in Lethbridge, Alberta.

The same is true across all other agricultural inputs including fertilizers, soil amendments, and agricultural chemicals etc., and those that are available locally are available only in very small quantities at inflated prices. Thus, it appears (based on an informal survey with local farmers) in excess of 90% of local agricultural input purchases are made with companies external to the Regional District of Central Kootenay. The map on the following page highlights those locations where livestock feed is available.

Agricultural Equipment

There are two suppliers of agricultural equipment in the Creston area and one in the Salmo area, both of which are suppliers of general equipment. Specialist equipment has to be brought in by special order. Because of the general lack of supply, there is a very good market of second hand and old equipment with prices in the region 40% higher than that available in the Lower Mainland and about 50% higher than the equivalent equipment available in Alberta. The prices of new equipment are the same as in other regions, but with the addition of extra freight charges.



Map 5-1. Map - Location of agricultural input suppliers in the RDCK

Infrastructure

Processing

The only processing infrastructure that exists in our region is based around the Creston area, other than cottage industry-scaled commercial kitchens.

Livestock

We have one red meat slaughter house, founded in response to the new Meat Inspection Regulation, that was both provincially and privately funded. It currently is in operation only one day a week which is far below expectation and does not meet the needs of the agricultural community. As a consequence, an increasing number of livestock are being shipped out of the region for slaughter. As of June 2011, a mobile poultry abattoir will be licensed and based in the Slocan Valley and a second unit is planned for the Creston Valley.

Fruit

There are four packing houses for fruit in the Creston area, focusing on apples and cherries. The largest is the Creston Co-op Packers which aggregates between 30 to 40% of the fruit (apples, pears and cherries) produced in the Creston Valley and ships it to the Okanagan for packaging or processing. The other three operations are privately-owned and are for processing cherries for the export market.

There is a new privately-owned cherry juice extraction and bottling plant that opened in 2010 and is set to expand in 2011. It is unlikely to process fruit for others in the foreseeable future.

Storage

There is one full time cold storage facility available in the region, operated by the Creston Co-op Packers. Currently it is used for fruit (apples, pears and cherries) in the harvest season and then stores beer for the local brewery in the off season. It is likely that this facility would be available for storage of root crops for off season sales.

Distribution

There is currently no locally based distribution system for local agricultural products within our region. Some farmers and processors cooperate formally or informally to jointly ship their products to the markets in the Region and outside the Region.

Agricultural Training

Since its inception in 2008, the Kootenay Local Agricultural Society (KLAS) has run a plethora of courses for farmers and gardeners on subjects as diverse as beekeeping to identifying diseases and nutritional deficiencies in plants. KLAS also maintains an extensive library of books on subjects of interest, and members also receive monthly

newsletters that are dense with helpful information. KLAS has also produced an up-todate guide called "Growing in the Kootenays", which covers everything from daylight hours and climate around the region, to specific notes on when and how to plant a variety of crops in our area. They also run a certification program for local farmers using sustainable practices who want to use the Kootenay Mountain Grown label on their products, and their peer-to-peer approach to this process has proven to be a great way of sharing knowledge and practices amongst local producers.

The Kootenay Organic Growers Society (KOGS) is another producer-group in the region and they provide information for growers interested in producing certified organic foods. Founded in the early 1990s, the group formed to provide organic certification to their members but also saw the value of sharing information working together to meet their needs. Over the years KOGS has been able to undertake a range of projects and programs to support their members with marketing, production practices, and skills development. Currently, they have a library of materials available for member-loans and organize farm tours and other peer-to-peer knowledge sharing. KOGS is a member of the Certified Organic Associations of BC, which also provides educational events and materials that are useful for producers in the province.

Less specific to the Regional District of Central Kootenay, yet covering the cultivation and production of foods in BC, is a range of post secondary education options. The University of the Fraser Valley, located in BC's most fertile valley, has a strong agricultural program with a variety of streams and courses. Their courses focus on horticulture, livestock, as well as integrated pest management. Kwantlen Polytechnic University, also in the Lower Mainland, has a horticulture program as well as a new Farm School program (in Richmond) which focuses on urban agriculture enterprises, providing a mix of theoretical and applied studies. The Faculty of Land and Food Systems at the University of BC provides extensive options for those interested in food and agriculture education in BC. Some of their degrees include: Soil Science; Integrated Studies of Land and Food Systems; Food, Nutrition & Health; Applied Biology; and Agricultural Economics.

Though we do not have a veterinarian program in BC, Thompson Rivers University based in Kamloops has an Animal Health Technology program that includes a large animal component for those who are interested in farm animal health and wellbeing. Thompson Rivers University also has a horticulture program. Providing less formal courses in both production as well as value-added kitchen training - with a focus on indigenous foods - is the Aboriginal Agricultural Education Society based in Kamloops. Gaia College is another option for those who are looking for education in organic horticulture, and they run their courses in a variety of locations, predominantly on the coast.

There are other informal educational opportunities in the field of food and agriculture throughout the province, and though not touched on here, there are also several options for those looking for culinary arts education too, including a program at Selkirk College in Nelson. The College of the Rockies Creston Campus is exploring re-instating a short-course horticultural program.

Section 6

RDCK WATER SUPPLY INFRASTRUCTURE, FLOOD CONTROL, AND DRAINAGE

Water Infrastructure

The RDCK has several bylaws and plans in place for handling regional water infrastructure including the Water Management Plan, a Regional Water Landscape Inventory, Official Community Plans, and the Floodplain Management Bylaw.

The Water Management Plan has been developed to help with decisions regarding water system assessments, conservation, and operation of water systems. It also outlines how the District will prepare for and respond to climate change pressures and community needs. Previously, many factors concerning District water supply were allotted to other agencies and ministries including forestry, highways and roads, and recreation. The Water Management Plan adopted in 2010 allows the RDCK to have jurisdiction over or involvement in water supply decisions (RWMP). This plan was developed in response to the Regional Water Landscape Inventory (RWLI) completed in 2008.

Because of increasing concerns about changing weather patterns and climate, the

District completed a Regional Water Landscape Inventory to assess where the RDCK stood regarding water issues. The inventory comprises all available water related data within the RDCK including watershed analysis, snowfall levels, existing and applied for water licenses, floodplain and erosion zones, as well as all water systems.

Most legislation regarding water is provincial. The Ministry of Environment (MoE) handles water licenses, permits, and regulations including watershed and groundwater management and water allocation.

Surface Water and Groundwater Supply

Residents rely on either surface water or groundwater for their water supply. The Regional Water Landscape Inventory stresses that there is much concern regarding potential over-prescription of water, as well as at-risk surface water in developed and agricultural areas. This inventory shows that the number of existing and pending licenses and development applications in many areas may exceed the water supply. This is reinforced by the lack of data collection on sources throughout the District. For example, water licenses are granted for lakes yet they are considered undetermined sources, which allows for unknown volumes of water to be withdrawn by many different residents. Property owners often share licenses on small streams and creeks and so the actual volume of water that is being withdrawn from a particular source is unknown. These unknown volumes contribute to issues of over-prescription and water supplies at risk.

In addition, there is little concrete knowledge of the extent and availability of groundwater resources within the RDCK and, as such, many of the known groundwater sources are being stressed. This increases the uncertainty in planning for water resources going forward. With the information collected in the Regional Water Landscape Inventory, strategies are suggested for careful planning and conservation of water resources within the District with emphasis directed to managing development and subdivision growth on rural lands that will not exceed water availability in the future.

Flood Control and Drainage

The Floodplain Management Bylaw (No 2080), outlines development and construction requirements, and building setbacks when located within a floodplain. This includes specifications on farm buildings, dwellings, and livestock housing. This bylaw is considered to be increasingly important as weather and climate patterns change and drought and flooding is forecasted to intensify in the future.

Currently, there is little legislation in place regarding drainage within the RDCK. The District is considering implementing a monitoring program for runoff water quality into major watercourses along with proposed regulations on the control or prevention of gravel, debris, and silt discharge from construction sites into waterways and agricultural land.

The District supports the prevention of harmful and toxic substances contaminating local waterways through selective land use planning and encouraging on-site wastewater and drainage management. Furthermore, they promote the use of natural ditches and natural drainage pathways within the region (OCP 2010). The District is in the process

of developing a Regional Wastewater Plan and Wastewater Bylaw that will help address drainage issues including the development of a Liquid Waste Management Plan and the revision of the Resource Recovery Plan (formerly called the Solid Waste Management Plan).

Water Systems within the RDCK

The RDCK is involved in some of the community water systems within the region. Currently, there are 345 independent water systems throughout the RDCK. These include improvement districts, small and large water systems, and water use committees (RWMP). All of these systems are run independently of the RDCK, with local residents managing the operation of the system, often on a voluntary basis. There is much controversy regarding independent water systems since provincial regulations regarding safe drinking water practices, for instance, may not be met. Within the RDCK there are over 23 boil water advisories in place (Public Health Protection).

A community may apply for assistance with the RDCK regarding their water system. The RDCK currently owns 16 small water distribution systems and one water treatment plant. A small water system services up to 500 people in a twenty-four hour period or about 125 to 150 connections. Residents of a small water system run by the RDCK pay the district a monthly or bi-weekly fee (DWS). A community with a water system can apply for assistance from the RDCK if they are not able to maintain operations, however the district prefers and encourages a system that can operate independently (RWLI).

Water prices have been too low within the region, creating a situation in which the RDCK systems are not able to produce enough revenue to ensure both operating and capital costs are met (RWMP). The District is moving to change pricing of services to better reflect cost and operation of water systems.

Agricultural Irrigation within the RDCK

The RDCK's Water Rights and Regulations Bylaw entails some agricultural references, noting for example that within the Lister water distribution system there is an additional toll of \$2.00 for any livestock (per unit) over six months old. Moreover, there is a 4.5-gallon/minute/acre maximum allowable withdrawal on systems (2011 personal communication from RDCK Water Service Liaison, Lauren Rethoret; unreferenced).

Historically, both the RDCK and MoE water permits have been broad and all encompassing in use: whether for sprinkling a lawn or irrigating a wheat field, the permit water allocations have been similar with little consideration of the reliability of the source, whether ground or surface water. In the future, the RDCK is planning to reevaluate water permits and licensing within the jurisdiction to include a more sustainable perspective. The RDCK is also interested in gaining higher agricultural irrigation efficiencies (OCP 2010).

The Ministry of Environment is reevaluating and making changes to water legislation over the next few years. The Water Act is being modernized to include more sustainable and climate wise regulations for consumption, and by 2012 all large water users will be required to report water consumption measurements. In time, irrigation water licenses will be based on climate, crop, and soil water needs (MoE).

The province is also committing to increasing support of farmers through different programs like the "Irrigation Assessment Guide" and "Irrigation Scheduling Calculator" that determine irrigation needs for crops based on current climate conditions and forecasts. The Ministry of Environment is also looking to establish water reserves in key agricultural areas throughout the province (MoE).

Section 7

INITIATIVES THAT SUPPORT FARMING

Community Food Charters

Food Charters are part of a recent movement to create sustainable food policy at the local and regional levels of government. They are usually statements, formulated by a group of citizens, containing values, priorities, and guidelines which reflect their vision for a secure food supply and a healthy agricultural system. Once adopted, although non-binding, they are used by political representatives to link municipal action to sustainable food sector policies.

By engaging residents in the articulation of their vision, and providing authorities with the rationale for supportive decisions, food charters foster collaboration towards sustainable food and agricultural approaches in their communities. The Village of Kaslo is the only community in the RDCK that currently has a community food charter, though more communities are acting to put these in place. The Province of Manitoba has a province-wide food charter and Victoria's Capital Regional District is in the process of creating a regional food charter.

Community Food Action Initiatives (CFAI)

Food security is a core public health program in BC's Ministry of Health. The Community Food Action Initiative is an associated health promotion effort which aims to improve food security for all residents of the province, particularly those who are vulnerable due to socioeconomic reasons. To accomplish this objective, the initiative pursues the following goals:

- Increase awareness about food security;
- Increase access to local healthy food;
- Increase food knowledge and skills;
- Increase community capacity to address local food security; and
- Increase development and use of policy that supports community food security.

The program is jointly administered through the Ministry of Health Services, the Provincial Health Services Authority, and the regional health authorities - the Interior Health Authority here in the RDCK - however assurance for the program is still measured year-to-year. The 'Good Food Hub', a project of the North Kootenay Lake Community Services Society in Kaslo, was the project selected in the RDCK to receive funding (during this funding cycle from 2010-2012) through this initiative.

The Land Conservancy of BC

The Land Conservancy (TLC) of BC has several innovative programs related to land conservation and agriculture in the province. Through conservation covenants, bequests, and purchases, TLC is preserving farmland for future generations. Moreover, with the formation of community farms, cooperatives, regional farmland trusts, and land rental agreements, they are providing working models for communities to keep the land in sustainable food production. TLC also runs a conservation holiday program which enables people to gain a deeper understanding of their work through hands-on participation, some of which occurs at their partnering community farms.

By providing recognition, incentives, and assistance through their Conservation Partners program, TLC helps farmers and ranchers steward the land they are working for the benefit of both agriculture and conservation. The label affiliated with this program helps consumers distinguish the producers following these practices when they purchase food. Bright Ridge Farm outside of Castlegar is the only farm within the region currently certified through this program. Interesting to note, in the East Kootenays, TLC uses a progressive model to maintain grazing licenses with ranchers in an attempt to strike a balance between protecting the ecological features of the land while still allowing it to be used productively (2011 personal communication from TLC Terrestrial Stewardship Advisor, Kootenay Region, Emily Nilsen; unreferenced).

Agriculture and the 4-H Connection

Last July (2010) the Minister of Agriculture and Lands, Steve Thomson presented BC 4-H members with an \$87,000 grant, and stated "4-H is an important part of both rural and
urban life in British Columbia. BC 4-H provides a vital link between youth and agriculture that contributes to the future of farming in BC." (MAL:Press Release) Partnership between the BC government and the 4-H organization has long been a tradition that has contributed to the building of healthy and sustainable rural communities and provided skilled leaders for BC's agriculture and food industries. These funds are intended to contribute to the ongoing vitality of the BC 4-H youth clubs and all their affiliated programs.

4-H started in British Columbia 1914 and is overseen by the BC 4-H Provincial Council, a not-for-profit organization governed by a group of individuals comprised of representatives from each of the 7 provincial 4-H regions, 4-H Alumni, sponsors, and the BC Ministry of Agriculture. Clubs were originally known as Boys and Girls clubs until they were renamed 4-H clubs in 1952 to more clearly represent the four H's: head, heart, hands and health. Swine, beef, dairy, corn, potato and poultry projects were popular in the early years, with the then Department of Agriculture being instrumental in providing project training and support. Now BC 4-H programs include, but are not limited to: Agriculture, Bicycle, Dairy, Gardening, Honey Bees, Horses, Poultry, Rabbit, Small Engine, and Swine. 4-H also organizes events and learning opportunities for their members on topics ranging from understanding the Agricultural Land Reserve to animal husbandry and invasive plants. These youth clubs are focused on bringing attention to the reasons for supporting local agriculture and the benefits it brings to communities. 4-H Clubs play an important role, in BC and the rest of the country, in connecting youth with interest in agriculture and providing them support, resources, as well as comradeship.

There are only three 4-H clubs registered within the RDCK: two are based on the Creston Valley and the newest club was formed in the Nelson area in early 2011.

Regional Farm and Food Organizations

There are a few farmer organizations in the RDCK, namely the Creston Valley Agricultural Society, which is the umbrella organization for the sector groups in the Valley (cattle, dairy, tree fruit, grain and field crops), Kootenay Local Agricultural Society, and Kootenay Organic Growers Society. These producer groups offer resources and educational services to their members, and the later two also provide certification services and assistance with marketing and promotions.

There are more food-related organizations in the region, though these have varying histories and impacts on the regional scene. On the east side of the District, the Creston Valley Food Action Coalition is a group that has been gaining momentum and membership over the past few years. Their main focus includes the Creston Valley Farmers' Market, the area's 'Farm Fresh Guide', as well as the Harvest Share program in that valley. Up the lake, is the Kaslo Food Hub (described in more detail below).

Nelson's Community Food Matters has hosted several educational and networking events. Also in Nelson, the EcoSociety is the organization through which the farmers' markets and the Garden Festival are organized. The Kootenay Grain CSA was originally organized through the EcoSociety, yet as the project has matured the farmers have become involved in running it themselves. Earth Matters, founded in the mid 1990's, is an environmental program aimed at youth in the Nelson area. Over the years the programming has frequently been focused on food and agriculture systems. Among the legacy projects that Earth Matters is responsible for are: the Hendryx Street Forest Garden, a permaculture demonstration garden with perennial plantings; the Seeds of History Report, documenting the history of seed saving over generations in the RDCK; urban composting demonstration projects; and a demonstration garden at the popular Cottonwood Falls Park in Nelson.

The Kootenay Food Strategy Society is based in Castlegar, and their work has focused on the Castlegar Community Garden as well as the city's Harvest Rescue program. This organization also helps some of the smaller food groups of the region in their role as a host agency – recently including the Winlaw Farmers' Market – because they are eligible for funding (as a result of their society status) which isn't always available to less formalized organizations. Community Service organizations such as those in Nakusp and Salmo support food-related initiatives as local interest and funding allows.

Because the Kaslo Food Hub offers such a diverse mix of programming and their approach has been met with a fair bit of success, it is worth examining more closely. The Food Hub approaches food systems work from a broad base, bringing together a range of programs that strive to address and co-ordinate the many needs and issues that affect the vitality of a community and its food supply. The vision of the Food Hub is that meeting the immediate hunger needs of residents combined with skills and infrastructure building will change the pattern of food insecurity for the community for the long term.

The Hub's catchment area is the Village of Kaslo and Area D. The range of initiatives under the Food Hub's umbrella include:

- The North Kootenay Lake Food Cupboard meets the need for emergency food access by providing a barrier-free venue for local produce and other staples. Excess food from the various outreach programs of the Hub help to stock the shelves of the Cupboard.
- The Bulk Buying Club has a dual purpose of supporting local farmers with the intent of increasing their markets and their production while providing an affordable option for local, organic food for the community. A twenty-five cents per pound premium on the bulk items goes towards bulk purchases that help to stock the Food Cupboard.
- The Community Root Cellar provides storage space for those want to purchase local food in bulk but cannot keep at their own homes.
- The Tool Library provides all sorts of tools to enable using and preserving locally grown, fresh food.
- The Food Resource Library is full of information on healthy eating, cooking, growing food, the food system, and much more.
- Two online directories The West Kootenay Food Directory and West Kootenay Farmland Database – are focused on increasing our knowledge of the foods grown within the region and to support the increase of farms and farmers growing food.

Section 8

REGIONAL EVENTS AND SYSTEMS THAT SUPPORT AGRICULTURE

In Canada, during the first half of the 20th century, we still lived in an era that was significantly dominated by regional food production. Farming and the secondary industries it spawned accounted for upwards of 30% of employment at the time. Here in the Kootenays, this was even more the case. It was reported in 1932 that two thirds of the population of the Creston Valley were engaged in food production in one way or another. In the Slocan Valley, the Kosiancic farm thrived through the 1930s, with a large market garden producing 300 tons of potatoes among other vegetables, 1000 laying hens, and a cow dairy, all employing and feeding local residents (Kosiancic 16).

Agriculture by necessity permeated both our economy and our culture and every community had its related festivals and fairs that were major economic and social occasions. In Nelson there was the annual "Nelson Fruit Fair", Creston had their annual "Blossom Festival", and Crawford Bay had the "Fall Agricultural Fair".

Every community in the region celebrated its connection with food and farming in its own particular setting and in its own unique fashion. In today's world of industrialized food production, these celebrations aren't quite what they once were, but one can safely say

that the recognition and celebration of local food is garnering more and more attention once again. There are still a number of more traditional agricultural fairs, with some nearly 100 years old, complemented by farmers' markets in nearly every town in the region.

Farmers' Markets	Festivals and Fairs
Cottonwood Market (Nelson)	Creston Valley Fair
Baker Street Market (Nelson)	Hills' Garlic Festival
Winlaw Market	Nelson Garden Festival
New Denver Market	Kootenay Lake Agricultural Fall Fair
Nakusp Market	Crawford Bay Fall Fair
Creston Market	Harrop Fall Fair
Crawford Bay Market	Creston Valley Fall Fair
Castlegar Market	Creston Valley Blossom Festival
Kaslo Market	Naskusp Fall Fair
Salmo Farmer's Market	Pass Creek Fall Fair

Farmers' Markets, Festivals and Fairs

 Table 8–1.
 Farmers' Markets, Festivals and Fairs

Access to Locally Grown Food

A list of retail markets, restaurants, producers and distributors using locally grown produce can be accessed through:

The Kaslo Food Hub (for the West Kootenay excluding Creston) at: <u>http://nklcss.org/</u> <u>fsdir.php</u>

The Creston Valley Food Action Coalition (for the Creston Valley) at: <u>http://</u> <u>crestonfarmfresh.pbworks.com/w/page/25112886/Welcome</u>

Seed Exchanges

Seed saving and sharing has a long history in the RDCK. Many of the early settlers came with seeds sewn into the hems of their clothing. In 2000, Nelson Earth Matters undertook a project to identify the seed savers in the area and document the range of seeds saved and for how long. The result was an 85 page report entitled "Seeds of History: Giving our Past a Future" that documented a wealth and diversity of seeds, some of which have been saved for decades and handed down from generation to generation (McGregor et al).

Formal and informal seed exchanges occur across the RDCK each year in the early spring and have benefitted from the increased interest in food, food security and biodiversity over the past several years. Currently there are public seed exchanges in Nelson, Kaslo, Winlaw, and Creston. Section O

POPULATION

Population Overview

The RDCK covers 2.4% of the provincial land base with 1.4% of the population residing here. Between 1996 and 2006 there was a small decline in population. The greatest decline, as a percentage of population, occurred in Silverton, followed by Electoral Area A, Electoral Area J, and Salmo. Electoral Area C alone had a significant increase in population of almost 21% over the same ten year period.

53% of those living in the RDCK reside in the Electoral Areas, with 47% in the municipalities. The nine municipalities of the RDCK have a population range (as of the 2006 Census) of 185 in Silverton to Nelson, the largest, with 9,258 residents. The largest rural population is in Electoral Areas B and H, followed closely by E and F.

In 1996 the median age was 41.6 with 18% of the population under 15 years old. By 2006, our aging population pushed the median age up to 45.3, with 16% of the population under 15 years of age. Also in 2006, 28.4% of the population was between the ages of 45 and 60.

The Tables and Figures below provide a more detailed breakdown of the population of the RDCK.

Census Figures from RDCK Reports				
	1996	2001	2006	% change 1996 - 2006
Municipality				
Castlegar	7,030	7,002	7,259	3.15%
Creston	4,929	4,917	4,950	0.42%
Kaslo	1,063	1,032	1,072	0.84%
Nakusp	1,736	1,698	1,524	-13.91%
Nelson	9,585	9,298	9,258	-3.53%
New Denver	579	538	512	-13.09%
Salmo	1,202	1,120	1,007	-19.36%
Silverton	241	222	185	-30.27%
Slocan	335	336	314	-6.69%
Total	26,587	26,041	26,081	-1.94%
Electoral Area				
	2 (17	2 125	2.041	20.220/
A	2,617	2,125	2,041	-28.22%
В	4,723	4,658	4,575	-3.23%
С	1,015	1,3/1	1,284	20.95%
D	1,596	1,500	1,525	-4.66%
E	3,533	3,531	3,716	4.92%
F	3,854	3,907	3,730	-3.32%
G	1,573	1,354	1,605	1.99%
Н	4,460	4,482	4,319	-3.26%
I	2,507	2,436	2,415	-3.81%
J	3,524	3,513	2,792	-26.22%
К	1,997	1,979	1,800	-10.94%
Total	31,399	30,856	29,802	-5.36%
RDCK Total	57,986	56,897	55,883	-3.76%

Table 9–1. Population Figures For Municipalities and Electoral Areas



Figure 9–1. Population Graph of the RDCK 1996 - 2006







Figure 9–3. Rural Population of the Kootenays

1996 Census Data				
Age Characteristics	Central Kootenay Regional District (CD)			
	Total	Male	Female	
Total - All persons	51,073	28,900	29,195	
Age 0-4	3,305	1,680	1,625	
Age 5-14	8,655	4,460	4,195	
Age 15-19	4,130	2,165	1,965	
Age 20-24	2,960	1,495	1,465	
Age 25-44	16,505	8,045	8,460	
Age 45-54	8,100	4,110	3,990	
Age 55-64	5,870	2,995	2,875	
Age 65-74	4,775	2,355	2,420	
Age 75-84	2,900	1,255	1,645	
Age 85 and over	895	340	555	

Median age of the population	41.6	41.1	42.2
% of the population ages 15 and over	82.00%	81.40%	82.70%

Table 9–2. 1996 Census Population Data

2001 Census Data				
Age Characteristics	Central Kootenay (CD)			
	Total	Male	Female	
Total - All persons	57,020	28,315	28,705	
Age 0-4	2,795	1,455	1,350	
Age 5-14	7,460	3,830	3,635	
Age 15-19	4,165	2,200	1,960	
Age 20-24	2,780	1,480	1,295	
Age 25-44	14,575	7,050	7,525	
Age 45-54	9,495	4,735	4,755	
Age 55-64	6,580	3,275	3,305	
Age 65-74	5,075	2,630	2,445	
Age 75-84	3,015	1,280	1,740	
Age 85 and over	1,080	380	700	
Median age of the population	41.6	41.1	42.2	
% of the population ages 15 and over	82.00%	81.40%	82.70%	

Table 9–3. 2001 Census Population Data

2006 Census Data				
Age characteristics	Central Kootenay (CD)			
	Total	Male	Female	
Total population	55,885	27,645	28,240	
	1		1	
0 to 4 years	2,525	1,320	1,205	
5 to 9 years	2,900	1,505	1,400	
10 to 14 years	3,490	1,795	1,695	
15 to 19 years	3,665	1,910	1,765	
20 to 24 years	2,425	1,235	1,185	
25 to 29 years	2,420	1,210	1,205	
30 to 34 years	2,860	1,375	1,485	
35 to 39 years	3,385	1,650	1,730	
40 to 44 years	3,965	1,890	2,080	
45 to 49 years	4,800	2,330	2,470	
50 to 54 years	4,990	2,475	2,510	
55 to 59 years	4,770	2,355	2,415	
60 to 64 years	3,745	1,885	1,855	
65 to 69 years	2,980	1,500	1,475	
70 to 74 years	2,425	1,270	1,155	
75 to 79 years	1,955	945	1,015	
80 to 84 years	1,355	565	785	
85 years and over	1,245	435	810	
Median age of the population	45.3	44.9	45.8	
% of the population aged 15 and over	84.00%	83.30%	84.80%	

Table 9-4. 2006 Census Population Data



Figure 9-4. Age Components of Central Kootenays

RDCK Agriculture Plan Background Report

Section 10

THE POLITICAL CONTEXT

Governments at all levels set policies that affect agriculture and food systems. Provincial and national policy operates in the context of the international agreements to which Canada is a party.

The suite of policies include the so-called "command and control" mechanisms embedded in regulations that are either prescriptive (explicitly governing operations) or outcomes based, where the means to achieve an end are given more leeway (such as, "do not pollute"). There are also incentive mechanism that are manifested in funding programs (such as the Environmental Farm Plan) and taxation instruments (such as farm tax exemptions).

The final policy mechanism relates to information and advisory services (see Nolet et al, 2006). Historically agricultural information and advisory services were more widely available in the form of public research programs aimed at developing new breeds and varieties, and extension services that provided sector-specific expertise to guide farmers in making changes or improvements to their operations.

On the ground is one farm, but it is surrounded by a multitude of regulations and programs that all blend into "government" with differentiation amongst the different levels and ministries of government only apparent when their requirements are at least seemingly in opposition. This contributes to the challenges and confusion in the farming community about what is actually required. For example, the requirements for managing the specified risk material (SRM) implicated in Bovine Spongiform Encephalopathy (BSE)

are complex, include both provincial and national requirements, and are embedded in international agreements and protocols around managing BSE. The list below indicates some of the considerations for producers:

- The BC Ministry of Environment regards it as it would any other organic matter from animals and so regulates it accordingly, with the goal of disallowing pollutants from being discharged into the environment;
- The Canadian Food Inspection Agency requires all SRM to be marked and then permanently contained or destroyed, with transportation of the material only possible under permit. However, they do not have any control over SRM that does not leave its farm of origin, so if a cow dies on a farm and is buried or composted there, the CFIA does not get involved. Any bovines that dies, either naturally or in a slaughter plant contains SRM.
- The Agricultural Land Commission, with its mandate to preserve and enhance farmland, does not want compost containing SRM to be spread in the Agricultural Land Reserve since under the federal regulations governing SRM, this effectively quarantines the land from animal grazing or human food production for five years.

However, despite the confusion, policies and programs have been put in place to support agriculture for almost as long as BC and Canada have had formal governments. Some have clearly had positive benefits while others have been a bad fit for the scale and type of farming that happens in the RDCK.

Growing Forward

In 2007, the Ministers of Agriculture across Canada signed the Growing Forward Framework Agreement replacing an earlier federal-provincial cost-sharing and program delivery agreement. In April 2009, BC and Canada signed a bilateral agreement under the new Framework that includes joint contribution and program delivery commitments.

The Framework is based on three strategic outcomes:

- A competitive and innovative sector
- A sector that contributes to society's priorities
- A sector that is proactive in managing risk (Growing Forward 2008)

Given that the market conditions and the regulatory oversight of agriculture crosses provincial boundaries, there is some merit to a pan-Canadian approach with a BC-based implementation. However, the Growing Forward Agreement constitutes the majority of the provincial Ministry of Agriculture's budget and programing, and so determines much of the activity possible within the Ministry. So something as seemingly simple as recreating the once highly successful "Buy BC" program is constrained by the fact that, under the Growing Forward Framework, "local" means Canadian. The Agreement ends in 2013 at which time a new pan-Canadian program will take its place.

Among the federal legislation that impacts farming in the RDCK are the following:

• Canada Agricultural Products Act which regulates the marketing and standards of agricultural products. Under the Act is a suite of related regulations including:

Dairy Products Regulations, Egg Regulations, Fresh Fruit and Vegetable Regulations, Honey Regulations, Livestock and Poultry Carcass Grading Regulations, Organic Products Regulations, Processed Eggs Regulations, and Processed Products Regulations.

- Feeds Act and Regulations control the production and sale of animal feeds.
- Fertilizers Act and Regulations govern how fertilizers are handled, stored, sold, and applied to the land.
- Fisheries Act has provisions respecting the protection of fish habitat from substances which would have a negative impact on fish or their habitat.
- Seeds Act and the associated Seeds Regulation along with the Weed Seeds Order control how seeds are raised, graded, marketed, and sold in Canada.

Legislative and Policy Context - Provincial

Agricultural Land Commission (ALC)

The <u>Agricultural Land Commission</u>¹ is an independent provincial agency established with the mandate to protect BC's farmland. Through the administration of the Agricultural Land Commission Act, policies and regulations, the Commission strives to preserve agricultural land and encourage and enable farm businesses. The ALC also encourages local governments to enable and accommodate farm use of agricultural land and uses compatible with agriculture in their plans, bylaws, and policies. The ALC finds its legislated authority in the Agricultural Land Commission Act.

The Agricultural Land Commission Act

The <u>Agricultural Land Commission Act</u>² created a special land use zone called the <u>Agricultural Land Reserve</u>³ to preserve agricultural practices and communities by protecting agricultural lands. Established in 1973 and covering about 5 percent of the province's area, only those uses specified in the *Agriculture Land Reserve Use, Subdivision, and Procedure Regulation* are permitted on ALR lands. Other uses may only be authorized with permission by application to the ALC; permission must be sought by the ALC to:

- Include land in the ALR
- Exclude land from the ALR
- Subdivide land in the ALR
- Use land in the ALR for non-farm purposes

In 2002, the ALC Act replaced the Agriculture Land Reserve Act, along with several operation changes including restructuring of the ALC and increasing the types of

¹ Agricultural Land Commission: <u>http://www.alc.gov.bc.ca/</u>

² Agricultural Land Commission Act: <u>http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/</u> <u>freeside/00_02036_01</u>

³ Agricultureal Land Reserve: http://www.alc.gov.bc.ca/alr/alr_main.htm

permitted uses in the ALR to expand economic opportunities for farmers. In order to better reflect the local context and expedite application response times, the ALC was split into six panels across the province, each responsible for deciding on applications in its region.

The updated ALC Act also increased local government powers; a local government may now enter into an agreement to exercise some or all of the commission's power to decide applications for non-farm use or subdivision of lands in its jurisdiction. Local governments may also decide to refuse to refer applications for ALR exclusions or non-farm uses to the ALC. When an application is received by the Agricultural Land Commission, it then makes the final decision on whether to permit the requests based on accordance with the ALC Act. The Act also outlines what activities may or may not be prohibited by local governments.

Ministry of Agriculture

The <u>Ministry of Agriculture</u>⁴ is responsible for the administration of a wide range of legislation and regulation impacting agriculture in the RDCK. In addition to managing the Farm Industry Review Board and the Provincial Agricultural Land Commission, some of the Ministry of Agriculture's key legislation governing activities in the RDCK include:

- Agri-Food Choice and Quality Act
- Animal Disease Control Act
- Bee Act
- Farm Practices Protection (Right to Farm) Act
- Food Products Standards Act
- Livestock Act
- Milk Industry Act
- Seed Potato Act
- Veterinarians Act
- Weed Control Act

BC Assessment

<u>BC Assessment</u>⁵ is a provincial crown corporation responsible for providing independent property assessments for all property owners in the province. Local governments in BC rely on the annual assessment roll for fair and equitable tax assessments. Farm classification provides the benefit of a low tax rate for assessed properties. Under the *Standards for the Classification of Land as a Farm Regulation* (the Standards), a farm is all or part of a parcel of land used for primary agricultural production, a farmer's dwelling or the training and boarding of horses when operated in conjunction with horse rearing.

In 2008, the BC Government commissioned the "Farm Assessment Review Panel"⁶ (the

⁴ Ministry of Agriculture and Lands. <u>http://www.gov.bc.ca/agri/</u>

⁵ BC Assessment <u>http://www.bcassessment.bc.ca/about/Pages/default.aspx</u>

⁶ Farm Assessment Review Panel: <u>http://www.farmassessmentreview.ca/</u>

Panel) to simplify and update the farm classification process and regulations.⁷ Among the Panel's recommendations was a change to the standards which was incorporated into the 2010 assessment roll. Prior to the recent changes to the standards, assessment policy dictated that for any parcel of land, only that portion that was actively in production would be classed as farm, with the remainder of the parcel classed as residential by default, unless there was a clear other use for the property and an income criteria was being met. Split classification is a concern particularly for farmers with small holding in the urban/rural areas where property values are high.

ALR land in active production will no longer be split classified, even if some of the land is clearly not producing because it is rocky, a gully, treed, swampy etc. Farm land that is not in the ALR will not be split classified if at least 50% of the land is in production or contributes to production, or if 25% of the land is in production and a minimum income threshold of \$10,000 is met. For leased land, only the land actually in production will be classed as farm.⁸

BC Ministry of the Environment

BC <u>Ministry of the Environment</u>⁹ (MoE) establishes significant legislation impacting agricultural lands and related farming activities. Many RDCK farms have taken advantage of the Canada – BC Environmental Farm Plan (EFP) Program, which enables individual farmers to evaluate how their operation impacts the environment and plan for environmental stewardship. Some of the relevant environmental policies and regulations include:

- Environmental Assessment Act
- Environmental Management Act
- Park Act
- Pesticide Control Act
- Water Act
- Wildlife Act
- Drainage, Ditch and Dike Act
- Organic Matter Recycling Regulation
- Agricultural Waste Control Regulation
- Fish Protection Act
- Riparian Area Regulation¹⁰

Currently agricultural activities are exempt from the Riparian Area Regulation, but nonfarm activities are included. It is expected that all activities will be included in the future.

⁷ Farm Assessment Review. <u>http://www.farmassessmentreview.ca/2010_assessments.htm</u>

⁸ Changes to the Rules for Determining Farm Classification for Assessment Purposes. Farm Assessment Review. <u>http://www.farmassessmentreview.ca/pdfs/changes_to_rules.pdf</u>

⁹ Ministry of Environment. <u>http://www.gov.bc.ca/env/</u>

¹⁰ Riparian Area Regulation. <u>http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/</u> <u>freeside/10_376_2004</u>

BC Ministry of Health

<u>BC Ministry of Health¹¹</u> establishes agricultural-related standards and procedures to protect public health through the Public Health Act, Food Safety Act, and the Drinking Water Protection Act. In the RDCK, the Interior Health Authority shares responsibility with inspection agencies for enforcing regulations. The Food Safety Act was established in 2002 to consolidate respective aspects of the milk industry, meat inspection and Health Act under one statute. In September 2004, the Province enacted a new Meat Inspection Regulation, requiring all BC abattoirs producing meat for human consumption to be licensed either provincially or federally. Only meat from livestock slaughtered in a licensed abattoir can be sold for food.

BC Ministry of Community, Sport and Cultural Development

BC <u>Ministry of Community, Sport and Cultural Development¹²</u> establishes the foundational legislation for local governments in the province, most notably the Local Government Act and the Community Charter. This ministry is also responsible for the Farm Assessment Review Panel, Property Assessment Review Panels, BC Assessment and the Union of British Columbia.

The Local Government Act(LGA)

The Local Government Act¹³ (LGA) provides the legal framework and powers for local governments to represent the interests and respond to the needs of their communities. Regional districts are considered an independent and accountable order of government with the mandate to:

- a. Provide good government for its community
- b. Provide the services and other things that the board considers are necessary or desirable for all or part of its community
- c. Provide for stewardship of the public assets of its community
- d. Foster the current and future economic, social, and environmental well-being of its community

The LGA establishes the authority for local governments to establish bylaws such as Official Community Plans, Rural Land Use Bylaws, Subdivision and Servicing Bylaws, Zoning Bylaws, fiscal budgets, and capital expenditure plans. Regional districts are encouraged to adopt more than one plan, and plans specifically respecting the maintenance and enhancement of farming on land in a farming area.

i. Official Community Plan (OCP) is a policy document which outlines a long-term vision for a community, articulating the policies, priorities and guidelines for land use and community development to achieve the vision. OCPs establish policy for agricultural land uses, as well as residential, commercial, industrial, institutional,

¹¹ BC Ministry of Health. <u>http://www.gov.bc.ca/health/</u>

¹² BC Ministry of Community, Sport and Cultural Development http://www.gov.bc.ca/cscd/

¹³ BC Local Government Act. <u>http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/</u> <u>freeside/96323_00</u>

forestry and other land uses; the location of major infrastructure; restriction on certain land uses; location of schools, parks and waste management sites; and social and affordable housing policies. Local governments are not required to adopt OCPs but if they do, all subsequent zoning bylaws, capital expenditures and development permit areas must conform to the OCP. Development Permit Areas (DPAs) are designated through the adoption of OCP bylaws (see discussion in Section 11).

Official Community Plans may also support agriculture by articulating a strong agricultural vision, support, and protection for agriculture in land use decision-making and establishing Development Permit Areas protecting agriculture from adjacent land uses. (See discussion on the RDCK's OCPs in following section.) Some examples of plan policies that promote both agriculture and the ALR include:

- Providing for a full range of agricultural and complementary uses in the ALR and encouraging value-added activities that can improve farm viability.
- Providing setbacks and buffers when developing land adjacent to the ALR to prevent conflicts and encroachment.
- Recognizing and protecting the needs and activities of farm operations when considering adjacent and nearby land use.
- Planning for uses that are compatible with agriculture along the ALR boundary.
- Preserving contiguous areas of agricultural land and avoiding severance by recreation, parks, and transportation and utility corridors.
- Encouraging partnerships with the agricultural community, senior governments and private enterprise to promote the development of the agricultural sector.
- Local governments may also commit to implementing Agricultural Area Plans in an OCP. (Curran 20)
- **ii. Rural Land Use Bylaws** (RLUB) were enacted to guide an area's development and redevelopment under the authority granted by the now repealed Municipal Act. RLUBs are still in effect in RDCK Electoral Areas F and G. According to the Local Government Act, the provisions of a rural land use bylaw are deemed to be provisions of an applicable official community plan, zoning bylaw, or subdivision servicing bylaw.
- **iii. Zoning Bylaws** enable local governments to regulate the development and use of lands through division of the regional district into zones, with certain standards and regulations provided for each zone. Zoning bylaws regulate the use of land, buildings and structures, the density of development, the siting, size and dimensions of buildings and other land uses, parcel shapes and sizes, green spaces, parks and environmentally sensitive areas, riparian setbacks and aspects of watercourse protection, among other things. An intention of zoning is to protect property owners against changes in the use of neighbouring parcels of land that may result in a conflict and devaluation or affect the enjoyment of their property. Zoning standards can help prevent an activity from becoming a nuisance to neighbours or interfering with agriculture.

Zoning regulations can enable agricultural uses and ensure that land is not used for some other purpose, even if removed from the ALR. Zoning regulations can also help to mitigate the impacts of farm-related activities, such as residential, marketing, processing and agri-tourism on farmland by directing where these types of activities can occur, and to what extent. The most important characteristics of zoning that aim to support the ALR and agricultural community include:

- Large lot size minimums and as few zones as possible for ALR land to ensure adequate land for the continued viability of a diversity of farm operations.
- Contiguous areas of agricultural land where other uses do not interfere with the practice of farming.
- Suitable commercial land to accommodate the agricultural service industry in farming communities without compromising the ALR with commercial uses.
- Regulation of accessory and non-farm uses on agriculture land and in the ALR to minimize their impact on agriculture (such as maximum lot coverage and the appropriate siting of buildings, driveways and parking lots close to access roads).
- Edge planning techniques such as buffering and setbacks to decrease conflicts between the agriculture/non-agriculture interface.
- The type of farm and residential uses, buildings or structures (see the discussion below).
- Direct farm marketing & other agri-tourism activities.
- Form and character of buildings to protect rural quality (such as the height of buildings).
- Off street loading and parking (Curran 24-25).
- **iv. Subdivision and Development Bylaws** create local requirements for subdivision, including the regulation of access, minimum parcel sizes, fire hazard areas, parkland dedication, utilities, and other services. A local government may not exercise the powers under this section to prohibit or restrict the use of land for a farm business in a farming area without Ministerial approval. Many communities have enacted policies and bylaw provisions that limit the subdivision of ALR land and land adjacent to the ALR. Approving officers the officials responsible for approving subdivisions also have several tools available to them to address agricultural protection. They may decline an application for subdivision, both within (with the approval of the ALC) and outside of the ALR if the anticipated development of the subdivision would unreasonably interfere with farming operations on nearby properties due to inadequate buffering. Even if the ALC approves the subdivision. Some strategies for minimizing subdivision of the ALR and ensuring subdivision adjacent to the ALR respects farming include:
 - OCP policies that oppose subdivision of ALR or rural resource land and require buffering on land adjacent to the ALR.
 - Agriculture plan policies or recommendations that address the conversion of agricultural land outside the ALR for non-farming purposes (including "no net loss" policies) and the adequacy of the land base for agricultural service industry support.

- Large lot zoning for ALR land and lot sizes of land adjacent to the ALR that are sufficiently large to support adequate buffering.
- Development permit areas for the protection of farming that require urban-side buffering.
- Covenants on the title of land adjacent to the ALR specifying the construction and maintenance of buffers, the siting of buildings, and notification to owners of the potential impacts of farming practices (e.g., noise, dust, odour), as well as restricting future subdivision.
- Referral to a local agricultural advisory committee for recommendations to the ALC and approving officer about any applications for subdivision that affect agriculture or farmland.
- Using subdivision and development control bylaws to require buffering on urban land adjacent to the ALR. Subdivision bylaws are a stronger tool through which to require buffers when compared with the effectiveness of development permits (Curran 27-28).
- v. Farming Bylaws enable greater flexibility for local governments to regulate farming than a zoning bylaw. Zoning bylaws have relatively specific parameters within which they function. A farm bylaw provides opportunities to deal with matters that cannot be regulated by zoning bylaws, such as the conduct of farm operations, the types of buildings, structures, facilities, machinery, etc. that are a prerequisite to conducting farm operations, the siting of stored materials, waste facilities and equipment, and the prohibition of specific farm operations.
- vi. Local Government Assuming Approving Authority Regional districts may request the subdivision approving authority, by board resolution. The authority and process for the appointment of regional district approving officers is set out in Section 77.1 of the Land Title Act. To date (January 2011), there is no Regional District with approving authority.

Farm Practices Protection (Right to Farm) Act

Farm Practices Protection (Right to Farm) Act¹⁴ protects farmers that are using normal farm practices (both within and outside of the ALR) from nuisance lawsuits and nuisance bylaws of local governments (provided the operation is not in contravention with other relevant legislation, such as the *Environmental Management Act* or *Pesticide Control Act*) and that take place in the ALR or other areas where farming is permitted. The Act also establishes a process to resolve concerns and complaints in order to:

- Let farmers farm.
- Keep people out of court.
- Deal fairly with people's concerns and complaints.
- Deal with poor farm practices.

¹⁴ Farm Practices Protection (Right to Farm) Act: <u>http://www.bclaws.ca/EPLibraries/bclaws_new/document/</u> ID/freeside/00 96131 01

Natural Products Marketing Act

Natural Products Marketing Act¹⁵ provides for a system of "schemes" for individual commodities to promote, control and regulate production, transportation, packing, storage, and marketing of natural products in the province, including prohibition of that production, transportation, packing, storage, and marketing. The Act provides for the constitution of marketing boards and commissions under the schemes, and provides them powers vested by the Lieutenant Governor in Council. A supervisory and appellate Board, the British Columbia Marketing Board, is also created under the Act.

Provincial Plans and Province-Wide Initiatives

BC Climate Action Plan

The <u>BC Climate Action Plan</u>¹⁶ is the Government of British Columbia's plan to take action on climate change mitigation while stimulating the economy through job creation in implementing climate action goals. The framework for the plan is based on:

- 1. Entrenching greenhouse gas reduction targets in law, including a commitment to reduce BC's emissions by one-third by 2020.
- 2. Taking action in all sectors of the economy to help reduce emissions.
- 3. Taking steps to help residents adapt to climate change impacts.
- 4. Educating and engaging residents through the LiveSmart initiative while building a new low-carbon society.

The action plan includes researching ways to reduce GHG emissions, which in the agricultural sector arise from a range of sources, primarily: agricultural soils (33%), livestock (50%) and manure management (17%). Recognizing that climate change will impact the agricultural sector in a number of ways and that adaptation is important, the Government is currently exploring the following GHG reduction strategies for the agricultural sector:

- Constructing anaerobic digesters to capture methane from stockpiled manure to be used to generate electricity or heat.
- Improving fertilizer application practices
- Supporting community biogas digestion/ electricity generation projects
- Expanding research in biomass fuels
- Developing green city farms to reduce emissions produced by long-distance transportation and refrigeration of food
- Encouraging local purchasing of produce and other agricultural products

¹⁵ Natural Products Marketing Act. <u>http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/</u> <u>freeside/00_96330_01</u>

¹⁶ BC Climate Action Plan. <u>http://www.livesmartbc.ca/government/plan.html</u>

BC Agriculture Plan

The <u>BC Agriculture Plan¹⁷</u> was launched in February 2008. The Plan's 23 strategies are organized around five themes:

- 1. Producing local food in a changing world;
- 2. Meeting environmental and climate challenges;
- 3. Building innovative and profitable family farm businesses;
- 4. Building First Nations agricultural capacity; and
- 5. Bridging the urban / agriculture divide.

The Plan, subtitled "Growing a Healthy Future for B.C. Families" was the result of province-wide consultations and submissions that began in 2005 under the guidance of Val Roddick, then Parliamentary Secretary for Agriculture Planning. The vision guiding the strategies is:

"Continued development and growth of an economically viable and resilient agriculture and food sector which contributes significantly to:

- the health of British Columbians;
- climate change mitigation;
- environmental sustainability; and
- a growing B.C. economy."

The Agriculture Plan is explicitly linked with other provincial plans and goals, such as the greenhouse gas reduction targets outlined in the BC Climate Action Plan. It also recognizes the role of agriculture in fostering long-term environmental sustainability and economic vibrancy in local communities and industries.

Twelve of the twenty-three strategies in the BC Agriculture Plan complement or match (at least in intent) recommendations in the RDCK Agriculture Plan:¹⁸

- 1. Promotion of B.C. agriculture and food products at the provincial and local levels.
- 2. Implement initiatives to strengthen community food systems.
- 5. Implement initiatives to improve environmental management in the agriculture and agri-food sectors.
- 8. Integrate needs of agriculture in provincial water management policies and programs.
- 9. Optimize forage production for livestock grazing on rangeland.
- 10. Enhance and coordinate province-wide, invasive plant management.
- 14. Assist the agriculture industry with human resources, succession planning and new entrants.
- 15. Strengthen current extension services.

¹⁷ The Plan is located on the website of the Ministry of Agriculture and can be found here: <u>http://www.agf.</u> <u>gov.bc.ca/Agriculture_Plan/</u>

¹⁸ The numbering of the strategies in the BC Ag Plan has been retained.

- 20. Increase awareness and interest in agriculture and food among B.C. youth.
- 21. Preservation of agricultural land for future generations of farm and ranch families.
- 22. Implement strategies to minimize conflict between rural and urban residents.
- 23. Increase agriculture industry input at the local government level. (BC Ag Plan 5–7)

Community Food Action Initiative

Food Security is one of twenty-one model core functions identified in a policy framework that was accepted in 2005 by the Ministry of Health and the Health Authorities. Health Authorities are responsible for delivering these twenty-one core public health functions.

Since 2005, the Provincial Health Services Authority's (PHSA) department of Population and Public Health has taken a leading role supporting food security in BC by managing the Community Food Action Initiative (CFAI), which is a health promotion program targeted at improving community food security. PHSA's Population and Public Health food security program also endeavours to engage stakeholders, build evidence through research, and engage in surveillance, monitoring, evaluation, informing policy and supporting community action.

Interior Health has completed a Food Security performance improvement plan and has committed to making a report available annually. Since 2006, Health Authorities have been managing their own CFAI programs with funds committed through the provincial government. In the interior region, this funding has been largely distributed to communities through a granting process. Interior Health has also contributed staff time and resources to improving community food security. The Interior Health Food Security and Community Nutrition program staffs about 2.0 Full Time Equivalent (FTE) Dietitians who work in food security which translates into about a 0.2 FTE supporting food security across the West Kootenay and Boundary.

Today, the Provincial Ministry of Health continues to support the model core functions framework. Given the impending provincial election and a recent change in leadership in Interior Health, it is difficult to predict the future of food security programming in the West Kootenay and Boundary.¹⁹

BC Drought Response Plan

In June 2010, the BC Drought Plan was launched. The intent of the Plan was to clearly define what constitutes a drought, to develop a four level drought response plan, and to identify the roles of the various agencies involved. The Plan is directed primarily at staff in provincial government but also includes recommended actions for federal government agencies, First Nations, and water license holders under the Water Act.

The Plan guides the response of these agencies and individuals to drought conditions by identifying the level of drought and the appropriate response, and also recommends actions to be taken after the drought condition has subsided. The Drought Response Plan

¹⁹ Information provided by Tara Stark, Community Nutritionist with Interior Health, January 2011. More information on Interior Health's food security programming, including the Community Food Action Initiative can be found here: http://www.interiorhealth.ca/choose-health.aspx?id=11690

is a component of the Provincial Living Water Smart initiative and can be found here: http://www.livingwatersmart.ca/drought/response.html

RDCK Agriculture Plan Background Report

June 2011

Section

AGRICULTURE & RDCK PLANNING

The RDCK was incorporated in 1965 and covers an area of 23,130 square kilometers, encompassing eleven Electoral Areas and nine Municipalities. Official Community Plans and zoning varies across the RDCK, based on direction from communities.

Official Community Plans

As of February 2011, the RDCK has adopted six Official Community Plan (OCP) bylaws: for all of Electoral Area K and partially for Areas A (Kootenay Lake portion); A, B & C (Creston Valley); D (Kootenay Lake and Lardeau Valley), and H (Slocan Lake North) and I/J (Kootenay-Columbia Rivers). The bylaws contain a diversity of policies and objectives related to agriculture as a land use designation and other land use designation policies and objectives related to agricultural activities.

Each plan is unique. Many OCPs share common elements: for instance the objective: "To minimize conflicts between agriculture and other land uses." However, mechanisms through which to achieve this are not further described (although see Zoning Bylaw 1675 discussed below for discussion on buffers). While some of the OCP language is repetitive, the emphasis on different aspects of agriculture and its relationship to the community vary depending on the community, reflecting the local culture and also the time of adoption. For example, Slocan Lake North's OCP was adopted in 2009 and provides creative and more comprehensive policies to support agriculture within the community, whereas the Kootenay-Columbia Rivers OCP, adopted in 1996, contains policies to maintain the status quo of agriculture at the time of adoption.

The majority of the policies are general in nature and largely do not provide action items to address how the policies and objectives might be achieved. Universal to all OCP bylaws is the support of removal of land from the ALR or boundary changes in the ALR, for lands with limited agricultural use. However, across the province over the last decade there has been a significant increase in small-lot agriculture that focuses on direct farm marketing and local markets. Given this shift, the BC Assessment Authority and the Agricultural Land Commission¹ are re-evaluating the productive capability of small lots that have traditionally been understood to have "limited use".

Development Permit Areas (DPA)

Local governments may designate development permit areas (DPAs) for a number of purposes including for "the protection of farming." To improve land use compatibility and appropriate buffering or separation of farming from other incompatible types of development, the provisions allow regulations for screening, landscaping, fencing and siting of buildings or structures.

Of the six Official Community Plan bylaws enacted in the RDCK, three (Kootenay Lake Area A; Creston Valley (A,B,C); Area K) have adopted agriculturally-related Development Permit Areas. The objective is to protect environmental qualities and to protect the form and character of nearby residential areas. Through Delegation Bylaw No. 1808, the RDCK Board delegated the judgment of an application's compliance with the DPA guidelines to be determined by the Director of Development Services, thus simplifying the process for issuing a development permit.

From the Creston Valley Official Community Plan, the justification for a development permit area is:

"The OCP recognizes that small scale food processing facilities that process more than 50% of off farm product with limited production, and that process locally grown foods are activities particularly appropriate, given the rural and agricultural nature of much of the Region. The overall objective of the Development Permit requirement is to ensure the operation is compatible with its surrounding residential and rural character, that it be environmentally sensitive and still promote local farming activities."

The Development Permits incorporate design guidelines that include minimum lot sizes, the requirement to be in compliance with any relevant government agency (such as the Canadian Food Inspection Agency and the Agricultural Land Commission) and a siting requirement of 30 meters from the nearest business or residence on another parcel.

¹ Personal interview with Lorraine Gilbert, Senior Appraiser with BC Assessment 6 Jan 2011.

Official Community Plans in Electoral Areas

Kootenay Lake Portion OCP Area A

Area A's agricultural objectives speak directly to valuing 'agricultural lands' by encouraging identification of, optimal usage, and development of agricultural activities. The objectives also speak to the support of environmental sustainability and minimizing conflict between agriculture and other land uses. However, the removal of 'marginal' lands from the ALR is supported, although it is not clear how 'marginal' would be determined. Only three agricultural polices have been adopted for the agricultural designation: that the principal use shall be agricultural in nature, that ALC regulations should be followed and that minimum lot sizes 'shall be three hectares'.

Area A has also adopted the Development Permit Area for small small-scale food processing facilities on Farm Lands in Agricultural zones.

The Tourist Commercial land use designation supports "community sustainable agriculture" as an accessory use to tourist accommodations. The Rural Residential R3 and Rural Resource land use designations support agriculture as a principal use.

The "Specific Community Policies" for Kootenay Bay/Pilot Bay/Crawford Bay, Boswell/ Sanca and Grey Creek direct the Regional Board to support removal of all lands from the ALR, subject to a 'site specific evaluation' and approval of the ALC.

Creston Valley OCP (Portions of Area 'A' and Areas 'B' and 'C')

The Creston Valley OCP is substantially more detailed in the support of agriculture. The objectives speak directly to valuing agricultural lands by encouraging identification of, optimal usage and development of agricultural activities. The OCP supports continuation and preservation of ALR lands for agriculture (except "where lot size restrictions would provide minimal benefit to agriculture"), as well as allowing farm animals within residential areas. The objectives also support environmental sustainability and minimizing conflict between agriculture and other land uses, including buffering cluster residential development to protect agriculture within the ALR. This OCP, however, does not contain a Development Permit Area specifically for the protection of farming. Senior governments are encouraged to facilitate farming.

The minimum lot size for agricultural land outside the ALR is 3 hectares. Zoning regulations are directed to 'protect continuation of agricultural operation'. However, removal of land from the ALR is supported where it 'provides minimal benefit to agriculture due to historical subdivision trends'. It should be noted that minimum lot sizes of 4 or 8 hectares is common to preserve larger scale farming.

Agriculture is supported through the commercial land use designation policy that encourages the establishment of collective farmer's markets as a means of selling local agricultural products.

Within Park & Recreation objectives, trail development must have 'minimal negative impact on agricultural land use'.

Specific community policies continue to reflect the importance of agricultural lands, although in Wynndel `non-contiguous parcels of ALR lands are recommended for exclusion from the ALR.'

The Creston Valley is one of three electoral areas that have adopted the small-scale food processing facilities Development Permit Area.

Kootenay Lake and Lardeau Valley OCP (Portion of Area 'D')

The objectives directly address the importance of agriculture, the preservation of agricultural land, minimizing conflicts between agriculture and other land use, the importance of local food production, the examination of ALR boundary changes, support for increased farm income, and environmental considerations and promotion of self-sufficiency.

Policies recognize the importance of agricultural land both in and out of the ALR for regional agriculture. Additionally, they support sustainable agriculture, encourage food processing and adjunct economic activities, support enhanced multi-level educational opportunities, maintenance of agricultural land use, supportive land use decisions to local food production and self-sufficiency.

The Remote Residential and Commercial and Industrial land use designations also support agriculture as a primary use. The community specific polices underscore the strong community support of small-scale local food production, processing and sales. There is strong support of the ALR.

Slocan Lake North Portion OCP of Area 'H'

Agricultural objectives direct the protection of agricultural land for agricultural uses, minimize conflict between agriculture and other land uses, encourage supportive land use policies in recognition of 'the importance of local food security', support strategies to diversify farm income related to agricultural use, and encourage organic and sustainable practices. However, they also support ALR boundary changes as part of an ALC/RDCK review of agricultural sustainability.

Policies encourage agriculture as the principle use in both designated lands. The OCP also contains a policy to "work with the Province to ensure that new development adjacent to agricultural areas provides sufficient buffering in the form of setbacks, fencing, and landscaping consistent with Provincial specifications" but does not spell out the land use tools that will be used to implement the policy.

Another policy supports the designation of properties that do not meet the minimum lot sizes (provided that the parcel's primary use will be agriculture or market gardens) in order to "diversify the local agricultural community and provide enhanced food security." The OCP further supports the preservation of sustainable agricultural values and practices, encourages the adoption of environmental farm plans and the consideration of impacts on local food security when making land use decisions.

The Regional Board will also "generally" discourage "administrative and institutional

uses from locating in rural areas, particularly on agricultural land, and directs them to the areas which have the necessary infrastructure and support services." The board will support the use of hazard lands for agriculture.

Kootenay-Columbia Rivers OCP Area 'I' & 'J'

Agricultural objectives seek to identify lands and encourage protection and agricultural use for lands with continuing value for agriculture, to encourage optimum use and development of agricultural activities, and encourage sustainable agricultural practices. The Kootenay-Columbia OCP policy also aspires to minimize conflicts between agriculture and other land uses, to propose options for marketing locally produced agriculture and promote preservation of ALR through buffered cluster development.

Policies include adherence to ALR rules and local governments, only a single building per ALR lot (unless approved by the ALC), and average lot size of 2 hectares for subdivisions in the ALR. It encourages farm operators to adhere to sustainable farm practices such as the avoidance of chemical use and polluting groundwater, maintenance of soil, and the collection of rainwater. There is policy support for removal of specific properties from the ALR, however 'suitable farmland' should be retained in the ALR.

The remainder of the policies support existing regulations as outlined by the various governing bodies such as the regulation of manure, setbacks adjacent to farmland, and roadside stands for sale of local agricultural products. Additionally, "The Ministry of Agriculture, Fisheries and Food is encouraged to provide technical and financial incentives for productive use of farm land", the removal of gravel and soil is not permitted in ALR without a permit, and specific directions pertaining to trails within the ALR are outlined.

Several residential land use designations support agriculture as a principal permitted use. The Specific Community Policies further support sustainability and address growth direction. Glade specifically states: "Market gardening, greenhouses, nurseries and florist uses are encouraged".

The Arrow Lakes OCP Area 'K'

Both land in and out of the ALR are recognized for their agricultural value, encompassing a comprehensive variety of activities. Agricultural objectives include encouraging the preservation of agricultural land, enhancement of agricultural activities, and minimizing conflicts between agriculture and other land uses. The OCP policies also support the diversification of farm income through the permitting of accessory agricultural uses, including home industry, home occupation and small-scale tourism, "provided the activity serves local producers and is small scale".

Policies include encouraging agricultural use of land within ALR, supporting the consolidation of small parcels (<0.8 Ha) with other agricultural parcels within the ALR, and "to diversify the local agricultural community and provide enhanced food security". The board will consider re-designation of below minimum size lots whose "primary use is that of agriculture or market gardens". However, the Board supports application for the removal, subdivision, and non-farm use of lands in the ALR if land does not have 'value for agriculture' as determined by the ALC.

Additionally, the Board encourages the development of small-scale food processing facilities on lands in agricultural zones provided they operate in an environmentally sustainable fashion (through the development permit process) and prevent negative impacts. They will also consider second dwelling applications within the ALR for farm help/relatives. Small-scale food processing permits are required for processing >50% off farm product. The overall objective is to ensure compatibility with the area, and "that it be environmentally sensitive and still promote local farming activities".

In both R1 and R2 policies the OCP directs that accessory uses including keeping of farm animals and sale of site grown horticultural produce will be allowed. Energy and Environment Objectives include "support local food security through agricultural uses and local food processing".

Development Permit Areas in Electoral Areas

To facilitate processing of more than 50% off-farm product in agriculture zones, the Official Community Plans of the Kootenay Lake Area of Electoral Area 'A', Electoral Area 'K' and the Creston Valley have been amended to incorporate Development Permit Areas. Facilities located within agricultural designations in each of the OCPs require a Development Permit pursuant to Sections 919.1(1)(b), and 919.1(1)(c) of the Local Government Act, for the purpose of providing guidelines for the protection of development from hazardous conditions and protection of farming.

Electoral Area*	Agriculture permitted as primary use	Land use designations supporting agriculture	Development Permit Areas
A (2008)	Agricultural Rural Residential R3 Rural Resource R4	General residential Agricultural Livelihoods & economies Tourist commercial	DPA #3 -small scale food processing facilities
A,B,C (partial) Creston Valley (2002)	Agricultural Rural Residential	Agricultural Commercial (encouraging farmers markets) Livelihoods & economies Specific community priorities	DPA #2 - small scale food processing
D partial (2010) H North	Agricultural Remote Residential Agricultural	Agricultural Commercial and industrial Community specific policies Agricultural Hazard Lands(flood lands in particular)	
(2009) I & J Kootenay- Columbia Rivers (1996)	Agricultural Country Residential 1 Country Residential 2 Rural Residential Remote Residential	Agricultural Commercial (local producers are encouraged to establish farmers' markets market local agricultural products) Community specific policies	
K (2009)	Agricultural Community Residential Country Residential Rural Residential	Community specific policies	DPA #4 - Small Scale Food Processing

* Year of Adoption

Table 11–1. RDCK Official Community Plans

Official Community Plans Template

The RDCK is currently developing a template for the creation or revision of future OCPs in the regional district. The draft template contains supportive policies for agriculture as a land use designation. These policies are crucial for providing guidance on subdivisions and rezoning applications in the RDCK. An agricultural land designation is described as:

Areas with potential for agricultural operation or activity generally including but not limited to the production of livestock, poultry, farmed game, fur bearing animals, crops, fruit, grain, vegetables, milk, eggs, honey, mushrooms, fibre crops and horticultural and aquaculture products, as well as activities associated with the production and processing of these items. Agricultural land primarily includes land in the ALR. (pg 35)

The template recognizes that agriculture operations and activities, such as livestock grazing, are also dependent on rural lands located outside of the Agriculture designation. Distributed, smaller locations for food production, such as community gardens and personal gardens, are also a crucial component to establishing a secure food system in the region.

The Template's stated Objectives for "Food, Agriculture and Rural Land" are:

- 1. Preserve and promote the use of agricultural land for current and future agricultural production.
- 2. Support small farms and local food systems by creating opportunities to develop value-added secondary industries to enhance farm income.
- 3. Support agricultural land use practices within and adjacent to farming areas that seek to minimize conflicts between agriculture and other land uses.
- 4. Support ALR boundary changes initiated by the Province arising from joint local government and ALC initiatives which enhance or do not damage the agricultural integrity of the region.
- 5. Encourage opportunities for residents to cultivate their own food on land that is not necessarily designated as agricultural.
- 6. Retain and enhance the natural character of rural / country residential areas. (pg 35-36)

These Objectives are followed by Policies specific to lands designated as agriculture and a second set that apply to Rural and Country Residential.

"Agriculture - The Regional Board:

- Directs that the principal use of lands designated 'Agriculture' in Schedule B shall be for agricultural use.
- Will permit varying parcel sizes depending on the respective land use designation, but generally shall not be smaller than 4 hectares, for land within the ALR, or smaller than 2 hectares for land outside the ALR.
- Encourages all land use and subdivision of land within the ALR to be in accordance

with the provisions of Provincial Acts and Statutes, associated regulations, and orders and decisions of the ALC.

- Will ensure that new development adjacent to agricultural areas provides sufficient buffering in the form of setbacks, fencing, and landscaping.
- Encourages the rural area to participate in the Agricultural Advisory Committee to consider and advise the Board on agricultural matters and to participate in the preparation the Agricultural Area Plan.
- Will consider applications to subdivide parcels smaller than 4 hectares within the ALR, subject to approval of the ALC, in the following cases:
 - a. for a homesite severance under Provincial Acts and Statutes; where the subdivision or boundary adjustment will allow for more efficient use of agricultural land or the better utilization of farm buildings for farm purposes; and
 - b. where the community interests in the subdivision of the land outweigh the community interests in the retention of the land in a larger parcel.
 - c. In these cases, the individual parcel sizes within the 'Agriculture' designation are subject to approval by the ALC, and must meet minimum parcel size required to meet the regulations for septic disposal fields.
- Supports the consolidation of legal parcels that support more efficient agricultural operations.
- Supports the planning of new and modified roads, utility and communication corridors in the Plan area that avoid disruption and fragmentation of existing and potential agricultural land.
- Supports directing intensive agricultural operations to larger lots or increasing building setbacks and other possible mitigation measures in the Zoning Bylaw or separate Farm Bylaw to prevent potential conflicts with adjacent uses.
- Supports a balanced approach between environmental objectives and agricultural objectives.
- Provides for property owners or occupiers to diversify and enhance uses secondary to agricultural uses with home industry, agri-tourism, home occupation, or bed and breakfast establishment business opportunities, provided that they are compatible with the agricultural character of the area.
- Will consider second dwelling applications within the ALR in accordance with second dwelling policies established in the implementing Zoning bylaw, and reflective of the views of the farming community.
- May consider appropriate provisions for tourist commercial uses in the implementing Zoning bylaw, such as agri-tourist accommodation or other farming tourism practices supported by the ALC, and where such land is within the ALR, such uses must be approved by the ALC.
- Supports the Farm Practices Protection (Right to Farm) Act.
- Work to ensure new development, adjacent to the Agricultural Land Reserve (ALR), integrates with and does not jeopardize the long-term use of land for agricultural purposes.

• Encourages regulation of commercial water bottling in agricultural areas to protect the resource for agricultural use.

Rural and Country Residential - The Regional Board:

- Establishes that Country Residential designations provide for a rural or semi-rural, country residential lifestyle ranging in minimum parcel size from 1 hectare to 2 hectares.
- Establishes that Rural Residential parcel sizes should be 2 hectares and greater to ensure that large parcels of land in these areas are protected.
- Considers that a proposal to create additional land designated as Country or Rural Residential should clearly demonstrate and articulate the need for it in the context of its impact on the community, and will use the following criteria to assess future applications:
 - a. capability of the natural environment to support the proposed development;
 - b. capability of accommodating on-site domestic water and sewage disposal;
 - c. impact on important habitat and riparian areas in the natural environment;
 - d. susceptibility to natural hazards including but not limited to flooding, slope instability or wildfire risk;
 - e. compatibility with adjacent land uses and designations, and the character of the existing area;
 - f. proximity and access to existing roads and other community and essential services;
 - g. consideration of visual impacts where development is proposed on hillsides and other visually sensitive areas; and
 - h. type, timing and staging of the development
 - i. impact on / potential for reducing greenhouse gas emissions.
- Encourages environmental stewardship on private land within Rural and Country Residential designations.
- Encourages the Provincial Subdivision Approving Authority to ensure that development or subdivision located within Rural and Country Residential areas allow for public access to Crown land.
- Encourages the location of buildings and infrastructure in clustered configurations that minimize site disturbance.
- Provides for property owners or occupiers to diversify and enhance uses secondary to Rural and Country Residential uses with home industry, agri-tourism, home occupation, or bed and breakfast establishment business opportunities, provided that they are compatible with the agricultural character of the area. (pg 36 – 39)

Agricultural Zoning

RDCK Bylaw 1675 was enacted in 2004 to regulate zoning in the following areas:

• A portion of Electoral Area A – Wynndel/Eastshore Kootenay Lake
- A portion of Electoral Area B and all of Electoral Area C
- All of Electoral Area I and all of Electoral Area J Lower Arrow/Columbia
- All of Electoral Area K

As with most zoning bylaws, Bylaw 1675 divides the regions up in to specified zones. The bylaw contains six separate zoning classifications specifically for agriculture as a primary use. Other land uses permit agricultural activities, farming as well as processing, warehousing, farmers markets and other related activities. Rural, suburban and residential land uses include medium to large sized parcels of land generally used for rural residential, part time farming, limited agriculture and limited resource management. Note that for the purposes of Bylaw No. 1675, "agriculture" does not have a specified definition.

The bylaw contains many regulations pertaining to agricultural activities, including a minimum 10m setback required on all lots adjacent to land zoned Agriculture from any portion of the Agricultural Land Reserve boundary. Additionally, signs may be illuminated provided that glare is contained onsite when adjacent to any residential, agricultural, institutional, park and recreation zoned property.

There are six zones for agriculture:

- Agriculture 1 AG 1
- Agriculture 2 AG 2
- Agriculture 2A AG 2-A
- Agriculture 3 AG 3
- Agriculture 4 AG 4
- Agriculture 4 K AG4K

A reduction in the minimum lot size for a single lot for subdivision within any Agricultural zone is permitted subject to the lot being no smaller than 0.4 hectares in area and serviced by a community water system. The remainder of the lot must consolidated with an adjacent property that has an agricultural tax assessment from the BC Assessment or is within the ALR or created through subdivision to provide residence for a relative.

Agricultural-related activities are permitted as a principal or accessory use (in ranging forms – See Table 11.2 below) in 23 out of a total of 43 specified zones throughout the RDCK areas which have adopted the zoning bylaw.

Zone SHORT FORM	Permitted principal uses (ag related)	Accessory uses	Inclusive/supportive to farming activities	Restrictive to farming	Minimum Lot Size	Conflicts with non-farmer neighbours/ setbacks
Suburban Residential R1		 Keeping of farm animals Sale of site grown horticultural produce 	Section 613 - keeping of farm animals: 2 livestock, 6 sheep or goats for every 0.4 ha, with minimum 0.4ha lot; 12 head poultry/rabbits for every 0.4 ha, with minimum 0.2 ha lot	No Swine Farm Animals/ poultry must be caged/fenced at all times	To Level of Service; from 700m2 for single detached with water/ sewer to 1 ha single detached/ duplex with onsite servicing	15m setbacks for Farm Animal enclosures/feeding troughs and manure piles; none for pasture fencing
Ootischenia Suburban Residential R1A		 Keeping of farm animals Sale of site grown horticultural produce 	Section 613 - keeping of farm animals: 2 livestock, 6 sheep or goats for every 0.4 ha, with minimum 0.4ha lot; 12 head poultry/rabbits for every 0.4 ha, with minimum 0.2 ha lot	No Swine Farm Animals/ poultry must be caged/fenced at all times	To Level of Service; Water only: Single Detached – 0.2 ha; duplex 1h; On-site servicing: Single detached 0.4 ha; duplex 1ha	15m setbacks for Farm Animal enclosures/feeding troughs and manure piles; none for pasture fencing
Suburban Residential K R1K		 Horticulture Keeping of Farm Animals Sale of Site Grown Horticultural Produce 	Section 613 - keeping of farm animals: 2 livestock, 6 sheep or goats for every 0.4 ha, with minimum 0.4ha lot; 12 head poultry/rabbits for every 0.4 ha, with minimum 0.2 ha lot	Farm Animals/ poultry must be caged/fenced at all times	To Level of Service; ranges from 700m2 for single detached with water/ sewer to 1 ha single detached/ duplex with onsite servicing	15m setbacks for Farm Animal enclosures/feeding troughs and manure piles; none for pasture fencing

Country Residential R2		 Keeping of farm animals Sale of site grown horticultural produce 	Section 613 - keeping of farm animals: 2 livestock, 6 sheep or goats for every 0.4 ha, with minimum 0.4ha lot; 12 head poultry/rabbits for every 0.4 ha, with minimum 0.2 ha lot	1 Hectare	15m setbacks for Farm Animal enclosures/feeding troughs and manure piles; none for pasture fencing
Country Residential I R2I	Nurseries, greenhouses and florists	 Keeping of farm animals Sale of site grown horticultural produce 	Section 613 - keeping of farm animals: 2 livestock, 6 sheep or goats for every 0.4 ha, with minimum 0.4ha lot; 12 head poultry/rabbits for every 0.4 ha, with minimum 0.2 ha lot	1 Hectare	15m setbacks for Farm Animal enclosures/feeding troughs and manure piles; none for pasture fencing
Country Residential (South Arrow) R2SA		 Keeping of farm animals Sale of site grown horticultural produce 	Section 613 - keeping of farm animals: 2 livestock, 6 sheep or goats for every 0.4 ha, with minimum 0.4ha lot; 12 head poultry/rabbits for every 0.4 ha, with minimum 0.2 ha lot	1 Hectare	15m setbacks for Farm Animal enclosures/feeding troughs and manure piles; none for pasture fencing
Country Residential K R2K	Horticulture	 Keeping of farm animals Sale of site grown horticultural produce 	Section 613 - keeping of farm animals: 2 livestock, 6 sheep or goats for every 0.4 ha, with minimum 0.4ha lot; 12 head poultry/rabbits for every 0.4 ha, with minimum 0.2 ha lot	1 Hectare	15m setbacks for Farm Animal enclosures/feeding troughs and manure piles; none for pasture fencing

Zone SHORT FORM	Permitted principal uses (ag related)	Accessory uses	Inclusive/supportive to farming activities	Restrictive to farming	Minimum Lot Size	Conflicts with non-farmer neighbours/ setbacks
Rural Residential R3	Horticulture	 Keeping of farm animals Sale of site grown horticultural produce 	Section 613 - keeping of farm animals: 2 livestock, 6 sheep or goats for every 0.4 ha, with minimum 0.4ha lot; 12 head poultry/rabbits for every 0.4 ha, with minimum 0.2 ha lot		2 Hectares	15m setbacks for Farm Animal enclosures/feeding troughs and manure piles; none for pasture fencing
Rural Residential B R3B	Horticulture	 Keeping of farm animals Sale of site grown horticultural produce 	Section 613 - keeping of farm animals: 2 livestock, 6 sheep or goats for every 0.4 ha, with minimum 0.4ha lot; 12 head poultry/rabbits for every 0.4 ha, with minimum 0.2 ha lot		2 Hectares	15m setbacks for Farm Animal enclosures/feeding troughs and manure piles; none for pasture fencing
Rural Residential I R3I	Horticulture	 Keeping of farm animals Sale of site grown horticultural produce 	Section 613 - keeping of farm animals: 2 livestock, 6 sheep or goats for every 0.4 ha, with minimum 0.4ha lot; 12 head poultry/rabbits for every 0.4 ha, with minimum 0.2 ha lot		2 Hectares	15m setbacks for Farm Animal enclosures/feeding troughs and manure piles; none for pasture fencing
Rural Residential K R3K	Horticulture	 Keeping of farm animals Sale of site grown horticultural produce 	Section 613 - keeping of farm animals: 2 livestock, 6 sheep or goats for every 0.4 ha, with minimum 0.4ha lot; 12 head poultry/rabbits for every 0.4 ha, with minimum 0.2 ha lot		2 Hectares	15m setbacks for Farm Animal enclosures/feeding troughs and manure piles; none for pasture fencing

Rural Resource R4	Nurseries, Greenhouses and Florists	 Keeping of farm animals Sale of site grown horticultural produce 	Section 613 - keeping of farm animals: 2 livestock, 6 sheep or goats for every 0.4 ha, with minimum 0.4ha lot; 12 head poultry/rabbits for every 0.4 ha, with minimum 0.2 ha lot		2 Hectares	15m setbacks for Farm Animal enclosures/feeding troughs and manure piles; none for pasture fencing
Rural Resource (South Arrow) R4SA	Horticulture	 Keeping of farm animals Sale of site grown horticultural produce 	Section 613 - keeping of farm animals: 2 livestock, 6 sheep or goats for every 0.4 ha, with minimum 0.4ha lot; 12 head poultry/rabbits for every 0.4 ha, with minimum 0.2 ha lot		2 Hectares	15m setbacks for Farm Animal enclosures/feeding troughs and manure piles; none for pasture fencing
Rural Resource K R4K	-Food processing; Warehousing (small warehousing, cold storage plants, feed/ seed storage, distribution)		Section 613 - keeping of farm animals: 2 livestock, 6 sheep or goats for every 0.4 ha, with minimum 0.4ha lot; 12 head poultry/rabbits for every 0.4 ha, with minimum 0.2 ha lot		2 Hectares	15m setbacks for Farm Animal enclosures/feeding troughs and manure piles; none for pasture fencing
Seasonal Residential R7			Section 613 - keeping of farm animals: 2 livestock, 6 sheep or goats for every 0.4 ha, with minimum 0.4ha lot; 12 head poultry/rabbits for every 0.4 ha, with minimum 0.2 ha lot	No Swine Farm Animals/ poultry must be caged/fenced at all times	To Level of Service; ranges from 700m2 for single detached with water and sewer to 1 ha for single detached/ duplex with onsite servicing	

Zone SHORT FORM	Permitted principal uses (ag related)	Accessory uses	Inclusive/supportive to farming activities	Restrictive to farming	Minimum Lot Size	Conflicts with non-farmer neighbours/ setbacks
Agriculture 1 AG 1	"Farm Use"; Keeping of farm animals; Sale produce grown by agricultural business; Small Scale Food Processing Facilities		No more than one single detached dwelling or duplex may be on a lot unless farmworker dwelling if >4ha or 1 manufactured home for immediate family. Max site coverage 35 %, Greenhouse site coverage 60 %	No Small Scale Food Processing Facilities in Areas B, I, J	4 Hectares in ALR 2 Hectares outside ALR	5 metre setback for animal enclosure, troughs and manure. Processing of >50% of farm product must be min 30m from lot line; on min 2 ha lot; 3 ha in ALR
Agriculture 2 AG 2	"Farm Use"; Keeping of farm animals; Sale produce grown by agricultural business; Small Scale Food Processing Facilities		No more than one single detached dwelling or duplex may be on a lot unless farmworker dwelling if >4ha or 1 manufactured home for immediate family. Max site coverage 35 %, Greenhouse site coverage 60 %	No Small Scale Food Processing Facilities in Areas B, I, J	8 Hectares in ALR 2 Hectares outside ALR	5 metre setback for animal enclosure, troughs and manure. Processing of >50% of farm product must be min 30m from lot line; on min 2 ha lot; 3 ha in ALR

Agriculture 2 – A AG 2-A	"Farm Use"; Keeping of farm animals; Sale produce grown by agricultural business; Small Scale Food Processing Facilities	No more then one single detached dwelling or duplex may be located on a lot. Maximum site coverage 35 %, Greenhouse site coverage 60 %	No Small Scale Food Processing Facilities in Areas B, I, J	8 Hectares in ALR 2 Hectares outside ALR	5 metre setback for animal enclosure, troughs and manure. Processing of >50% of farm product must be min 30m from lot line; on min 2 ha lot; 3 ha in ALR
Agriculture 3 AG 3	"Farm Use"; Keeping of farm animals; Sale produce grown by ag business; Small Scale Food Processing	No more than one single detached dwelling or duplex may be on a lot unless farmworker dwelling if >4ha or 1 manufactured home for immediate family. Max site coverage 35 %, Greenhouse site coverage 60 %	No Small Scale Food Processing Facilities in Areas B, I, J	60 Hectares in ALR 2 Hectares outside ALR	25 metre setbacks for animal enclosures, troughs and manure. Processing of >50% of farm product must be min 30m from lot line; min 2ha lot; 3ha in ALR
Agriculture 4 AG 4	"Farm Use"; Keeping of farm animals; Sale produce grown by ag business; Small Scale Food Processing	No more than one single detached dwelling or duplex may be on a lot unless farmworker dwelling if >4ha or 1 manufactured home for immediate family. Max site coverage 35 %, Greenhouse site coverage 60 %	No Small Scale Food Processing Facilities in Areas B, I, J	2 Hectares	25 metre setbacks for animal enclosures, troughs and manure. Processing of >50% of farm product must be min 30m from lot line; min 2ha lot; 3ha in ALR

Zone SHORT FORM	Permitted principal uses (ag related)	Accessory uses	Inclusive/supportive to farming activities	Restrictive to farming	Minimum Lot Size	Conflicts with non-farmer neighbours/ setbacks
Agriculture 4 K AG4K	"Farm Use"; Keeping farm animals;Sale produce grown by ag business; Small Scale Food Processing		No more than one single detached dwelling or duplex may be on a lot unless farm worker dwelling if >4ha or 1 manufactured home for immediate family. Max site coverage 35 %, Greenhouse site coverage 60 %	No Small Scale Food Processing Facilities in Areas B, I, J	2 Hectares	25 metre setbacks for animal enclosures, troughs and manure. Processing of >50% of farm product must be min 30m from lot line; min 2ha lot; 3ha in ALR
C1 Neighbourhood Comm	Commercial Greenhouse -Farmer's Market					
General Commercial C2	Warehousing (cold storage plants, feed/ seed storage, dist'n)					
Small Scale Tourism Accom C5		 Horticulture Sale of site grown horticultural produce 			Minimum site area for use must be 1 Hectare	
Small Scale Tourism Accom K C5K		 Keeping farm animals Sale of site grown horticultural produce 			Minimum site area for use must be 1 Hectare	

	-Food				
	processing;				
Light Industrial	Warehousing			Minimum site	
	(cold storage			area for use must	
MI	plants, feed/			be 1 Hectare	
	seed storage,				
	disn)				
	Agriculture				
Park and	on ALR lands				
Park and Pocreation DD	subject to				
Recreation PR	compliance with				
	ALC Act				
				Minimum area	
Open Space OS	Agriculture			for use must be	
				15 ha	
Environmental Reserve ER				Minimum area	
	Agriculture			for use must be	
				15 ha	

Table 11–2. RDCK Agriculture Bylaws





COMMUNITY CONSULTATIONS

he RDCK wanted an extensive public review to inform the development of the Agricultural Plan (RDCK RFP). Because Brynne Consulting is based in the Region, the team was able to readily identify the key communities to be consulted and also to secure suitable venues for the consultations.

Between November 2010 and February 2011, fifteen community meetings were held across the RDCK. The community meetings were held in:

- Creston Valley (3 meetings)
- Kaslo
- Argenta / Meadow Creek (2 meetings)
- Nelson (2 meetings, one for the general public, and one for emergency food service clients)
- Procter
- Salmo
- Winlaw
- New Denver

- Castlegar
- Nakusp
- Crawford Bay

Because the Creston Valley has the highest level of agricultural activity, three meetings were held there to ensure that as many people as possible could participate in the meetings. A second meeting was held in Argenta at the request of the participants.

Brynne Consulting also met with people in small groups of 2 or 3, at the request of RDCK residents, and presented at a range of venues with relevant audiences. These included the Annual General Meeting of the Creston Valley Food Action Coalition, a second year class in the Selkirk College Integrated Environmental Planning program, and the Creston Farmers Market. More than 200 people engaged with Brynne Consulting in providing direction for the creation of the Plan. An additional 131 people completed targeted surveys to provide additional data.

The input from the community meetings and surveys was analyzed to determine the category groupings and to sort it under the three goals of the Agriculture Plan project. This exercise provided information on the priorities within and across the RDCK. It also provided the basis from which to identify needs and develop recommendations to address them in the eventual Agriculture Plan. 128 people participated in a survey focused on obtaining feedback on draft recommendations to help determine priorities and how well they matched the communities' expectations for the agriculture plan.

The tables below represent the results of the analysis of the community input. The Consultation Report in Appendix F includes a full report of the community input and how it was gathered.



Figure 12–1. Community Input







Figure 12–3. Kaslo / Area D



Figure 12-4. Argenta / Area D



Figure 12–5. Nelson / Area E & F







Figure 12–7. Winlaw / Area H



Figure 12-8. New Denver / Area H



Figure 12–9. Castlegar / Area I & J







Section 13

ISSUES AND POSSIBILITIES

The goal of the Agricultural Area Plan Project for the RDCK is to (RDCK RFP 2010):

- Identify priority actions to support the viability of farming in the District;
- Ensure that the agricultural capability of the area is realized and protected; and
- Foster a secure food supply for the region.

Before delving into an examination of those goals, the role of government, as seen through the eyes of the farmers and other residents of the RDCK, warrants an examination.

Note: all quotes in text boxes in Section 13 are by residents of the RDCK, as voiced in the community consultations, submitted through the surveys, via phone interview or through the contact page on the <u>www.agplan.ca</u> website.

Planning, government and food systems perception and reality

There is a high level of cynicism in the communities about the goals and priorities of government and the effective use (or not) of their tax dollars. Producers were asked,

"My hope for the Ag Plan is that it will cause the RDCK and municipalities to recognize the importance of agriculture." in the Ag Plan survey, whether or not they feel supported by government in Canada. It is somewhat heartening to know that while most respondents indicated they did not feel well-supported by government, they chose local government as the one providing the highest level of support. Recognizing that local government has limited influence on policy and market conditions that have the most significant impact on farming, participants in the community consultations still embraced this opportunity to have direct input into RDCK planning and policy.

Some of the comments offered in the survey capture what we heard in the community consultations as well:

- " CFIA is putting up roadblocks and barriers for cereal grain producers in Creston which affects our livestock feed production. Provincial regulation has led to significantly reduced small scale beef and chicken production/sales under the guise of protecting human health. No one has become ill from eating farm-raised local beef whereas numerous cases are evident from large production streams each year. Local government appears to be starting to recognize the importance of maintaining and promoting local agriculture."
- "Fancy motherhood government rarely translates to any tangible benefit for the individual farmer."
- "Real ag support is non-existent in this country. The cheap food policies have to go, or there won't be an ag industry left to feed ourselves, and big business will control all of it."

One of the challenges in engaging the commercial farmers in this Project has been the need to overcome the belief that this will result in a document that will gather dust on the RDCK shelves. From 2001 - 2002, the RDCK undertook a joint project with the Creston Valley Agricultural Society to produce an agricultural inventory of the Valley. This Inventory Report is regarded by the Ministry of Agriculture as an Agricultural Area Plan for the RDCK (see the Ministry of Agriculture's list of existing Ag Plans found here: http://www.al.gov.bc.ca/resmgmt/sf/aap/index.htm). The Inventory report included four recommendations for consideration in the Creston Valley Official Community planning process:

- 1. The Official Community Plan designation and related zoning for the Creston Valley Wildlife Management Area should allow agricultural uses, especially for those properties in the Lower Wynndel area leased for agricultural production.
- 2. The Creston Valley Official Community Plan should allow for three agricultural designations respecting the three distinct agricultural areas of the 'Flats', 'Central Benchland' and 'Southeast Creston'. The designations should reflect the dominant lot size and agricultural characteristics of each of the individual areas.
- 3. The Creston Valley Official Community Plan should include policies that are not only supportive of agriculture, but actually promote agriculture consistent with the character of the identified agricultural areas.
- 4. A new database for collection of agricultural inventory data should be designed and constructed to accommodate the 2001 and any subsequent inventory data. The database must allow comprehensive analysis of all inventory data collected. The RDCK should design the proposed database to interrelate with ArcView. (CVAS 55)

How these recommendations have been implemented may not be well understood by the Creston Valley Agricultural Society. The first three recommendations have been acted upon but not the fourth, related to the agricultural inventory database. There may also be differing opinions on whether or not the policies supportive of agriculture that exist in the Official Community Plan are being acted upon as intended. Because the Agricultural Society operates as the Agricultural Advisory Committee of the RDCK for the Creston Valley, they review applications for removal of land from agricultural zoning or the Agricultural Land Reserve.

Concern was expressed in community meetings across the RDCK about the management of the Agricultural Land Reserve and whether the criteria used to remove land from the Reserve reflects the nature of farming in the RDCK. Given that 65 - 70% of the land removed from the ALR in the RDCK between 1974 and 2009 was prime agricultural land, this concern may be warranted (see Section 4 above). The general public would also benefit from a greater understanding of the RDCK's role in management of the ALR. This will be elaborated on later in this section.

Another legitimate concern raised during our consultations was the very limited role of local government in the wide spectrum of regulation, trade agreements, market realities and public perception with regards to food systems. The complex factors that coalesce to cause the financial challenges that exist on most farms in Canada are generally beyond the purview of the local government. Thus people found it

"Good luck. Why do you not waste more tax payers' money studying our food security and when things finally get rolling in Creston there is not enough funding to support the actual project's success."

hard both to identify measures that the RDCK could take and to believe that they will have any impact of significance. This is indeed the key challenge in the creation of this Agricultural Plan.

The creation of a region-wide Agriculture Plan provides an opportunity to bring awareness of the supportive measures that are already in place in the RDCK policy and practice and to complement these by identifying additional actions that will further support farming in the RDCK.

Community Direction for the Plan

Despite the perceived limitations of a local government agricultural plan, we received a wealth of ideas, suggestions and areas of concern from people across the RDCK.

Input from the community consultations (surveys, community meetings, web forms, and interviews) has been organized to fit into the broad categories outlined in the Project Goals: Farm Viability; Agricultural Capability; and Secure Food Supply. The data from the Project outreach is supplemented by additional research.

Farm Viability

Farm Community

"I would not recommend farming to young people because we work for \$2.00/hr."

The average age for BC farmers follows

a trend that is increasing right across the country. While in 1991 the average age of a farmer in BC was 48.9 years, in 2006 the average age rose to 53.6 years - the oldest in all the Canadian provinces. The Census of Agriculture also shows interesting trends when looking at farm operators grouped in three age categories (under 35 years, 35 to 54 years, and 55 years and over). While the percentage of people operating farms under the age of 35 steadily dropped between 1991 and 2006, the percentage of farm operators over the age of 55 steadily increased during the same time frame. Interesting to note, although the overall numbers are small, since 1991 the number of women working as farm operators has been increasing, though they are rarely sole operators (Statistics Canada). While these trends certainly correlate with what is happening in the RDCK, that there are some younger, well-educated, and aware farmers coming to the region to pursue agriculture is hopeful (something we witnessed in our community consultations during the research phase of creating this Agricultural Area Plan).

From 2005-2009, the net income for farm businesses in BC decreased for 62% of producers, and 28% of farm operators believe it will decrease more over the next five years. Yet 40% of BC farm businesses believe their net income will improve (Agriculture & Agri-food Canada). Clearly, poor wages and dismal financial prospects greatly impact the numbers of new and young farmers entering the field. Uncontrollable risks, such as disease and weather, the significant amount of experience it takes to be a good farmer, and the general shift of populations from rural to urban centres are also factors which undoubtedly affect overall numbers of farm operators too.

Furthermore, in addition to the high costs of farm equipment, skyrocketing land value has also contributed to the decline of people entering the field. Purchasing expensive land for agricultural use when farm incomes are trending downward makes it an unattractive option very few can afford. The high cost of land as a barrier to entering the field of farming is a sentiment we heard time and again during our community consultations in preparation for the creation of this plan. As a result of increasing land costs, from 2001 to 2006 the amount of land owned by Canadian farmers dropped 2.1% while the area of land rented or leased for agriculture during that time period increased 9.9% (Statistics Canada). The continuing trend is to *go big, or get out* and this combined with the above-mentioned factors have unfortunately created fewer opportunities for family farm succession.

The Economic Picture

"Is there any way the RDCK could make it profitable to be a farmer?" As discussed earlier in this document, the inevitable integration of any commercial farm into the global food system creates enormous obstacles to farm economic viability here in the RDCK (as elsewhere). There are few appropriate and efficacious measures available to the RDCK that will positively impact the marketplace and farm income. In 2006, the average net return on farms in the RDCK was \$5,422.00. Of the 562 farms in the region that participated in the Census, 323 of them had farm sales of less than \$10,000. (Penfold 2) Small lot intensive production of vegetables and fruit marketed directly to consumers holds promise but that particular market would be quickly saturated in the RDCK. While consumers who seek out product directly from the farmer are generally willing to pay a higher price, there needs to be a critical mass of such consumers in order to sustain many farms. Of the nine municipalities in the Region, none has a population surpassing 10,000.

Direct farm marketing has limited applicability to some agricultural sectors and farm sizes (see Detre et al). According to the US Department of Agriculture, 77.4% of the farms involved in direct-to-consumers transactions had annual sales of less than \$5000. Even removing commodities that do not lend themselves to direct to consumer sales, the percentage of total agricultural sales from direct farm marketing represented only 0.8% of total agricultural sales in the USA in 2007. (Diamond) Nevertheless, this is not a market that should be ignored, as it recorded sales increases of 104.7% in the USA between 1997 - 2007, as compared to 47.6% increase for the same period for all agricultural sales.

Conventional food outlets in the RDCK are dominated by the large grocery chains. Selling farm product to these outlets is getting increasingly difficult, due to the demands for specific packaging, labeling, bar codes and, most recently, liability insurance. Given the competition from low cost imports, the farmers generally cannot add these additional costs of doing business onto the product, making it a losing proposition.

"It's really hard to get established with Save-On they treat me as a nuisance, require 5 million liability, and they would like me to have a barcode for each of my products."

There are independent grocers across the RDCK, but

they too are forced to factor in the cheaper alternatives from parts of the world with a larger land base and longer growing seasons. This global competition for markets is impacting not only farm income here in the RDCK, but also our biodiversity. Production decisions are based on market opportunities and best prices that can be found for the range of farm product.

"Because of the cheap food imports, I produce less variety now after 20 years of farming because I can't make a go of things - I have to stick with crops that I can make a good return on." Institutions are often among the larger market opportunities, if the farmers are able to meet volume, scheduling and quality needs of the buyers. There have been a number of successful initiatives in the USA, connecting farmers with institutional buyers, often by supporting the aggregation of product from a range

of small-lot producers. More and more government agencies, schools, and hospitals across North America are setting local-sourcing policies that include percentage or volume targets (see, for instance, Fair Food's *Farm to Institution* program, or the USA *Farm to School Network*). In addition to the financial benefit to the farmers of an area, these institutions can model procurement policies that ripple out through the community. Should the RDCK institute a buy-local policy for any food procurement related to, for example, events and conferences, this could benefit the farmers with an additional and generally high volume (though perhaps inconsistent) market. Further, if the farms are promoted during the event, this can help to increase "brand recognition" for the farms and perhaps garner new market opportunities for them.

The RDCK can also help, albeit in a small way, with the cost of doing business. The province already provides exemptions on farm property taxes. These exemptions are only available to those whose level of income surpasses \$2500 for land between 8000 square meters and 4 hectares; for farms over 4 hectares \$2500 plus 5% of the actual value of the land over the 4 hectares; and for farms less than 8000 square meters, the income threshold is \$10,000. Moreover, the qualifying income can only be derived from products and activities as found in Schedule A of the *Standards for the Classification of Land as a Farm Regulation*. It may be that the farm products listed as agricultural in Schedule A do not adequately capture the range of farming that happens in the RDCK. The BC Assessment Authority is receptive to suggestions for changes to Schedule A, but these suggestions will likely be more effective if they come from a body such as the Association of Kootenay Boundary Local Governments or the Union of BC Municipalities.

Though taxes were discussed at most of our community consultations, no one proposed that farm taxes should be lessened. In fact, one farmer proposed that they remain as they are because farmers want to contribute to the communal services provided by the governments through our taxes. It is important to note that farm tax exemptions relate, in part, to the lower levels of government service provision that generally is the case with sparsely populated rural areas. Some participants in the consultations proposed higher taxes on non-producing agricultural land as a "stick" device to persuade the land owners to shift their land into production, either through their own efforts or through a lease to farmers.

Revisiting building permit processes and fee requirements could result in efficiencies and costs savings for both farmers and the RDCK. Various jurisdictions (such as Saskatchewan and the Regional District of Okanagan Similkameen) provide exemptions for farm buildings from the requirement to obtain a building permit. Generally that exemption is based on the proposed building meeting the definition of a farm building with low human occupancy under the National Farm Building Code of Canada. While the purpose of permits is to address public safety by helping to ensure that buildings are properly built and appropriated located, the National Farm Building Code of Canada can serve as a guide to the RDCK on when to allow exemptions. The low occupancy definition would have eliminated the challenges faced by several farmers who came to

the community consultations and spoke of cost and bureaucratic difficulties associated with the permitting process required for greenhouses and chicken coops. For such low cost and risk structures, the fees cannot cover the costs to the RDCK of providing oversight to the construction. Nevertheless, the cost to the farmers is prohibitive relative to the income likely generated from the new building.

"To make a small holding economically viable you have to engage in high value operations - livestock, dairy, value-added. However all of these are heavily regulated under the guise of food safety to keep the market open for large corporations with ties to the government."

The Regulatory Environment

Changes in regulations can negatively or positively impact farm incomes. A positive example was the recent increase in chicken numbers allowed under small-lot permits by the BC Chicken Marketing Board. A negative example, and one with widespread repercussions, is the change in the provincial Meat Inspection Regulation implemented in 2007.

Almost four years later, communities across the RDCK are still struggling to cope with the changes imposed by the revised regulation. On-farm slaughter service provided by skilled individuals is virtually non-existent now, since an activity that has taken place for generations on farms is now illegal. Ownuse slaughter and the resulting meat is still legal and so some livestock operators have scaled back their animal numbers and ended any off-farm sales. Others are taking risks raising and selling meat to small circles of clients, generally only by word of mouth.

"Since we went out of livestock, our farm income has gone down by \$20,000 / year and our farm costs have increased by \$4 - 5,000 in replacing soil fertility."

Given the necessarily small-lot agriculture that happens across our Region, mixed farms are a logical way to manage soil fertility and the advantages of diverse income streams. The end of legal meat production for most has meant not only a decrease of income but also an increase in costs since the loss of manure as a soil fertility tool accompanied the loss of animals. Businesses supplying the livestock industry are also struggling or have gone out of business as a result of the drastic reduction in farmers seeking young animals (piglets, chicks etc), feed, fencing and housing materials.

"We need a health and safety protocol based on a local food system, not one harmonized for international trade." Residents of the RDCK talked about the need for appropriately scaled regulations, that recognize the different processes and levels of risk involved in short supply chains with limited distribution - particularly those with a direct connection between the farmer and the eater.

The new Class E licenses under the Meat Inspection Regulation have a lower level of infrastructure and

oversight requirements based, at least in part, on the recognition that such limited market circles and short supply chains carry an inherently lower public health risk. It is unlikely, however, that sufficient Class E licenses will be awarded to our region to truly rebuild our local meat systems. The intent of the Class E licenses, introduced in 2010, is to enable on-farm slaughter and farm gate sales in areas where there are not enough animal numbers to warrant the investment in a fully licensed abattoir. (More information on the graduated licensing system can be found on the Ministry of Health Services site: http://www.health.gov.bc.ca/protect/meat-regulation/graduated_licensing.html) Some farmers feel that the volumes allowed under the Class E license and the restriction to farm-gate sales only can work for their farm business plan; others feel that the numbers allowed under a Class D license would work better. However, the Class D licenses are restricted to the most remote and isolated Regional Districts in the province and so they are not available to farmers in the RDCK. Based on input from the communities and our retailer survey, there is likely a strong market possibility for local meat sales beyond the farm gate. The RDCK currently has one provincially licensed red meat abattoir based in the Creston Valley that services farmers on both sides of the Kootenay Pass. A provincially licensed mobile poultry processor based in the Slocan Valley also operates in the Region, but will not travel over the Kootenay Pass. There are plans for a second poultry mobile abattoir to be based in the Creston Valley and operate under a provincial license.

However, meat from provincially licensed plants is not generally carried by the chain grocers since they cross provincial boundaries in their operations but provincially licensed meat may not. Thus, most large chain grocers will only work with federally licensed plants, which are much more expensive to build and operate and not likely ever an option for the small volumes of livestock in the RDCK. Should livestock producers get back into meat production at any scale here, they will need to carefully assess the options and level of demand amongst the independent grocers and restaurants in the area.

"Federal and provincial regulators also have to be cognizant of what works on the ground and stop making regulations for one purpose that cause substantive impacts to other areas. Water availability will also become an issue that needs to be addressed agriculture vs urban expansion."

A recent amendment to the General Orders of the BC Chicken Marketing Board has opened up some options for producers of chicken for meat. Prior to this amendment, poultry producers in BC not holding quota could only produce up to 3000kg annually, which worked out to approximately 1100 birds per year. For many farmers, this number was too low to be able to justify the cost of the infrastructure to raise the birds. As of mid March 2011, farmers can now legally raise up to 2000 chickens for meat each year without having to assume the expense of quota. Anecdotal evidence from farmers who raise chickens in the RDCK is that they can sell directly from their farm all the birds they can raise, often with a waiting list of people who want to purchase local meat.

The scale of production versus the infrastructure necessary to legally sell eggs without quota also affects production capacity in the Region. Based on anecdotal information and the producer survey, there is a lot of small-lot egg production and sales in the RDCK. The demand for farm-direct eggs far outstrips the supply in the Region. Yet 2010 saw the intervention in this area by the Canadian Food Inspection Agency on store-front sales of "farm eggs" - eggs that were not candled and graded in an approved facility. However, small volume poultry production can be a beneficial income stream for a diversified farm, if they can reliably sell the eggs. Grading stations spread out across the region and serving nearby farms with the opportunity to sell directly to consumers, retailers and restauranteurs would help to scale up egg production and protein availability for area residents.

Historically the RDCK was home to a number of creameries or milk processing plants. Frank Nixon, a second generation farmer in the Slocan Valley, offers an interesting historical perspective on milk production in the early half of the twentieth century:

"At that time just about every little farm had at least one milk cow. Every morning a cream can with the owner's name painted on it would be put out on the road for Bill

Anderson to pick up. Every night he would drop them off at the same spot. At the end of the month there would be a little cream cheque. There were two creameries in Nelson: Palm Dairy and Kootenay Coop. At some point the Kootenay Coop burnt down and went out of business. Eventually Palm Dairies announced they were no longer accepting cream. Then some time later Palm shut down their Nelson plant. Also at the same time the larger dairy farms, what with more and more rules, were regulated into extinction, one by one." (Nixon 1)

There are no dairies outside of the Creston Valley at this point. As recently as ten years ago there used to be fourteen dairies. There are now only six. All the fluid milk is shipped out of the region for processing elsewhere, with the exception of the milk retained at the Harris Dairy in Lister for their cheese production. Under the Milk Industry Act the sale of fluid cow milk in BC can only come from farms that have been approved and hold quota. The cost of obtaining quota is prohibitive, if not impossible, for a new farmer to acquire, and certainly not for small-lot production of the scale Frank Nixon described above.

Agricultural organic waste is currently handled under the Agricultural Waste Control Regulation. There are restrictions on where and how the waste can be handled but the requirements are not overly onerous for the farmer to meet the obligation to not pollute. While the Regulation has been amended in recent years, it has not had a comprehensive review since it was enacted in 1992. It has been slated for such a review

as of October 2009, though no progress on that review is apparent as of the date of this report. It is impossible to predict if the review of the Regulation will result in more stringent requirements for farm operations. However, that has been the trend to date, so it bears monitoring and, ideally, strong participation by farmers in the review and recommendations process.

"Distribution is a huge issue and challenge for individual farmers seeking to serve local markets."

Agricultural Infrastructure

In the past half century there has been a significant loss of the physical infrastructure that supports both primary agricultural product and processed goods across the RDCK. Some of that has been noted above. For primary agriculture, storage and distribution options have become increasingly limited, from the loss of active potato sheds in the Creston Valley to the closure of Quality Produce, a distribution company that served the Region, based in Nelson.

"The market needs to be in place to justify adequate transportation systems, so it's a chicken and egg situation." The stories still abound of the water-based distribution systems that supported early agricultural ventures in the region. Water transportation in the early part of the 20th Century had an advantage over the rough road options that turned soft fruit prematurely into jam. For isolated communities like Johnson's Landing, water transportation to the larger markets may be more efficient once again should there ever exist a critical mass of product going to market that can justify re-establishing water-transport.

Quality Produce was a Nelson-based distribution company

that operated for over 40 years, serving all the scattered communities of the RDCK. With the increasing vertical integration and consolidation in the grocery industry (see Mamen), they lost many clients through the closure of the independent "mom and pop" outlets. They also had to compete directly with the transport trucks owned and operated by the large grocers who simply added additional product to trucks already traveling to and around our region, undercutting Quality Produce's market.

For those wanting to ship product out to external markets, there are limited options as well. Even with the scale of production in the Creston Valley, filling up a freight truck fully is challenging. But less than full truckload volumes are prohibitively expensive and even the option of capturing empty back-hauls is limited due to the fact that our region is only a stop along a longer route, not a destination.

One option for augmenting farm income may be in processing the primary product and capturing the added value. Processing farm product in a region with such a limited growing season is also one way to prolong the availability of the local product by transforming it into a more stable form. Our limited growing season provides both the rationale and the added challenge of operating a processing facility. If the harvest season for the ingredients to be processed is only a portion of the calendar year, extra creativity or additional income streams must be found to support a year-round facility.

The factors that brought about the demise of some of the locally based infrastructure may have shifted sufficiently that the same business could survive and thrive today. More extreme climate events, political instability in various parts of the world and increasing fuel costs all undermine the stability of long supply chains and the ability to externalize the true costs of shipping food around the world. There may come a time

that locally produced food, even in our comparatively short growing season, will compete readily with globally sourced options. This will only be known through research outside the scope of this Project.

The cessation of the Sterile Insect Release (SIR) program in the Creston Valley was raised during community meetings in Creston. The SIR program was established in 1994, releasing sterilized coddling moths into orchards to mate with the wild moths and eliminate the moth populations and the "We need to put in bylaws to control pests and weeds and we need people to enforce them."

damage they cause to tree fruit. The SIR program was intended to reduce the use of chemical pesticides, the alternate moth control mechanism. Creston was involved in the program when it launched but withdrew in 2007. There are fruit growers in the

"Though KLAS has a seed bank... This is too important and should be supported by consistent government support. A lot of these so called societies...you will find one or two dedicated individuals or families. If they have a crisis one YEAR... then the seed bank could be lost..." Creston Valley who still believe this was in error. Additionally, in Creston and at other community meetings, farmers raised concerns about the extra challenges to their farming from pest, weed and disease pressures from abandoned or mismanaged farms and orchards.

Agricultural infrastructure is also made up of people and services. There are quite a few farmer and food security organizations across the RDCK. However, most of them suffer from being primarily or entirely dependent on volunteer effort to keep them running. This reality contributes to the fact that many of them are completely isolated from each other rather than being effectively connected to share resources, information and to form partnerships to their mutual benefit. With the dwindling numbers of commercial farmers, even the organizations funded by farmer contributions are struggling.

Many food security organizations in BC were founded as a result of grants under the Community Food Action Initiative launched in 2005 and implemented by the Health Authorities across the province. However, the Initiative is shifting away from the community outreach and grant programs that characterized its early years. As a result, food security organizations are also struggling with an over-dependence on volunteer effort.¹

"Volunteerism isn't sustainable. It might be good to get the ball rolling, but we need long term funding to keep serious food projects going." The lack of continuity and cohesion in the farm and food organizations is impacting the quality and quantity of outreach and education that many of them have traditionally been involved in. And when the organization is running a key program, continuity is all that much more important.

Across the region we heard from residents that they want educational support - for commercial producers, fledgeling farmers,

hobby farmers, and backyard gardeners. People want help with on-farm research to identify or develop crops and varieties best suited to their land conditions or resistant to disease; they want help understanding irrigation design and equipment options; they would like help setting up Community Supported Agriculture

(CSAs) marketing systems; they want to know what to grow that is possible in this region and for which there is a demand that can cover the cost of production; they want assistance dealing with pests and disease pressures that are only mounting with the increase in abandoned orchards and fallow fields.

The many young or new farmers that have the energy and enthusiasm to start farming often lack a farming background. In such cases, they clearly benefit from a wide range of information and programs like mentoring or apprenticeships. While the contributions of the new farmers to the economy or food supply may be minimal initially, by supporting them to be viable farms we can help to address the critical need to increase the number of farmers. Between 2001 and 2006 we lost almost 8% of our farmers in the RDCK and

of those remaining, the average age is 54.3 (according to 2006 Statistics Canada data). Clearly a succession plan is in order if we want farming to continue here.

The Ministry of Agriculture used to provide Extension services, with three

"It seems there is a lack of knowledge sharing and an ability to share knowledge across the region - like raising and slaughtering chickens - how can new, young people in the region access this information?"

"We could have a department of agriculture for this very region."

¹ Private interview with Interior Health Community Nutritionists, January 2011.

staff based in Creston providing information and research support to the farmers and gardeners of the region (with the exception of portions of Area K, which were served out of the Ministry of Agriculture offices based in the Okanagan). However, our last Extension Agent was shifted to a different position in 2002. The *Ministry of Agriculture and Food Act* states that among the purposes and functions of the Ministry is to carry out "advisory, research, promotional or education extension programs, projects or undertakings relating to agriculture and food" (Section 4 b). However, it is unlikely that direct outreach to farmers will be reinstated any time soon, given the fact that the BC

has the lowest expenditures in support of agriculture of all the Canadian provinces (BC Agriculture Council).

Knowing what is produced and where to find it is an essential piece of information for diverse markets. Though there have been various farm product guides developed in the RDCK over the years, none has been pan-regional. Farmers expressed a wish to know what "People don't know why it matters to buy local - marketing the local advantage is important."

others were growing, and consumers have asked endlessly for lists of local product and information on seasonality - what is available and when. Regional food guides can be very effective in supporting direct farm marketing (direct to consumer) but can also be a resource for institutional or commercial buyers seeking larger volumes.

The challenge with a regional food guide is that, whether in paper or internet format, it needs to be updated at least annually and widely promoted so that people know to use it. There is no point to a marketing venture that does not connect with customers. Such an initiative is generally beyond the capacity of grassroots organizations unless they have a very large membership base or core-funding from a reliable source. In the community consultations there was interest in a regional brand to help market local product.

Foodlink - Waterloo Region is a non-profit in Ontario that was created with support from the Region of Waterloo Public Health, recognizing that good quality food plays an important role in health. It evolved to focus on food localism and promotes local farm product to a range of markets and through a suite of successful programs. "Foodlink works to develop the capacity of our farming community and to also create sustainable partnerships connecting all links in the food chain. We provide opportunities for the food industry to connect with local food. We provide market information regarding local products, broker new sales for local farms and processors, and assist in developing value added products or features." (www.foodlink.ca accessed 28 Jan 2011)

Though it was not a common theme in the input we received from communities, some did feel there is a role for agritourism here. Farms with high-volume drive-by traffic can capitalize on that transient but numerous customer base to justify the investment necessary to provide the experience most tourists are looking for from a farm venue.

Some farms in the Creston Valley located on Highway 3 have a significant volume of drive-by tourist traffic in the summer. However, most areas of the RDCK would need to develop creative and aggressive marketing to draw in either a large enough volume of customers or a smaller volume willing to pay highly for a farm "experience". The recently launched destination tourism program supported by the RDCK could possibly assist with agritourism initiatives.

Scaling Up Production

Based on the premiss that the benefits from economies of scale also apply at the level of the farm, there is some rationale for scaling up production on the farms, provided there is the labour and land base to do so. And given that we import into our region in excess of 95%² of the food consumed here, increasing production can help to meet one of the RDCK's goal for the Agriculture Plan, that of a secure supply of food.

"We are lacking the leadership to develop the agricultural sector here."

The most efficient way to scale up production may be to find

creative ways to support the established and experienced farmers to do so. Given the bleak statistics about farm income levels and the threat this poses to retaining our farmers, mechanisms for scaling up the "take home pay" for the farmers would be ideal. Given the explosion of local food initiatives across North America, there is some evidence that capturing local markets and working in short supply chains can offer more profit to the farmers. However for most farms in the Creston Valley and possibly elsewhere in the RDCK, the scale of production does not lend itself to direct farm marketing or at least only for a fraction of the farm's production. (see Detre et al, 2010)

"I am not sure how it could be done, but if farmers can both pay rent, and put food on the table, they will be much more likely to continue farming. (This seems obvious, yet also seems to allude many folks) It is very stressful to be living on the very edge of the debt load you can get. To protect food production, you must protect food producers from utter destitution. While our hands are tied regarding the food prices set by the market, subsidies (either for producers, or consumers) that make the price of buying local accessible to the local community, while also paying a fair wage to local producers seems the only protection for keeping people in the game, so to speak."

Another way to increase the local supply of food is to increase the number of farmers. The best succession planning within a farm family is for the farm to be economically viable, demonstrating to the next generation that is is a reasonable career with a lifestyle they already know. Economic viability is a key incentive, not only for the next generation, but for anyone farming. It is also the most difficult area for the RDCK to address, given that most of the factors affecting farm viability are well outside the purview and spheres of influence of local government.

² Estimate supported by regional experts such as George Penfold, the Regional Innovation Chair in Rural Economic Development of Selkirk College.

For those that do not grow up on farms, the knowledge base necessary to run a business that is exceedingly complicated needs to be acquired elsewhere. There are no longer any formal agriculturally-related courses taught at the College of the Rockies nor at Selkirk College, other than short courses through Continuing Education programs. The College of the Rockies Creston campus is currently exploring reinstating a short horticultural program.

New farmers ideally need a full suite of training, from classroom, to business planning and marketing and perhaps most of all, hands-on experience. When each day on a farm offers new growth, pests, disease, births, deaths, weather changes and a host of other challenges, having access to knowledgeable mentors can be critical in sustaining the will for and interest in farming. In 2002 Kootenay Organic Growers Society had a short-term project to connect new farmers with established farmers in a mentoring program. The project enabled some knowledge transfer but was not sustained or adequately resourced to meet the need - then or now.³ However it is possible to learn farming as you go, though this is a luxury best afforded by those whose sole income is not derived from the fruits of their farm labour.

Scaling up production needs to be based on solid market research to determine what is needed that is not yet being adequately supplied, or where there is likelihood of import replacement with a local product. In the context of a secure food supply for RDCK residents, the market research could be focused on assessing the essential dietary needs of the local populations against what is and can be produced here.

Few farms in the region are able to produce fresh food year round. The exceptions are dairy, eggs, and some greenhouse crops. If scaling up production also relates to year-round availability of locally produced food, this can be done by expanding the capacity to preserve the primary agricultural products. Freezing, dehydrating, juicing, and processing into multi-ingredient soups and sauces is one way to do so. Some farmers are capturing that added value by processing their own product, such as Kootenay Alpine Cheese in Lister, Tabletree cherry juice in Creston, or Mad Dog Farm's dried herbs, lip balms and hand creams in Tarrys.

There have also been food processors over the years who have tried to source their ingredients from local farmers. Karthein's Kraut started out as a farm-based business in Crescent Valley, with owner Joe Karthein growing as much of his ingredients as possible and contracting the rest out to area farmers. However, he soon hit the price-point threshold that keeps a lot of products out of the grocery stores and decided that he had to scale up the production and move it out of the Kootenays. Jeff Mock at Silverking Tofu in Nelson found the same price barrier in trying to source garlic and fresh herbs locally for his tofu. When he could source peeled, minced garlic more cheaply than whole local garlic, he felt he had no choice but to go for the less expensive option in order to keep his own product at a price that consumers would buy at the grocery stores.⁴ This experience is likely shared by many other regionally-based food processors.

Beyond the price and cost issues associated with processing products is the challenge of getting into the venues where most people purchase their food, the chain grocers.

³ Based on personal experience with the project: Abra Brynne was the Co-ordinator of the KOGS mentorship program, part of a larger marketing and capacity building project.

⁴ Private communications with Abra Brynne.

This was elaborated upon earlier in the document and points to the role of independent grocers and other food outlets.

Issues related to farm viability dominated the discussions in the community consultations and were also a common theme in the survey responses. Unfortunately, this is also the area the RDCK has the least potential to impact through its services and influence. As a result, any mechanisms that are within the RDCK's ability to put in place that can positively impact the viability of farm operations across the RDCK should be carefully considered and given high priority.

Agricultural Capability - realized and protected

"Soils and arable land are considered to be a form of productive natural capital with only limited potential for technological substitution. Its unique properties and immeasurable value as an essential component of our global life support system justify the exclusion of adequate stocks of agricultural land from competing land markets. In short, a range of considerations and values beyond short-term efficiency bear on critical land use decisions. This is more likely to ensure food security in a world of rapid ecological change and political uncertainty. As a bonus, we may succeed in preserving important elements of rural life and landscape, a significant part of our national heritage." Rees 1993

In the eighteen years since William Rees wrote the quote above, rapid ecological changes have occurred more and more frequently and political unrest has increased. This only heightens the wisdom of protecting our agricultural and food security capability. Agriculture depends on a land base, on water and on the labour and knowledge of farmers. In order to fully realize the agricultural capability of the RDCK, their respective roles and necessity for agriculture must be fully understood. This planning process is one measure to protect and enhance them.

The Land Base

The need to hang onto the farmland that we have in the RDCK was raised over and over again in the community consultations and the surveys. Some did state that, after a lifetime of farming with little possibility of income sufficient to retire on, selling the land may be the only option for the farmers. However, this recognition was coupled with the knowledge that land suitable for farming is extremely limited in the RDCK and that, as one participant noted, "once it is gone it will not come back". "To have a future for food here, we need to maintain the operating farmland, and hopefully add new farmland. This isn't isolated from the other issue [of supporting farmers], as farmers are what is needed to maintain farmland (i.e. by soil building)." Many participants in the community meetings and surveys raised the issue of accessing land for new farmers. Yet established farmers observed that accessing land for lease is not a problem for them, and is actually getting easier as fewer and fewer people are willing to farm. Of the 2.5% of the RDCK land base that is suitable for farming, less than half of that is currently being farmed (according to the BC Assessment Authority's analysis of land use and Statistics Canada data).

The difference in experience accessing land likely relates to the fact that, in order to start a farm, one generally needs much more than just raw land. Frank and LIbby Ruljancich in Deer Park on the Lower Arrow Lake are a local exception to that rule, building a viable farm from raw land 35 years ago. Early European homesteaders in Canada's prairies certainly also started out that way, but did so through land grants that eased the need to derive cash from their labours, at least while they established the farms of the early 20th century.

Today's new farmers face stiff competition for the land base from others whose income will never be derived from the land. Should the new farmers be able to afford the land (and normally the concomitant mortgage), they face the need to acquire the equipment and infrastructure - such as tractors, barns, fencing and irrigation systems - necessary to build the farm to a level that it can generate income sufficient to cover their overhead. If the farmers are able to charge the cost of production for their crops - where the costs incorporate the land base, the labour and the farm infrastructure - the business can be viable and sustainable. Unfortunately, the global market place rarely allows our seasonally-restricted farmers to charge the true cost of production, forcing many of them to obtain off-farm jobs.

Established farms are able to use their equipment on multiple sites so getting additional land into production may not be Patrick Steiner and Colleen O'Brien of Stellar Seeds recently move their well established seed company from the Shuswap to Johnson's Landing. Shifting their operation away from a farm partnership gives them a degree of independence that they wanted after a decade in business. The land base is well suited to the particular needs of seed production, but its very remoteness limits direct farm marketing for many fresh crops. The biggest challenges, however, are the "huge capital expenditures" necessary to build the farm infrastructure on their precious land. Access to equipment without having to purchase it themselves could help significantly. Kootenay Local Agricultural Society has a tool lending library with a range of equipment available to their members. However, to better meet the needs of new and established farmers across the RDCK, more depots and a wider range of equipment is necessary.

as big a challenge as it is for someone starting out. However, the necessity to cobble together multiple tracts of land to have a large enough land base is not without its challenges, even if the leasing costs are low. In Lister, where the average lot sizes are between 15 to 25 acres, some farmers deal with more than 20 different landlords in order to have the land base necessary to support their farm plan and needs.

Fragmented farmland also adds costs to both the farmer and local government. Moving equipment from site to site places extra time demands on farmers, additional wear and tear on the equipment and increased fuel costs. Heavy farm equipment traveling on public roads results in costs associated with road maintenance.

Getting on the Land

Leased land or land partnerships can be an effective way to help new farmers to get onto land and also build their skills and market possibilities. With less than half of the agricultural land of the RDCK under production, there is enormous potential to increase farming and food production here by encouraging creative land access arrangements. Many land owners may not be aware that if their land produces \$2500 in sales of agricultural products they qualify for tax exemptions available to farms in BC.

The farmer in question need not be the land owner - this fact has been used effectively by the Linking Land and Future Farmers (LLAFF) initiative to get new farmers onto otherwise prohibitively expensive land. Founded in 1994, LLAFF is a non-profit society in British Columbia that works to connect landless growers with landowners who want to see their land farmed organically. They have resources to help the landowner and farmer come to a mutually acceptable agreement, whether it be through lease or purchase. LLAFF started out with a focus on southern Vancouver Island, expanded to serve the entire province and recently launched a pan-Canadian presence. (http://www.llaff.ca).

The North Kootenay Lake Community Services Society has lists of landless farmers and farmland available. Launched in 2009, the project created lists of landowners and of farmers seeking land, with the goal of connecting the two. The listings are organized by sub-regions of the RDCK and are supported by resource materials related to successful land-sharing arrangements. Like many such web-based initiatives, it is not as widely known as it could be to be truly effective and suffers from a lack of resources to make sure that it is kept up to date and promoted.

Leasing land needs incentives for both the land owner and the lessee. The farm tax exemption may be sufficient for the land owner but if the difference in taxes is not significant, they may not be motivated to enter into a long term lease with the farmer. However, for the farmer, leasing land without some sort of long term commitment is a risk, particularly when the farmer has to put in significant effort and investment to enable the land to be in production. If the soil is not in good condition, there are no deer fences, access to water is difficult or not available - these are all additional barriers in a business that already presents many to even the most well-established farmers. As Wayne Harris, the President of the Creston Valley Agricultural Society, has pointed out, if we want to increase the number of farmers we have and also to keep them, "the threshold for getting into farming must be very low, and the threshold for getting out very high".

Some RDCK residents proposed the development of land trusts that could be leased out to new or landless farmers. It is the opinion of Brynne Consulting that the tax base of the RDCK could not support widespread land acquisition with the purpose of increasing local farming. Some participants in the community consultations were also leery of government owned farms. However, there are a number of models that warrant consideration. Consideration of land trust models should include an analysis of whether the land should only be used as an "incubator" to help new farmers build skills and markets prior to moving on to their own farms. If land in a trust was to be made available to a commercial farmer, the conditions of an arrangement made possible through public funds should not unduly privilege one farmer over the others.

Case Studies: Delta Farmland & Wildlife Trust is a non-profit organization that promotes the preservation of farmland and wildlife habitat on the lower Fraser River delta through co-operative land stewardship with local farmers. Each year, the Trust provides local farmers with \$325,000 of cost-share funding through their Stewardship Programs. With this funding, farmers can invest in the long-term health of their soil while providing habitat for a diversity of wildlife, including birds migrating along the Pacific Flyway. These Stewardship Programs ensure an annual average of over 500 acres of Grassland Set-asides, 3,000 acres of Winter Cover Crops, and over 12 km of Hedgerows & Grass Margins. (from www.deltafarmland.ca accessed January 2011)

The Regional District of East Kootenay established a dedicated Local Conservation Fund in the Upper Columbia Valley that raises up to \$230,000 annually through a \$20 / parcel property tax. The fund has three themes: fish and wildlife habitat conservation, watershed conservation, and open space conservation including family ranches and forested land. (from www.ekcp.ca/index.php?page=Local_ Conservation_Fund, accessed January 2011)

The Cowichan Valley Regional District established its Local Conservation Fund via a referendum in 2008. This fund is generated from a property tax of \$5 / \$100,000 of assessed value, raising a maximum of \$715,000 annually to acquire land for parks. (from www.ekcp.ca/index. php?page=Local_Conservation_Fund, accessed January 2011 and the CVRD Regional Parkland Acquisition Fund Fact Sheet, 2008)

Nebraska has had a creative beginning farmer tax credit program in place since 1999. "The Nebraska Beginning Farmer Programs are designed to help new producers get a head start in farming and ranching, while giving back to the farmers and ranchers who own agricultural assets and are still interested in being involved in the farming or ranching process." (Nebraska) The program provides a tax credit of 10% on the fees collected through the rental of agricultural assets (land, facilities, breeding stock and equipment) to new farmers. It also gives a15% credit on income derived from share cropping (where the rental agreement is a share in the value of the crop produced). While income tax credits are outside the purview of the RDCK, the idea could be put forward to the Union of BC Municipalities. The Nebraska model is a well developed program with government legislation to guide it that could be implemented in British Columbia. It could form one of a suite of measures to address the critical need for
succession planning for the aging population of BC farmers.

Wildlife crop depredation

Farming in an area that is predominantly rural, such as where the majority of agricultural activity in the RDCK occurs, results in losses of crops by animals if the property is not adequately protected. For farms growing crops other than grains and forage, fencing is quite often a necessity to ensure significant loss is not experienced. Adequate fencing to keep wildlife out is a significant yet necessary expense for most farm operators. Elk and bear damage can ground crops grown at a scale that is too large to effectively fence, with the crop loss absorbed as an inevitable cost of doing business as a farm in proximity to wilderness.

The BC-based Investment Agriculture Foundation has a program entitled the Agriculture and Wildlife Fund with strategic priorities that include the reduction of wildlife impact on farms. It is likely that farmers in the RDCK are not accessing this funding program to the degree possible.

Water

Discussions about water did not arise in many of the community consultations. However, Brynne Consulting believes that this is not due to a lack of concern about water but because many recognize that water is as essential as air and so assumed that is a "given" that it be incorporated into planning for agriculture. When we did hear about water, people expressed their thoughts and opinions with a passion likely based in the realization that without water life simply does not exist. People also saw water in context - water supplies and quality are directly impacted by the activities in the watershed.

One of the Slocan Valley's senior farmers, Frank Nixon, wrote in the March 23rd, 2011 edition of the Valley Voice about his decades long protest against logging that continues to threaten his farm's water supply and that of his neighbours. Brynne Consulting heard about the challenges of getting adequate water up to Lister in the Creston Valley and in Shoreacres we learned that farmers are restricted to the same volume of water for their crops as neighbours simply watering their lawns. Currently Robson and Ootischenia lack ready irrigation water access, though Ootischenia was once the site of thriving Doukhobor farms, supported with a reservoir, pumping plant and irrigation works.

"We don't know how much water we have so we don't know what population can be sustained by our water levels." The dykes of the Creston Valley helped to secure the valley bottom, known as "The Flats", from regular flooding of the Kootenay River. It must be stated that the dykes, along with other settler activities, negatively impacted the traditional use of the Kootenay River floodplain by the Ktunuxa Nation living in the area. However, reclaiming and protecting the 25,000 acre fertile valley bottom from flooding helped to expand agriculture in the area and protect homes and properties from damage. The miles of dykes are maintained by the various drainage and diking authorities in the

Creston Valley, supported by annual fees from area residents. Currently, the task of maintaining the dyke infrastructures, constructed decades before the various Columbia River damns, is made more difficult by the changing water levels resulting from releases

from the LIbby Dam reservoir. These rising and receding water levels are worsening the erosion of the dykes.

There are licenses on water systems across the RDCK, some dating back a century. These licenses are linked to the land and make water available for residential and farming uses. However, some water systems are "over-subscribed", meaning that no new licenses are possible. For some homeowners in communities like Edgewood the only other water access option, an on-site well, may not be a realistic solution. If there is no water, it doesn't matter how deep you drill, it still won't be there. While it may not seem that the RDCK is short of water, competing interests and development pressures on the existing supplies (aquifers and surface water) need to be addressed to ensure that the

population and eco-system essential needs can be met in the longterm. The RDCK's Regional Water Management Plan of 2010 will be a key resource in this area.

Further, both the Castlegar and Kaslo / Area D Climate Change Adaptation projects completed in 2010 identify water as a key issue to address going forward. Of the twelve actions related to water identified in the Kaslo /RDCK Area D report, eight of them identify the RDCK as one of the "The conversations around the Columbia River treaty only occur at a high level and we need to bring this back to the public and farmers - this discussion needs to be tied in to farming."

lead bodies for actions related to protection of water availability and quality, education, and preservation (Kaslo Appendix C). And in Castlegar "water emerged as a priority for the community by way of highest public concern". (Castlegar 19) Given that all life requires water, in a planning exercise that is looking longterm, it seems only logical and necessary to review water access, supply and quality issues relative to food production currently and going forward in the RDCK.

Land Use Planning

"Planning for agriculture's long term future must be grounded on a basic understanding of the unequivocal necessity of food" Planning for Ag, ALC, pg 7. Planning is a means of creating systems, programs and policy to support change prior to a crisis situation forcing it upon us. In the context of the land base, planning for its diverse uses helps to ensure that they are compatible with each other and, ideally, best suited to the particular characteristics of the land and of the communities that depend upon it. Planning can

help to reduce friction between neighbouring activities, promote lot sizes suitable to the intended use, and help to protect against encroachment into agricultural areas.

Not all areas of the RDCK have land use planning in place. However, where it is in place, a lot can be done to better support farming and a secure food supply for the RDCK residents. Zoning could be used to reduce speculation on agricultural land by ensuring that its 'highest and best use' is clearly understood by all involved to be agriculture realtors, land owners, RDCK staff and Directors - and by strengthening policies and decision making processes to foster that use.

Larger plots of land are necessary for the economic viability of many forms of farming.

According to the Agricultural Land Commission, British Columbia has one of the most heavily parcelized land bases in Canada. The addition of a house on each lot increases the cost to acquire the land for farming. Given how little agricultural land exists within the RDCK, aggregating the parcels back into larger lots could help create efficiencies on the farm. However, with diverse ownership, this is not likely a reasonable or easily achieved objective.

Further parcelization of agricultural land can be protected against through two measures: by disallowing any new subdivisions on agricultural land; and by identifying nonagricultural land that is suitable for subdivisions and higher density development. The latter is particularly important in the Creston Valley where urban encroachment and periurban estates undermine the agricultural capability of the Valley. Limiting the expansion of urban areas into farmland also has benefits for the cities, aiding in the development of more compact and efficient communities, lowering per capita service costs and fostering walkable communities and healthy residents.

Small lot intensive agriculture is practiced in the RDCK and elsewhere and can be quite lucrative if the market is there for those particular products. Small lot agriculture tends to be more labour intensive since there is no room for the scale of equipment that allows for mechanized production. Therefore, to support the level of human labour necessary on a small farm, crops have to be high value with a market to match such as farmers markets, specialty stores and restaurants. Given the small population base of even the largest of the RDCK municipalities, these markets can only support a limited number of such farms before they are saturated.

Outside the Creston Valley, the scarce flat land base has already limited parcel size. Throughout the region it is important to retain the agricultural lot sizes at the maximum possible to increase the potential for economically viable farm units. Zoning bylaws should be reviewed to ensure that they allow forms of agriculture best suited to the lot sizes of a particular area.

A review of rural residential zones is also warranted. It is not uncommon for RDCK rural residents to raise some of their own food, from fruits and vegetables to livestock. Some participants in the community consultations expressed concern about the limitations placed on their designated zones that restrict numbers of animals or locations of outbuildings. These so-called hobby farmers can contribute to a secure food supply of the RDCK. While they may never produce much more than their own families can consume, they nevertheless contribute to the food supply of the region. Should a regional study be undertaken to better match commercial agricultural production with the nutritional needs of the region's residents, the contribution of hobby farmers and backyard gardeners to, at the very least, the fresh fruits and vegetable supply, could free

up the agricultural land base and farmers to focus on supplying other dietary needs that may be derived from production systems requiring a larger land base and machinery.

Issues related to rural estates were raised at consultations across the RDCK. The more obvious issue is that they contribute to the loss of agriculture in the region, since the new landowners rarely have "Rural Estates tend to plunk new homes right in the middle of good farmland, making it harder to ever get that land back into agriculture." the intention of farming themselves. New homes and related buildings also drive up the land prices, often beyond the reach of those who wish to farm since the increased land values domino beyond the "rural estate" to neighbouring lands (see Stobbe). Some landowners may lease the land out for hay production, for example, allowing them to obtain the income threshold required to qualify for the farm tax exemption.

But more significant is the conflict between rural dwellers and their farming neighbours, whether or not they are full time commercial farmers. Noise and smell commonly associated with farm activities can be a source of friction. It is unlikely that prevailing winds are commonly factored into zoning or development decisions, but they have a huge and longterm impact on those living there. The old saying "good fences make good neighbours" does not apply to noise and smell.

Good fences and owner control do apply to another area of conflict that was raised in community consultations. Guard dogs are common on many rural properties but they can do serious harm to domestic livestock, even killing them. Such conflicts are hard to resolve in a way that satisfies all or adequately compensates the farmers for the damage to or loss of livestock.

Much of this can be addressed through bylaws, from animal control measures to buffer zone requirements. Where buffer zones are required to mitigate visual, noise or dust conflict, these must not reduce the area available for agriculture. This approach to buffers has been incorporated into some of the RDCK planning already.

Whenever possible the mitigating measures should be put in place on the nonagricultural property where the owner does not rely on the land base for a livelihood. Educational materials disseminated through realtors, chambers of commerce and tourism centres could be developed to ensure that those who move into agricultural areas understand that they are essentially living in an active business district. While agriculture retains the lovely pastoral scenes that so many appreciate and are drawn to, either for a day or for a lifetime, the preservation of that scenery happens through the day-to-day, noisy, messy, dusty and necessary work of farming.

Rural-Urban Fringe Issues

While rural-urban fringe issues arise throughout the region, this section will focus on what is characteristic of the Creston Valley. Because this area contains the largest flat valley bottom in the region suitable for agriculture, along with desirable residential attributes, the rural-urban interface issues are most pronounced there. The following provides more specific details.

According to the 2001 Creston Valley Agricultural Land Inventory Project, 48% of the land in the Creston Valley was part of the ALR. Of the ALR lands, 11% was located within the Lower Kootenay Indian Reserves and 18% was located within the Creston Valley Wildlife Management Area. So in actuality only 71% of all ALR land in the valley is available for agriculture and within the jurisdiction of the RDCK. At that point in time, only 20% of the land within the ALR was actually being used for agricultural purposes according to the BC Assessment Authority records, and many prime agricultural areas were being used for residential properties as well.

Of the lots being used for agriculture, the majority (29.4%) were greater than 10

hectares, with the second most (20%) common lot size being 2-3.99hectares, while only 3% were under .2hectares in size. The majority of properties larger than 10 hectares were used for grain and forage production, whereas the smaller lots tend to be used for fruit tree production in the Creston Valley. The portion of the Valley referred to as the "Creston Flats" has the best agricultural land in the area, with the majority in Class 1 or 2 soils, and over half the properties were greater than 10 hectares, while the other half was a fairly broad mix of property sizes.

The "Central Benchland" area which includes Erickson, Canyon, and the Goat River Bottom was predominantly comprised of lot parcels between 2-4 hectares in size, and is where the fruit tree production is most abundant in the region (with 60% of the properties producing mainly fruit). The next most common land parcel size was between 1-2 hectares, and while some of these were used agriculturally, others served primarily as residential properties. In 2002, there were only 7 properties in this area that were greater than 8 hectares, and none of these were used for fruit production. The beautiful vistas and mild climate of this particular area has resulted in markedly more competition for the land and water that supports agricultural activities by those who are inclined to use the land for residential, recreational, and wildlife habitat purposes. "Southeast Creston" comprised of the areas commonly called Lister and Huscroft and lands south to the US border, was generally parceled between 6-10 hectares in size and small scale farming was most common here. Grain and forage, dairies, and mixed farms represented the majority of production here, yet water quantity is seen as the primary limiting factor for increasing output in this area.

When agriculturally suitable land is viewed favourably by those looking to develop residential, recreational, or wildlife areas instead, smaller parcels are often purchased and turned into hobby farms with horses or rural estates, and this tends to start a pattern of higher land prices on these types of properties because of a speculative market. Furthermore, it becomes more costly for farmers to manage their operations which end up getting spread out over several smaller parcels. At times this can create rifts in communities when non-farming residents start dominating land and water use decisions, in areas that are generally still agricultural (CVAI). While it is difficult to say how significant this issue is currently, these issues do prevail in the Creston Valley where one young farmer who came to a consultation for the Agricultural Area Plan was working four distinct tracts of land to comprise his small farm.

Municipalities - where the eaters live

The last 100 years saw a dramatic shift as people moved from the country to the city, with 85% of BC's population classified as urban, according to the 2006 Canadian Census (in 1921 it was 47%). In the RDCK, we buck that trend with more than 61 % of our population living in communities with a population of 5000 or less (according to 2009 Province of BC population estimates). Urbanization has advantages for local governments since a critical mass of people have accumulated in a confined space to enable more efficient service offering. This critical mass of people also offers efficiency in the distribution of agricultural goods through a range of venues, from grocery outlets, to restaurants, institutions and farmers markets.

Producers of any goods in the RDCK, food-based or otherwise, looking to sell them within the region are faced with the considerable distances between each of the communities. The distance factor is exacerbated year round by various barriers on the road - from rock slides to avalanches to recreational vehicle convoys. However it is still more efficient for the farmers to move their product to the population centres than for the people to all travel out to the farms. Purchasing and handling policies can be barriers for food producers with some of the larger chains and institutions in the cities. But policies can be changed, with proper encouragement.

The role of municipalities came up in many of the community consultations across the region, both rural and municipally-based. Municipalities are seen as having a key role to play in supporting and promoting production and consumption of local goods. Participants in the consultations identified a range of possible mechanisms that a municipality can pursue to support the RDCK food system. These include:

- the donation of land for a permanent farmers market;
- promotion and support of the farmers market as a contributor to the social and financial economy of the community and the health of individuals;
- the use of zoning bylaws and building permits to encourage or require a percentage of local product on grocery shelves or restaurant menus;
- zoning that enables a hub for regional food storage and distribution;
- zoning that allows urban farming, including vegetables, fruit and livestock, within reason;
- the use of edible landscaping in public spaces, from fruit trees to ground crops;
- the incorporation of agriculture and food in their sustainability and emergency preparedness planning.

Most of the cities within the RDCK are constrained by mountains and bodies of water in terms of their growth. This geographical reality has meant that we have had to adhere to some of the principles of Smart Growth by necessity.

Where agricultural land juxtaposes municipal boundaries, care must be taken to ensure that population growth within the city does not result in the loss of agricultural land, wherever possible. Land suitable for agriculture is also generally highly desirable for residential or commercial development, due to the fact that it is normally flat, welldrained and cleared land. However, as was repeated often in all the forms of community input to this project, once our agricultural land is gone, it cannot be replaced and can be virtually impossible to reclaim for farming. With only 2.5% of the RDCK land base suitable for agriculture, there remains 97.5% available for all the other uses. When municipal boundary expansion is under consideration, ideally that expansion should not be at the cost of irreplaceable agricultural land.

Agricultural land bordering municipalities can offer a host of opportunities for the farmers and for community members. The simple proximity to the city means that time spent off the farm getting product to market is reduced. It also enables an easier connection for those interested in learning more about farming and the sources of their food, whether it be a class of elementary school children or a college culinary program.

The farm / community connection can also address waste stream issues. By having a strong link between urban dwellers and farmers, household food waste could be captured as food for livestock or as feedstock for composting that will retain at least some of the

food nutrients and return them to the soil.

Public attitudes toward Agriculture

In a 2008 poll, nine-in-ten (91%) residents agree that "it is important that BC produce enough food so we don't have to depend on imports from other places", and significantly this number was 8 points higher than how residents responded only 4 years earlier (Ipsos Reid). Another recent survey revealed that 38% of the general population of BC believe that economic and financial issues are the most important issue facing Canadian agriculture, while 18% believe it is rural communities/sustainability of Canadian agriculture (Agri-Food Canada 2009). There is obviously a lot of interest in maintaining a strong agricultural sector in the province, as well as ensuring that it is economically viable and a contributor to the wellbeing of the rural communities.

Statistics like these are supported by the surging popularity of the urban agriculture movement and farmers' markets, not to mention the huge increase in the number of people trying to grow a bit more of their own food. There is also a steadily increasing willingness to pay a premium for locally-produced agricultural products, suggesting a healthy public attitude towards agriculture today. Indeed of the close to one hundred consumers in the region who completed a survey for this Plan, 45.5% were willing to pay between 10-20% more for local produce, and 39.8% were willing to pay a 20-50% premium for local food. Furthermore, though the Kootenay Local Agricultural Society has only been issuing memberships for the past two years, there are now one hundred members. Many of them are not seriously involved in food production but are members because they are supportive of the work of the Society. This said, not unlike elsewhere in North America, people have grown accustomed to food being unrealistically cheap - that is, cheaper to buy that it is to produce at times - and an evident gap exists between people's concern for farmers and agriculture and what they expect of food and its costs.

Partnerships

Local governments clearly cannot tackle all the needs and issues facing farmers and regionally-based food systems, many of which have been elaborated upon earlier in this document . This is due to various limiting factors: the purview and mandate of local government, its sphere of influence, and the scope of its tax base which provides the financial wherewithal to pay for the services it offers. But partnerships and co-operation have a long history of accomplishments within and outside this region, leveraging the resources and knowledge base of various parties for the benefit of the whole.

Brynne Consulting has approached this project with the goal of identifying priorities as well as realistic actions - those measures that can actually be achieved within the RDCK. But many of the needs and dreams identified in our community consultations cannot be tackled by the RDCK alone. The RDCK role can be simply that of convener with available meeting rooms - bringing people or groups together often launches new partnerships that continue without any further support. In addition, the RDCK has influence with key or potential partners that could far outweigh that of individuals, farm or food security organizations in the region.

Case Study: Many great initiatives have been launched with project funding but frequently cannot be sustained if they are not tied to established organizations, ongoing funding or operate on a fee-for-service basis with enough subscribers to support the necessary infrastructure. The Richmond Schoolyard Society is an example of a school gardening program that has a broad range of partners sustaining the program, from the City of Richmond and the local School District, to the Northwest Culinary Academy, the Richmond Food Security Society and Master Gardeners of BC:

"The Richmond Schoolyard Society is a non-profit community-based project that connects elementary and high school students with the earth, the community around them, and agriculture at large. The Schoolyard Project is based on three simple concepts:

learn ~ Children learn about organic gardening, our impact on the environment, and soil science.

grow ~ Children enjoy hands-on opportunities to plant seeds, turn compost and harvest vegetables.

nourish ~ Children nourish themselves with delicious dishes made from produce grown in the garden and nourish the community by donating excess crops to the Richmond Food Bank.

Working with adult volunteers from the community, children learn to grow, harvest and eat nutritiously. Outdoor classroom activities integrate the complete food cycle, from seed to table and from table back to soil. Activities are aligned with the school curriculum, helping to cement learning by integrating classroom concepts." (www.kidsinthegarden.org/about-us/ how-we-do-it) See also a Youtube video of the Schoolyard in action.

We heard how important children are in educating their parents, pointing to the success of school-based recycling programs that enabled knowledge transfer from the classroom to the home so that recycling eventually became the cultural norm. School-based learning sets the stage for career choices, lifestyle choices and lifelong learning. The newly launched Edible School Grounds Network based in School District #8 is an exciting initiative with energy and enthusiasm to bring gardening and cooking skills to our children in the school setting. There are undoubtedly partnership possibilities between the school districts of the region and the RDCK to promote and expand hands-on food-based learning opportunities. If the school gardens are complemented by, for example, edible landscaping in public places or community-based composting programs, the uptake in the general population beyond those with school-aged children will be increased.

While the impact of the meat inspection regulation has been a blow, locally-based meat systems are also challenged by the lack of experienced butchers. Integrating a butchering course into the Selkirk College culinary programs could help to create a local pool of skilled labour. With such a labour force in place and licensed slaughterhouses, local livestock producers can benefit from the interest in the provenance of food (for example, the 100 mile diet), coupled with a widespread concern about farm animal

welfare.

The RDCK is home to many urban refugees, many of them seeking a "back to the land" experience without ever having experienced "the land" in the first place. This does not seem to deter them from wanting to be farmers. Since founding the organization, Jan Wright, the Executive Director of Kootenay Career Development Society, has been tracking clients interested in farming. The numbers increase every year. It is likely that other career development and business start-up service agencies around the region experience a similar level of interest amongst their clients. With the right mix of funding, creativity and partnership, it may be possible to develop a suite of training programs that could include basic business planning, marketing, and a mentoring program involving established farmers as paid mentors.

The new joint initiative of Selkirk College and the Columbia Basin Trust, the Rural Development Institute, could be instrumental in developing the data necessary to better identify, for example, the core dietary needs of RDCK residents relative to the agricultural production possibilities of the region (see the next section on a Secure Food Supply).

The RDCK is home to three separate credit unions. The RDCK could use its influence to encourage the creation of regionally-based farmer-friendly loan programs and credit counseling services. The promotion of farms and farm product to regional residents and visitors could be done through a partnership with chambers of commerce, tourist information centres, the Kootenay Real Estate Board, farm organizations, and others.

The Columbia Basin Trust would be a key ally in providing information that could help in addressing the needs of the Creston Valley dyke system, as discussed earlier in this section. Since the water level management by the Libby Dam is increasing the maintenance requirements of the dyke infrastructure, this could be included in negotiations of the Columbia River Treaty. The Province has committed to consulting those impacted by the Treaty and so it is reasonable to expect that the RDCK will have influence on the substance of those negotiations. The two RDCK Directors appointed to represent the Region in the negotiations could carry this message forward.

The Association of Kootenay Boundary Local Governments, the Ktunaxa, Sinixt and the Columbia Basin Trust are also obvious partners in a regional initiative to preserve and protect water resources and ensure that water use is prioritized for essential activities and services. The water sheds of this region do not coincide neatly with the political boundaries of the Regional Districts but the Canadian portion of the Columbia Basin is a logical reference for water-based initiatives.

Participants in the community consultations expressed the need for access to good quality reference materials. While there is much available on the internet, not all communities in the RDCK have high-speed internet access readily at hand. Many also prefer to sit with a book rather than stare at a screen. The public libraries of the RDCK could be encouraged to stock up on materials related to farming and gardening. These could take the form of books but might also include DVDs and listings of internet based resources, from downloadable materials to archived webinars, serving a range of learning styles. Area farm and food security organizations could help with compiling lists of suitable and useful materials.

Social service agencies may not be obvious partners in food systems work, but many of them are already fully engaged, at least on issues related to food access. Nelson CARES has supported the Earth Matters project for many years. Earth Matters is responsible for the creation of the Hendryx Demonstration Forest Garden in Nelson, training on composting, and outreach to schools and youth on themes related to food and agriculture. Arrow & Slocan Lakes Community Services received a grant to build a community garden to provide their clients with healthy food and a place to work co-operatively. Salmo Community Services is convening a food security group that

is revitalizing their farmers market and identifying other services and priorities related to food for area residents.

North Kootenay Lake Community Services Society likely has the most broadly-based food security programming. As mentioned earlier in the report, their suite of projects address hunger and access in the community as well as the need for Kaslo area farmers to access fair markets for their goods.

Most of these agencies run the programs "off the side of their desks", with project funding that can be unreliable or come in fits and starts. It may be possible to obtain more "There is a problem with funding projects in this area because nobody can get the money to do what they need to do well. Instead they are giving out little drips and drabs and nobody can do much with it...If there was a partnership with the Columbia Basin Trust, so much more could be done for funding real and bigger projects."

reliable programming and funding if the efforts of all interested social service agencies were co-ordinated and perhaps allied with agricultural or food security organizations. The Kootenay Boundary Community Services Co-operative could play a key role in such an effort.

Lastly, the RDCK could play the role of convener or co-ordinator amongst the farm organizations and food security groups across the region. It could be very useful to establish a regional organization that maintains connections and communication amongst the various farm and food security organizations of the area and have it formally linked to the RDCK. However, the geographical reality of the region - long distances, difficult highways and mountain passes - combined with the fact that many of the organizations are run almost exclusively on volunteer effort adds extra challenges to the sustainability of such a pan-regional group.

There are certainly organizations that connect far-flung members, such as the Kootenay Boundary Community Services Co-operative mentioned above. However, such regional groups benefit from having a membership with staff who are funded by their respective employers to participate in the group. For farmers to participate in any meetings generally means a loss of income since they are not on the farm doing work; while food security organizations are predominantly populated by volunteers whose paid labour may have nothing to do with farming or food security. Thus, before instigating any regional group, careful thought must be put into strategies and support mechanisms that could create a sustainable group with a stable membership. Having a certain level of consistency and continuity in such a group will help to build its efficacy as a regional reference group, resource and catalyst.

Secure Food Supply

Food Insecurity

The term food security is often thought of an an issue of poverty and access. This is an important component of food security and is a harsh reality for many RDCK residents. The first food bank appeared in Canada in the 1981 and was intended to be a temporary measure. According to Food Banks Canada, as of March 2010, there were more than 900 food banks in Canada feeding 867,948 people in "The RDCK has very poor food security. There are so few farmers, and all the younger farmers I have met are simply unable to make a go of it here. Costs are high, land is not inexpensive, and there isn't a premium paid for local and organic (as there is in the city). I think a lot of people here wax poetic about food security, but when it comes to paying their farmers, are unwilling or unable to do so. If it continues to be impossible for new farm businesses to succeed here, we will continue to see attrition as older farmers retire, or 'sell the farm' to attain a much deserved lifestyle improvement."

that month alone with almost half of them running solely on volunteer staff. Emergency food provision services have become a necessary feature in our communities, and whether they are known as a food bank or cupboard, their use has only increased in the past 30 years. Communities across the RDCK have emergency food access programs which often struggle to keep food stocks in line with the demand, never mind with the nutritional guidelines of Health Canada.

The impoverishment of people does not mean that they deserve or desire good quality food any less than the rest of the population. When asked his vision of a local food system, one client of the Nelson Food Cupboard spoke of affordable, quality foods that match what he likes to eat. Unfortunately, given that his daily budget for food is \$7, this is a luxury he can rarely afford.

The Dietitians of Canada have tracked the cost of food for more than a decade and published their first report entitled The Cost of Eating in BC in 2005. The report draws on the National Nutritious Food Basket tool developed by Health Canada as a representative nutritious diet for a variety of individuals. The 2009 report indicated that the cost of food for a family of four on income assistance is 217% of their food support allowance. Since that 2009 report, the cost of food continues to rise, as does housing and transportation.

One advantage of having a locally based food system is that there is more opportunity to insert community values into the system. While many of the chains stores participate in the BC Sharing program, locally-based food stores, bakeries, food processors and farmers are frequent donors to organizations throughout the RDCK that offer food to their clients. Direct relationships between the community organizations and the farmers and food producers of the region help to ensure that quality, seasonal and fresh foods can be made available to those who might not otherwise be able to access, for instance, farm fresh eggs.

A shining example of a local food initiative that integrates community values is the Food Hub in Kaslo. It has been described earlier in this report but is worth mentioning again because of its success in integrating fair prices for local farmers with the provision of quality food for those who are hungry. By promoting and providing a market for the local farmers and then charging a small premium on the food purchased, they are able to fully compensate the farmers for their crops, make them available to local consumers in a central market, and stock a barrier-free food bank for community residents who need help with their food supply. This is a model worth replicating across the RDCK.

Resiliency

However, this agricultural plan has the goal of a secure food supply for all residents of the RDCK. Best estimates are that upwards of 95% of the food consumed in the RDCK is imported. With the ever increasing cost of fuel, weather events and patterns that are wreaking havoc in some of the key food producing areas of the world, and political instability in others, there is evidence that our long supply chains are becoming increasingly vulnerable. If these supply chains are disrupted, then all residents of the RDCK, no matter what their economic status, become food insecure when we rely on those chains for the essentials of our diet. Further, even when food arrives readily on BC shores, there is no guarantee that it will make it to the RDCK.

Every longtime resident of the region has experienced closed highways due to mud and rock slides, avalanches and traffic accidents. Based on the business inventory strategy known as "just in time" deliveries, most grocers have only three days worth of food on their shelves, assuming normal business volumes. When a crisis hits that interferes with those deliveries, food shortages can occur. This points to the wisdom, both at a

regional and household level, of integrating food and water into emergency preparedness planning. This project and the resulting agricultural plan could be used to help put systems in place to support resilient communities able to withstand a range of crises.

"Regional food security is 80% doable. But, farmable land, skilled farmers and a reasonable economic return have to exist."

Planning processes are generally for the long term, and not just for emergency situations.

Planning for region-wide, communal food security based on local supplies would entail a significant shift and increase in production. According to a Ministry of Agriculture 2006 report, BC is 48% food secure, based on a review of the population base compared to the volumes of dairy, meat & alternatives, vegetables, fruit and grain produced in the province (MAL 2006).

A more detailed study was undertaken of New York state that includes an analysis of a "complete diet framework" and the repercussions of various dietary choices and nutritional needs on the land needs of each diet. Their analysis determined that for a diet based on 190g of meat consumed per day and 30% fat, the land base of the state could feed only 21% of the population. The researchers caution that "Future research on the resource requirements of diet should not consider the impact of individual foods in isolation, but in the context of a complete diet and a complete food system" since the proportion of fat in a diet, whether vegetarian or meat based, impacts the land necessary.(Peters et al. 2007).

It would be an interesting exercise to better understand the carrying capacity of the RDCK landbase relative to essential dietary needs of its residents. However, for many

this would be an academic indulgence that would only be of use if it then concretely impacted both the production and consumption patterns of the Region. A more useful endeavour may be to better understand how much of the food produced here is consumed within the region. Estimates are that 90% of the food produced in the Creston Valley is shipped out of the region5. This could be due to a variety of factors, some of which are undoubtedly economic - if the market is more lucrative for cherries in Japan or the UK, then it makes good business sense for the farmer to ship there. Other factors could include the loss of processing, storage, distribution and marketing

"Over the past 30 years, agriculture has become disconnected from food - all major crops leave here and come back in a different 'food' form." infrastructure. By understanding what constrains local product from being consumed in the RDCK, we can better identify the mechanisms necessary to direct product to the households of the region.

The RDCK goal of securing a food supply for residents does not assume 100% self-reliance. And given the very small agricultural land base in the region, 100% self-reliance may never be possible, even under optimal conditions with enough knowledgeable

farmers to work all the available land. It must also be stated that 100% food selfreliance may not actually be a wise goal. It may make more economic and environmental sense to import goods from other areas that can grow them more readily. Given our land and climate constraints and disparities, even within the region, an analysis should be undertaken of the comparative advantages of different locations relative to their productive capabilities. Some areas of the RDCK are clearly more suited to commercial scale grain production than others, simply because of the lot size necessary. In contrast, given the scarcity of farm labour, large lots do not lend themselves readily to the type of intensive vegetable production that can be handled on a couple of acres.

We will also never be able to produce many of the foodstuffs which have become staples in North America, such as coffee, chocolate, bananas, and avocados. However, individual households can contribute to a regional food system. It is not likely that a backyard garden, or even large rural spread managed by those who work full-time elsewhere can meet the complete dietary needs of those who live there. Nonetheless, a significant amount of vegetables, fruit and even protein needs can be met on small parcels of land. One has only to look to the so-called Victory Gardens of the first and second World Wars to realize the volume of food that can be produced. Victory Gardens provided as much as 40% of the vegetables produced in the USA in the second world war (Heinberg, 2006). Chickens are raised by peasants around the world as a cheap source of protein (through eggs and meat) that does not place high demand on land or feed.

Should food shortages globally threaten the supply of food for RDCK residents, by having households focus on producing what they can, regional farmers could focus on the crops and essential dietary needs that require more land base, equipment and infrastructure. For those observing the impact of increasing fuel costs and of increasingly severe and unpredictable weather events around the world attributed to climate change, building our local food production capacity is only common sense. This may require a revisiting of zoning bylaws in both rural areas and municipalities to ensure that this sort of food production is an allowed activity.

⁵ Interview: Don Low, Manager of Sector Analysis Unit, BC Ministry of Agriculture, 17 December 2010.

A recent report by the George Morris Centre highlighted another reason that household practices are critical to a secure food supply. The document, entitled "Food Waste in Canada", reports that an estimated \$27 billion worth of food is wasted annually in our country. Of that amount, more than half of it is from food thrown out at the household level. This compares to 9% waste in the field. (Gooch et al, 2010) This little-known fact could ease the pressure to increase agricultural production if we would eliminate the waste of food in our own homes.

Public attitudes toward Agriculture

In a 2008 poll, nine-in-ten (91%) residents agree that "it is important that BC produce enough food so we don't have to depend on imports from other places", and significantly this number was 8 points higher than how residents responded only 4 years earlier (Ipsos Reid). Another recent survey revealed that 38% of the general population of BC believe that economic and financial issues are the most important issue facing Canadian agriculture, while 18% believe it is rural communities/sustainability of Canadian agriculture (Agri-Food Canada 2009). There is obviously a lot of interest in maintaining a strong agricultural sector in the province, as well as ensuring that it is economically viable and a contributor to the wellbeing of the rural communities who tend to support it most directly.

Statistics like these, and the surging popularity of the urban agriculture movement and farmers' markets, not to mention the huge increase in numbers of people trying to grow a bit more of their own food, along with the steadily increasing willingness to pay a premium for locally-produced agricultural products suggest a healthy public attitude towards agriculture today. Indeed of the close to one hundred consumers in the region who completed our survey, 45.5% were willing to pay between 10-20% more for local produce, and 39.8% were willing to pay a 20-50% premium for local food. Furthermore, while the Kootenay Local Agricultural Society has just been issuing memberships for the past two years, there are now one hundred members, and while many of them are not seriously involved in food production they are very supportive of the work of the Society. This said, not unlike elsewhere in North America, people have grown accustomed to food being unrealistically cheap - that is, cheaper to buy that it is to produce at times - and an evident gap exists between people's concern for farmers and agriculture and what they expect of food and its costs.

Public and School Education

Gardening requires a knowledge base that has deteriorated over the past several generations. It went from being an essential household survival mechanism of the Great Depression and World Wars of the last century to being a luxury pastime that may not even produce edible crops. Community "We aren't producing enough - the education needs to start in early school years to cultivate this value that is not always in the home school gardens, REAL food instruction throughout the school years."

gardens and school-based gardening and culinary programs are bringing about a resurgence in gardening and cooking skills, starting with the youth.

School connections with gardens and whole foods is not yet as wide-spread in BC

as some wish. In the RDCK, part of the challenge of integrating gardening into the curriculum is the inherent mismatch between the school year and the growing season. However, this can be overcome as evidenced by the growing number of school gardens here and the recent launch of the Edible School Grounds Network. Having a garden on-site at the schools builds environmental awareness amongst the children, an understanding of how some of their food is produced and an enthusiasm for eating their vegetables. Instilling in children and youth the knowledge of soil properties, the interaction of soil, water and air with plant life, and the growing cycle of plants provides them with an important lifeskill. Moreover, the connection with whole plants and foods and integration into school curricula can help to build the knowledge base about where most of our food comes, the impacts it is having on the health of our ecosystems and human populations, and what more sustainable, longterm options might be.

"In reviewing finances for our operation, I feel insulted at the exceptionally low income, and this impacts not only the economic sustainability of the operation, but also my self-esteem and interest in continuing." Beyond the school garden component, children can benefit from strong links between the schools and nearby farms. Farm tours provide a host of educational opportunities, not the least of which is about the importance of farmers and farming in our communities. With less than 2%

of our population actively involved in farming, many people never have any contact with farmers. It is easier to dismiss them and not value their work and product when they are faceless.

Case Study: For the past 17 years, Alison Bell has been the Chef Instructor at David Thompson Secondary School (DTSS) in Invermere, BC. The school's cafeteria, the Rocky Mountain Café, is used as a venue to teach the fundamentals of professional cooking. The students prepare delicious, healthy foods for the entire school community. The Chef Training program at DTSS has been recognized provincially and nationally for its healthful and innovative approach to cuisine. Culinary students are taught the importance of a sustainable local food system through farm visits, by taking part in the harvest at local farms and by producing salad greens, herbs and edible flowers in the Community Greenhouse at DTSS. Recently, Alison deepened the students' understanding of meat by bringing a side of beef and a hog carcass into the class. This provided the students with hands-on training in the location on the carcass of the different cuts of meat. One student was so inspired by the experience that he has since enrolled in the meat processing program at Olds College in Alberta. (2010 personal communication from Alison Bell)

Creating interest in and knowledge of gardening and farming in the next generation will help to raise the profile of farming as a career choice. It is a long time since farming was promoted as a career choice to our youth, but without young people entering farming, the alarmingly high average age of farmers in BC will only increase. However, to learn the host of skills necessary to successfully farm, across the diverse agricultural sectors (ground crops, livestock, fruit, for example) we need to rebuild targeted training programs with supportive programs to encourage enrollment. Models already exist in other sectors - we just need to transfer them over to agriculture. Among the suggestions put forward at the community consultations were the following:

- scholarships for farmers in training;
- loan programs that include the forgiveness of the loan if they actively farm for a set period of time as is done for medical graduates who work rurally;
- incentive programs and links to high school classes like those for trades such as electrical or mechanical;
- agricultural degree co-op programs that formally recognize knowledge acquisition from on-farm placements.

The Ministry of Agriculture's Strengthening Farming program has a series of publications aimed at different audiences, from farmers to land use planners, to the general public. Historically, the Ministry's extension service also included practical how-to guides that were readily available to those needing help with creating infrastructure or managing production on their farms and homesteads.6 A more recent publication, The Countryside and You is still available but somewhat dated in content and appearance. This valuable document helps non-farming rural residents to understand what it means to live in neighbourhoods with active commercial farms. Updating and widely disseminating this publication could help to build awareness and support for farming in rural communities. The need to educate newly-rural residents was raised at many community consultations. Rather than creating an RDCK-specific document, it would undoubtedly be more efficient to update the Ministry of Agriculture publication.

Production Practices

Production practices were raised as an issue in some of the community consultations. Various participants, farmers and "eaters" included, raised concerns about genetically engineered crops. Others pointed to the reduction in harm to the environment that is generally associated with organic practices.

The RDCK is home to two farm organizations that promote ecological management practices: Kootenay Organic Growers Society (<u>www.kogs.bc.ca</u>) and Kootenay Local Agriculture Society (<u>www.klasociety.org</u>). Both organizations provide support services to their members and they also do certification - KOGS to the provincial organic standards

and KLAS to its own sustainable standards. Between the two organizations and including non-farmer associate members, the membership is approximately 200, with one quarter of the members certifying. The certifying member represent less than a tenth of the registered farms in the RDCK (562 as of the 2006 census).

"Food security should be a much higher priority for everyone. It could be a major economic driver in the region if we got it going."

The organic market has had consistent and strong growth for the past two decades. According to Statistics Canada, there was a 66% growth in the value of organic products sold in Canada in 2008 over those sold in 2006.

⁶ Interview: Corky Evans, 24 January 2011.

However, the land under organic production in Canada in 2005 was only 1.6% of the total agricultural area in the country (Willer and Yussefi, 2005). And despite the fact that fingers are pointed at conventional agriculture and intensive livestock operations as the source of an array of environmental harms, organic management is still only practiced on a small percentage of North American farms.

This is likely due to a number of factors. Some may be philosophical or political in nature, but most often farm decisions are necessarily dominated by economic factors and needs due to the fact that profit margins, where they exist on a farm, are generally slim. And though production methods formally recognized as organic have been around in North American for more than four decades, there are still sectors within organic farming that are poorly developed, hampering everything from access to production aids to market penetration. If farmers are to shift from chemically dependent practices or genetically engineered crops, it has to be demonstrated that there will be net benefits to the entire farm operation and that it is not merely a temporary fad that the consumers will grow tired of. Part of the reason that creating an agricultural area plan for the RDCK makes sense is that it necessarily factors in a long term vision - a fundamental in any farm operation.

The Path From Here

The Agricultural Area Plan is strongly rooted in the information gleaned from the community consultations. The input of community members has been analyzed to identify possible steps that the RDCK can take to address the issues, needs and dreams raised across the region. Priority areas have been identified through a review of community input. These priorities have been grouped under the three goals of the agricultural plan and are included in Section 12 above, aggregated for the entire RDCK and broken down by Electoral Area.

In an effort to foster the highest level of implementation for the Plan, Brynne Consulting has focused on mechanisms that are within the purview and sphere of influence of the RDCK. There are inevitably many needs and issues related to agriculture and food systems that are beyond the realm of the RDCK - the efforts to address these must lie with other agencies.



Appendixes





INPUT-OUTPUT MODELS AND THE MULTIPLIER EFFECT

An input-output model is a detailed accounting of regional industries. It provides estimates of the amounts and types of inputs that local industries purchase from local suppliers and from imported sources. These linkages form the basis for calculating the multiplier effect that changes in production may have within the region. For example, if production in a sector increases, then production in the sectors that supply goods and services to support the increase will also rise. In turn, sectors that supply goods and services to the supporting sector will increase, and so on.

The total economic impact is composed of three effects; direct, indirect, and induced. Direct effects are the value of new production, processing, and retail output, and the additional jobs and labor income generated. Indirect effects measure the total value of locally supplied inputs and services provided by businesses that serve the producers (e.g., machinery, feed, seed, fertilizer, financial services), and processing and retailing activities. Induced effects accrue when workers in the direct and input supply sectors spend their earnings in the region. Input-output modeling is one of the most accepted means of estimating economic impacts. This is because it provides a concise way of articulating interrelationships among industries and regions. Resulting simulations are designed to help understand intrinsic economic gains from the value of production shifts within an economy as local food production increases. Scenarios must be thoughtfully conceived, and rely on accurate detailed data.

However, these models have several limitations. For example, they do not indicate whether households, on average, are economically better off. Also, there may be costs to production shifts that are not identified in simulation models.

Sources: Swenson, 2008; Horowitz and Planting, 2006.



SCIENTIFIC STUDIES

Claims of economic development impacts—in the form of income and employment growth—are common in local foods research. Ross et al. (1999), <u>Marketumbrella.org</u> (1999), Marsden et al. (2000), and Ikerd (2005) suggest that expansion of local foods may be a development strategy for rural areas. Zepeda and Li (2006), Darby et al. (2008), Lawless et al. (1999), and Starr et al. (2003) cite farmers' retention of a greater share of the food dollar by eliminating money going to the "middlemen" as a possible benefit. Roininen et al. (2006) assert that local food systems may encourage growth in local labor markets.



AGRICULTURE IN CENTRAL KOOTENAY REGIONAL DISTRICT

Agriculture in Central Kootenay Regional District

Prepared by:

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Table 1: ALR Designated Area (in Hectares)										
		ALR at						ALR		
		Designation		Gov't	Private	Total		March 31,		
	Total Area	(1974)	Inclusions	Exclusions	Exclusions	Exclusions	Net Change	2009		
R.D.C.K	2,213,072	71,539	803	7,315	1,102	8,417	7,614	63,924		

Comment on Table 1: Area in the ALR has declined by 7,614 ha (net) in Central Kootenay RD since 1974. Most of this decline has been as a result of Government exclusions. Generally government exclusions are generally to remove lands that were inappropriately designated. A total of 1,102 hectares in Central Kootenay RD have been removed by private applications since 1974.

Table 2: Number and Area of Farms										
Area of Farms		2006 2001								
Central Kootenay	farms reporting	acres	hectares	farms reporting	acres	hectares				
Total	562	67,554	27,338	609	67,474	27,306				
Owned	545	44,929	18,182	557	43,738	17,770				
Leased (Gov't)	15	12,192	4,934	18	8,018	3,245				
Leased (others)	114	11,164	4,518	127	13,375	5,413				
Share Crop	23	2,633	1,066	31	2,343	948				

Comment on Table 2: The number of Census farms declined in Central Kootenay between 2001 and 2006. The area farmed increased in Central Kootenay RD (+32 ha). The area farmed in 2006 represents 48% of the ALR land in Central Kootenay RD. *Note: A census farm has been defined as an agricultural operation that produces at least one of the following products intended for sale: crops (hay, field crops, tree fruits or nuts, berries or grapes, vegetables, seed); livestock (cattle, pigs, sheep, horses, game animals, other livestock); poultry (hens, chickens, turkeys, chicks, game birds, other poultry); animal products (milk or cream, eggs, wool, furs, meat); or other agricultural products (Christmas trees, greenhouse or nursery products, mushrooms, sod, honey, maple syrup products).*

Table 3: Total gross farm receipts (excluding forest products sold)									
	2	2005 2000							
	No. farms	Amount	No. farms	Amount					
Central Kootenay	562	\$30,004,374	609	\$26,218,599					
Average Sales/Farm		\$53,388		\$43,052					
Average Operating Expenses/Farm	562	\$47,966	609	\$40,416					
Weeks of Paid Work	187	12,675	206	10,587					

Comment on Table 3: Average farm sales in 2006 were less than \$60,000. The difference between average farm sales and average operating expenses (average net return) was very low, \$5,422 in 2006.

Table 4: Farms classified by total gross farm receipts (Number)									
	Total number	of farms	Under \$10,000						
	2006	2001	2006	2001					
Central Kootenay	562	609	323	378					

Comment on Table 4: There were a proportionally large number of small farms (less than \$10,000) in gross sales in both Central Kootenay RD (57%) and Kootenay Boundary RD (56%) in 2006.

Table 5: Farm Investment									
	2	006	2001						
Central Kootenay	farms reporting	market value	farms reporting	market value					
Total Farm Capital	562	\$383,640,115	609	\$261,876,101					
Land and Buildings	562	\$329,422,469	609	\$209,009,536					
Owned	549	\$265,589,869	580	\$165,548,361					
Farm machinery	562	\$45,041,320	609	\$37,303,486					
Livestock and Poultry	363	\$9,176,326	417	\$15,563,079					
Average Total Capital	562	\$682,633	609	\$430,010					

Comment on Table 5: The average capital value of farms was \$682,663 in Central Kootenay RD in 2006. Land and buildings represented 86% of the total capital value in Central Kootenay RD.

Table 6: Total area of farms									
		2006		2001					
	No. farms	acres	hectares	No. farms	acres	hectares			
Central Kootenay	562	67,554	27,338	609	67,474	27,306			
Central Kootenay A (Creston)	22	3,764	1,523						
Central Kootenay B (Creston)	215	15,732	6,367						
Central Kootenay C (Creston)	64	18,881	7,641						
Central Kootenay D (Upper Kootenay)	22	1,308	529						
Central Kootenay E (Nelson)	43	1,845	747						
Central Kootenay G (Salmo Valley)	32	7,117	2,880						
Central Kootenay H (Slocan)	57	5,866	2,374						
Central Kootenay J (Arrow Lakes)	44	3,982	1,611						

Comment on Table 6: The greatest concentration of farms is in Electoral Area B, while the largest acreage under cultivation is in Electoral Area C.

Table 7: Farms classified by total area							
	2006	2001					
Total number of farms	562	609					
Less than 10 acres	134	146					
10 to 69 acres	268	289					
70 to 129 acres	53	66					
130 to 179 acres	34	33					
180 to 239 acres	13	11					
240 to 399 acres	9	15					
400 to 559 acres	8	12					
560 to 759 acres	9	10					
760 to 1,119 acres	6	5					
1,120 to 2,239 acres	5	4					
2,240 to 3,519 acres	4	1					
3,520 acres and over	1	2					
A	48.6 ha.	44.8 ha.					
Average	(120.2 acres)	(110.8 acres)					

Comments on Table 7: Most farms are small in area, with 72% of all farms less than 70 acres (28 ha).

Table 8: Crops on Farms										
		2006		2001						
Central Kootenay	No. farms	acres	hectares	No. farms	acres	hectares				
Total land in crops	441	28,253	11,434	463	28,582	11,567				
Hay and Field Crops	11	x	x	15	2,064	835				
Mixed Grains	1	x	x	4	x	x				
Oats	16	344	139							
Barley	17	1,302	527							
Corn	13	766	310							
Rye	12	105	42							

Canola	7	1,857	752			
Total Vegetables	86	331	134	78	273	110
Fruits, Berries, Nuts	138	855	346	159	812	329
Greenhouse	40	191,836 ft ²	17,822 m ²	44	502,003 ft ²	46,638 m ²
Mushrooms	0	0	0	2	х	х
Nursery Products	25	301	122	34	206	83

Comment on Table 8: The area in crops represents 42% of the area in Census farms and 20% of the ALR area in Central Kootenay RD in 2006.

Table 9: Livestock/Poultry									
	200	06	2001						
Central Kootenay	No. farms	No. animals	No. farms	No. animals					
Cattle and Calves	194	10,871	225	11,520					
Pigs	30	189	42	349					
Sheep and Lambs	36	826	39	685					
Hens and Chickens	156	11,545	215	22,580					
Beef Cows	148	3,240	154	2,782					
Dairy Cows	20	1,582	29	1,735					
Horses, Ponies	144	799	148	854					

Comment on Table 9: Both the number of farms reporting livestock and poultry and the numbers of animals declined for all types between 2001 and 2006.

Table 10: Number of farm operators by paid non-farm work in the calendar year prior to the census									
	Total nu operator	mber of rs	No paid farm wo	non- rk	Less than 20 hours per week		More than 20 hours per week		
	2006	2001	2006	2001 2006 2001		2006	2001		
Central Kootenay	855	895	420	100	115	115	230	390	

Comment on Table 10: In 2006, 49% of farm operators in Central Kootenay had no off farm income. *Note: "Farm operator" has been defined as those persons responsible for the day-to-day management decisions made in the operation of a census farm or agricultural operation. Up to three farm operators could be reported per farm. Farm operators do not necessarily include all income earners in the farm household.*

Table 11: Total weeks of paid work									
	2005 2000								
	farms reporting	number of weeks	farms reporting	number of weeks					
Central Kootenay 187 12,675 206 10,5									

Comment on Table 11: In 2005, 33% of all farms in Central Kootenay RD reported 1 or more weeks of paid on farm work.

	Table 12: A	verage age o	of farm o	perato	rs				
	Of all farm	operators	On farm one ope	s with rator	On farms more ope	with two or erators			
	2006	2001	2001 2006 2001		2006	2001			
Central Kootenay	54.3	51.5	56.0	52.9	53.4	50.7			

Comment on Table 12: The average age of farmers was just over 54 years in 2006. On farms with only 1 operator, the average age was 56 years.

Table 13	8: Farms reportin	g farm related	injuries - 2006	
	total reporting injuries	to operators	to other family members	to other persons
Central Kootenay	26	22	4	3

Comment on Table 13: Farm related injury was reported on 4.6% of farms in Central Kootenay RD in 2006.

Table 14: Farms producing certified organic products							
Region	2006	2001					
Central Kootenay	24	23					

Comment on Table 14: Only 4.3% of all farms in Central Kootenay RD and 3.6% of all farms in Kootenay Boundary report production of certified organic products. **Data Sources:**

http://www.alc.gov.bc.ca/alr/stats/Statistics_TOC.htm http://www.statcan.gc.ca/ca-ra2006/index-eng.htm



Other Related Information

Table	Table 15: Regional Population							
	2006	2001	% change					
British Columbia +	4,113,487	3,907,738	5.3%					
RD Central Kootenay	55,883	57,019	-2.0%					
Central Kootenay A	2,041	2,125	-4.0%					
Central Kootenay B	4,575	<u>4,742 A</u>	-3.5%					
Central Kootenay C	1,284	<u>1,287 A</u>	-0.2%					
Central Kootenay D	1,525	1,500	1.7%					
Central Kootenay E	3,716	<u>3,521 A</u>	5.5%					
Central Kootenay F	3,730	3,907	-4.5%					
Central Kootenay G	1,605	1,354	18.5%					
Central Kootenay H	4,319	<u>4,472 A</u>	-3.4%					
Central Kootenay I	2,415	2,436	-0.9%					
Central Kootenay J	2,792	<u>2,930 A</u>	-4.7%					
Central Kootenay K	1,800	1,979	-9.0%					
Castlegar	7,259	<u>7,585 A</u>	-4.3%					
Creston	4,826	4,795	0.6%					
Kaslo	1,072	1,032	3.9%					
Nakusp	1,524	1,698	-10.2%					
Nelson	9,258	<u>9,318 A</u>	-0.6%					
New Denver	512	538	-4.8%					
Salmo	1,007	1,120	-10.1%					
Silverton	185	222	-16.7%					
Slocan	314	336	-6.5%					

Comment on Table 15: Between 2001 and 2006, Census Canada reports a population decline in both Central Kootenay and Kootenay Boundary Regional Districts. *Note: These initial population estimates have not yet been adjusted for Census undercount.*

A – Population total affected by boundary adjustment

Table 16: R	Table 16: Rural Development - Residential Building Permits (Total number of units)										
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total 1998 to 2007
Central Kootenay RD	356	331	228	203	161	151	175	349	297	352	2,603
Central Kootenay RD Rural	267	268	98	88	103	115	114	146	155	174	1,528
Castlegar, C	23	16	22	90	16	8	26	17	30	23	271
Creston, T	26	11	14	9	28	4	17	109	23	48	289
Kaslo, VL	9	2	3	1	1	5	2	35		6	64
Nakusp, VL	2	4	7	2	4	1	2	6	15	19	62
Nelson, C	27	30	84	12	8	18	14	33	66	78	370
Salmo, VL	2			1	1			3	8	4	19
Dew Denver							1	3	3	7	14
Silverton					1					6	7
Slocan City							1		1	2	4

Comment on Table 16: Over the last 10 years, building permits for over 2,300 new residences have been issued in Central Kootenay Regional District with 58.7% of these for construction in rural (Electoral Areas) areas.

[Amended (to remove Regional District of Kootenay Boundary) and used with permission.]



HOW MUCH FOOD DO WE NEED TO FEED THE KOOTENAYS

How much food do we need to feed the Kootenays?

Population	
Castlegar	15,000
Creston	5,000
Kaslo	1,000
Nakusp	1,500
Nelson	10,000
New Denver	600
Rossland	3,500
Salmo	1,000
Silverton	200
Slocan	300
Trail	7,000
Others	9,700
	54,800

Personal Food Co	nsumption*					
Food	Pounds/year /person	Oz/day/person	Oz/day/person	*Calories	Calories/year /person	Calories/day /person
		(dry)	(wet)	per pound		
Grains	170	7	22	1,550	263,500	722
Dry beans	70	3	9	1,600	112,000	307
Oil	25	1	1	4,000	100,000	274
Sugar	30	1	1	1,380	41,400	113
Sprouting seeds	20	1	3	2,560	51,200	140
Fruit and vegetables	500	22	22	200	100,000	274
Dairy	100	4	4	1,500	150,000	411
Eggs	35	2	2	650	22,750	62
Meat	50	2	2	925	46,250	127
Totals	1,000	44	67		887,100	2,430

* USDA recomended figures

Daily Consumption	Grains	Dry beans	Oil	Sugar	Sprouting seeds	Fruit and	Dairy	Eggs	Meat
						vegetables		Dozen	
	7	3	1	1	1	22	4	0	2
Castlegar	6,986	2,877	1,027	1,233	822	20,548	4,110	2,500	2,055
Creston	2,329	959	342	411	274	6,849	1,370	833	685
Kaslo	466	192	68	82	55	1,370	274	167	137
Nakusp	699	288	103	123	82	2,055	411	250	205
Nelson	4,658	1,918	685	822	548	13,699	2,740	1,667	1,370
New Denver	279	115	41	49	33	822	164	100	82
Rossland	1,630	671	240	288	192	4,795	959	583	479
Salmo	466	192	68	82	55	1,370	274	167	137
Silverton	93	38	14	16	11	274	55	33	27
Slocan	140	58	21	25	16	411	82	50	41
Trail	3,260	1,342	479	575	384	9,589	1,918	1,167	959
Others	4,518	1,860	664	797	532	13,288	2,658	1,617	1,329
Total lbs. / day	25,523	10,510	3,753	4,504	3,003	75,068	15,014	9,133	7,507
Total Tons / day	13	5	2	2	2	38	8		4
								Dozen	
Total Tons / year	4,658	1,918	685	822	548	13,700	2,740	3,333,667	1,370
									Equals / year
Grain for eggs	6,084							One third Beef cows / head	1,691
Grain for chicken meat	1,918							Two thirds Chickens / head	365,333
	12,660								

How much food do we need to feed the Kootenays?

	Grains	Dry beans	Oil	Sugar	Sprouting seeds	Fruit and vegetables	Dairy		Eggs Dozen	Meat
Required - Tons	12,660	1,918	685	822	548	13,700	2,740	Dozen	3,333,667	
	Wheat	Navy	Canola	Beet	Mixed	Mixed	= Milk lbs.	Chickens laying	laving	
	= bushels	= bushels	= gallons	= lbs.	= bushels	= lbs.	5,480,000		11,112	
	452,141	68,500	196,595	1,644,000	19,571	27,400,000	= Milk gallons			
Yield per acre	35	30	127	12,000	14	17,000	637,209			
							lbs / day needed			
Acreage needed	12,918	2,283	1,548	137	1,398	1,612	1,746		Beef	attle
	Total Acres						Yield per cow		Head per year	1,691
	19,896						15 gallons day		Droodoro	
						Dairy	cattle		bieeueis	2 5 2 7
						Head needed	116		maintain herd	2,557
ALR area 2008 acres	158,747					+ dry cows	120		maintainnera	
Central Kootenay	200,7 17					+ breeders	60	-	Head in growth	2.000
						Total	296			,
						Acres per head*	2.50		Total	6,228
% needed of ALR to grow	12.53%					T . I . I			Acres per head*	2.50
crops						I otal acres	7/1		Total acros	
% pooded of ALP for boof						cattle	741		noodod for boof	15 571
cattle	9.81%					Cattle			cattle	15,571
									Cuttle	
% needed of ALR for	0.470/									
dairy cattle	0.47%									
Total ALR required to	36 208	% of ALR							*	for grazing and w
grow food locally	30,200	22.81%								
Si ow lood locally	acres	22.01/0								



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RDCK AGRICULTURE PLAN CONSULTATION REPORT

RDCK Agriculture Plan Consultation Report



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Acknowledgments

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The Project is also benefiting enormously through the guidance of our Steering Committee, composed of people from across the region. The members include:

- Deirdrie Lang (Nelson Area/ Kootenay Co-op Country Store General Manager) / Ben Morris, Alternate (Produce Manager)
- Rick Morley (Procter, mixed crop farmer)
- Judi Morton (Passmore, mixed vegetables, fruit and small-lot livestock farmer)
- Aimee Watson (Kaslo, urban gardener, Co-ordinator of the Kaslo Food Security Project)
- Randy Meyer (Lister, mixed farmer livestock and hay)
- Curtis Wullum, (Lower Kootenay Band)
- Jody Scott (Nakusp, forester and new viticulturalist)

Ex-Officio members of the Steering Committee are:

- Larry Binks (RDCK Director Area C)
- Paul Peterson (RDCK Director Area K)
- Don Low (BC Ministry of Agriculture, cherry farmer)
- Sangita Sudan (RDCK General Manager of Development Services)

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Disclaimer: Agriculture and Agri-Food Canada, the B.C. Ministry of Agriculture and the Investment Agriculture Foundation of BC, are pleased to participate in the delivery of this project. We are committed to working with our industry partners to address issues of importance to the agriculture and agri-food industry in British Columbia. Opinions expressed in this report are those of the authors and not necessarily those of the Investment Agriculture Foundation, the B.C. Ministry of Agriculture or Agriculture and Agri-Food Canada.

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Introduction

The purpose of this report is to provide information on the scope of and methods used in our outreach to the communities and residents of the RDCK as part of the information gathering component in the development of an Agriculture Plan.

Brynne Consulting embarked upon the Ag Plan Project with a strong commitment to consulting the residents of the RDCK. This commitment arises from the fact that members of the Brynne Consulting team reside in distinct communities within the Region and so recognize that there are unique characteristics in each community as well as particular production, eco-system, cultural, and market considerations.

Our consultations had three main goals:

1.To collect information and input from residents across the region;

2.To engage citizens in the democratic processes of the Regional District - in this case, that of planning for agriculture and secure food supplies; and

3.To build support for and "ownership" of the eventual Ag Plan amongst the citizens of the RDCK.

October was devoted to determining the range of communities in which it would be appropriate to hold consultations, establishing contacts and setting up venues. The actual consultations took place in November through early Dec. As of the 11th of December, our scheduled consultations are completed. However, we recognize both the will for and the value of ongoing dialogue with area residents about this Plan. Thus, we will accept, and integrate into our work, additional survey responses and input via other mechanisms such as our website's contact page (http://www.agplan.ca/ contact), casual and arranged meetings, and phone calls.



The Means

We launched the consultation phase of the Project with a range of awareness raising initiatives to capture people's interest and encourage them to be involved. These included the creation of an eye-catching postcard deliberately designed to be relevant over the entire course of the Project. The post card was used to "brand" the project and became the basis of our website (agplan.ca) and of a series of posters created to promote the community consultations. We also developed a black and white option for the community consultation event posters to ease the cost burden on those wishing to print them out and post them around communities.

After receiving approval from the Investment Agriculture Foundation and the RDCK, we disseminated a news release about the Ag Plan throughout the region. The news release was circulated to local media outlets (print, radio and internet-based), as well as via the e-lists of area agricultural and food security-related organizations, including the Kootenay Local Agriculture Society, Creston Valley Food Action Coalition, the Kaslo Food Security Project, Kootenay Food Strategy Society, Nelson Community Food Matters and others. The response rate was positive and enabled us to do further outreach, with interviews in print (the Express, Valley Voice) and on radio (Kootenay Coop Radio, on two different programs).

The website has been used to disseminate information about the community consultations (location and date) as well as to invite input via on-line surveys (which can be provided in print form for those who choose to not complete it online) and the contact form on the website.

Initially, the intention with the community consultations was to direct the conversation to areas that are specifically within the purview or influence of local governments. To that end, we developed a "Conversation Starter" that identifies a range of common issues and concerns and then shifts to an overview of local government possibilities, outlining the major areas over which they have control or can influence.

However, we quickly discovered that a focus on local government purview stifled conversation to a degree that may have precluded some important input. This was due to the fact that people had ideas and concerns but were not clear on whether or not they could actually be addressed by local government. We therefore revised our facilitation strategy, though we continued to use the Conversation Starter, supplemented by a "Relocalizing Agriculture" diagram, to spark conversation and ideas. The community meetings were facilitated to allow a wide-ranging discussion, leaving the Brynne Consulting Team to sort through what is and isn't relevant to an RDCK agriculture plan.

Another tool that worked well with the community meetings was the communityspecific maps, provided by the RDCK's GIS department. The maps never failed to draw people to them and often generated discussions about the farming history of each area, as well as helping to convey visually the very small amount of land within the RDCK that is suitable for agriculture.

In contrast to the community meetings and contact page on our website, the Surveys used in the consultation have very focused questions. The intent of the Surveys is to gather specific data on farming and the food systems of the RDCK, at a level that is likely not captured in the federal Census Data. While the results of the surveys will not be as statistically accurate as the Census Data, they will nonetheless provide us with nuances and localized data that will complement our other information sources.



The Process

Community Consultations

Community consultations were arranged based on the contract agreements between the RDCK and the Investment Agriculture Foundation and between the RDCK and Brynne Consulting. The communities identified in the contracts were supplemented with priority areas identified by the Brynne Consulting Team as well as in response to invitations from community members and suggestions from RDCK Directors.

Between the 8th of November and 11 December 2010 we held 13 consultations with a total of 163 people participating. These meetings took place in the following communities:

- Salmo, 8 November 11 participants¹;
- Creston (Public Library), 9 November 12 participants;
- Argenta, 22 November 13 participants;
- Kaslo, 22 November 10 participants;
- Nelson, 23 November 19 participants;
- Winlaw, 24 November 22 participants;
- Castlegar, 25 November 10 participants;
- New Denver, 30 November 12 participants;
- Argenta, 1 December (second meeting at the request of the participants) 8 participants;
- Nakusp, 1 December 18 participants;
- Nelson Food Cupboard, 2 December 2 participants;
- Creston (Recreation Centre), 6 December 8 participants;
- Crawford Bay, 7 December 5 participants;

Members of the Project team also gave presentations at the following events or venues:

- OpenHouse presentation of Michelle Mungall's "Kootenay Lake Regional Food System" project, Crawford Bay, 6 November;
- Selkirk College Second Year Environmental Planning Class, Castlegar, 10 November;
- Creston Valley Food Action Coalition Annual General Meeting, 6 December;

¹ Participant numbers do not include members of the Brynne Consulting Team.

• Creston Farmers Market, 11 December.

Key or particularly enthusiastic individuals were included in more intimate meetings. Some of these meetings were initiated by the Project Team and others by residents of the RDCK. These meetings include:

- meetings with various RDCK Directors, including Directors Popoff, Wright and Peterson;
- meetings (in person and via phone) with RDCK staff, including Tanji Zumpano, Brian Nickurak, Mike Morrison, and Dawn Attorp.
- a meeting with two women (a dietitian and a food technician) wanting to start a business supporting fledgling and established food processors;
- ongoing consultations with George Penfold, Regional Innovation Chair in Rural Economic Development with Selkirk College;
- a meeting with Roy and Jane Lake, elders in the Johnson's Landing and Meadow Creek farming community;
- a phone interview Inanna Judd, longtime commercial farmer in Argenta;
- meetings with Wayne Harris, President of the Creston Valley Agriculture Society;
- a Salmo Food Sustainability meeting organized by Salmo Community Services;
- City of Nelson's "Our Climate, Our Community" Workshop (by invitation).

A common experience at each community meeting was a level of excitement that kept people talking in small groups well after the meetings ended. Based on feedback we have received from some participants, the very existence of this ag plan project is galvanizing a new energy and enthusiasm that may have spin-off effects not directly related to the ag plan but nevertheless of benefit to the Region's food systems.

Though officially the community consultation phase of the Project is over we are aware of other communities that likely warrant a meeting. We are exploring the possibility of a meeting in the Edgewood area and a meeting in Harrop / Proctor is currently being planned for later in December.

Though we have had regular email and phone contact with Curtis Wullum of the Lower Kootenay Band, a series of postponements has meant that our consultation with him has been rescheduled for December 16th. It is likely that a follow-up meeting with Curtis and perhaps some other members of the Lower Kootenay Band will take place in January in the Creston Valley. We have also been in contact with Marilyn James of the Sinixt and have had similar scheduling problems. We hope to schedule a meeting with Marilyn later in December. The turnout at some of the community meetings was less than we expected. This was particularly the case for our second Creston Valley meeting, where the Project Team called over 100 farmers to talk to them about the Ag Plan Project and invite them to a special farmer meeting. Though the response rate on the phone was positive and high, few of them showed up at the actual meeting. However, smaller meetings enabled us to delve more deeply into some of the issues, with time to brainstorm solutions and alternatives.

The low turnout from Creston Valley commercial farmers was discussed at the December 10th Steering Committee meeting. It was agreed that extra effort is warranted to ensure that we hear from them. Based on a suggestion that the farmers may be more responsive to a draft document than an invitation for a discussion on planning for agriculture, it was decided to arrange a meeting in Creston in mid January and present a first draft of the Background Report.

A preliminary analysis of the discussions at the community meetings has been completed and is appended to this report. More in-depth analysis is currently underway to provide information and direction to the Background Report and the Agriculture Plan.

The Surveys

Three distinct surveys were created by the Project Team and uploaded onto our website. The three surveys are: one for farmers / producers; one for the general consumer; and one for retailers. The surveys were promoted at each of the community consultations, in outreach efforts and interviews, on the ag plan website as well as on the RDCK website.

Some area organizations, such as Kootenay Local Agriculture Society, have notified their members via newsletters and email reminders to fill out the surveys. We had indicated that the surveys would close on 15 December. However, due to a high level of interest, generated in part by the display and interactions at the Creston Farmers Market, we have agreed to accept survey submissions until the middle of January. Any new data will be incorporated into our Background Report and the Agriculture Plan as appropriate.

To date, 75 people have completed the general survey, 20 farmers have completed the producers survey, and 3 retailers have completed their survey.

Some highlights from the farmer responses to date:

• Among the farmers, the highest response rate has been from those residing in Electoral Area H (so far);

- 80% of the respondents are farming commercially, though the percentage of their income derived from farming was consistently pretty low;
- 65% see pressure to convert farmland to non-agricultural uses in their neighbourhoods;
- Almost three quarters of the farmers who filled out the survey could expand farm operations on their current site; and
- Though most farmers do not feel supported by any level of government (up to 88%), more felt that local government supports them over any other level of government (25%).

Highlights from the consumer surveys include:

- Three quarters of the respondents are women;
- 90% of them have a garden;
- Almost half are willing to pay a 10 20% premium for local produce while over 30% will pay a 20 50% premium; and
- Consumer respondents offered a wealth of suggestions for ways to better support the farmers and food systems of the RDCK.

Amongst the three retailer respondents:

- availability of local product was the greatest barrier to purchasing local food, followed by reliability of supply, choice and price.
- retailers are willing to pay a 10 20% premium for local produce; and
- local meat is hard to find but high on the wish list.

The summary reports of the completed surveys are appended to this report. Please note, however, that they do not include responses to open-ended questions. Those rather data-heavy portions can be made available upon request and will be carefully incorporated by the Project Team into the work on the Background Report and Agriculture Plan.

Website contact page and other connections

To date we have received 15 contacts via the ag plan website. The on-line contact form has generated a range of submissions, from an observation on the importance of not relying solely on the internet to do our outreach (we knew that!); to personal stories of the challenges of finding viable land-sharing options when the farmer or land-owner is too old to manage it on their own; to a request for a meeting about the ag plan. Periodically the Project Team receives phone calls from people who either attended a public meeting and want to discuss issues further, from media generated interest, or from media contacts. We have been fortunate to have strong support from the Valley Voice that has resulted in an initial column on the Project, a staff writer attending one of our community consultations, and a follow-up interview and pending second column in the paper. This may explain the high survey and community consultation participation level from Area H.

And lastly, because the Project Team lives and works in this region, we have all been approached by fellow residents in informal settings.



Preliminary Themes & Next Steps

With the bulk of the public consultations completed, the Project Team can now focus our attention on analyzing what we have heard and collected. It quickly became obvious that there were some common themes. However, the variations between communities in terms of their priorities and needs will need careful consideration. And since few of the suggestions came in the form of concrete actions that could be taken by local government, we will need to research and identify possible responses by the RDCK and other potential actors.

Farm Incomes

The perennially and notoriously low farm incomes came up in one way or another in every community consultation. According to George Penfold, average net return for RDCK farmers in 2006 (based on Census Canada data) was \$5,422, on an average capital investment per farm of over \$680,000. These figures undoubtedly account for the fact that we lost 47 of our 609 farmers between 2001 and 2006.² Repercussions of low farm income identified in the community meetings include³:

 fallow or abandoned farms that increase weed and pest pressures on the farms and orchards that remain;

"We're all headed for bankruptcy unless we have some sort of a niche market."

- loss of biodiversity as farmers are forced to focus on the "high value crops";
- continuing loss of farmers and their expertise the next generation, even if they are inclined to continue farming, are often encouraged to do anything else;
- a lack of retirement options for farmers that often result in the eventual sale of their land and rarely to other farmers the perennially low incomes do not allow for

much of a retirement fund. The opportunity to retire on the farm where many lived and worked for so many years is a luxury few can afford. If the land ceases to be productive farm land, then the property taxes go up. And if the land is in the ALR, the options for a second dwelling to house another farm family are limited.

"I'm aiming for Freedom 85: if I die with my boots on, I don't have to worry about retirement."

² See appended RDCK and RDKB Stats analysis by George Penfold.

³ All quotes in text boxes are by community consultation participants.

- farm income cannot support the purchase of land at residential / recreational market values;
- difficulty funding equipment and infrastructure needs for start-up farmers, even if they are able to acquire the land.

Given that our food systems are inherently linked to a globalized supply chain, the mechanisms for the RDCK to impact market issues are limited. However, there may be ways that the RDCK can foster better access to local markets or lower the cost of doing business for farmers, for example. An exploration of options to address what is a key issue for food producers across the region will be part of the Project Team's work going forward.

Food Systems Infrastructure

Throughout our consultations, we have heard stories of infrastructure that used to exist in this region, or of models that exist elsewhere that could work here. The irony is that many of the support systems or locally-based infrastructure that used to exist here ceased under pressure from the globalized food system. An example would be the demise of a family-owned regional food distribution company, Qualitie Produce, after more than four decades serving RDCK communities. Yet it is precisely because of pressure from the globalized food system that local support mechanisms are all the

more necessary since farmers here, with extremely limited growing seasons and a small land-base, compete in the global marketplace. The costs of production here are inherently more expensive.

"Small-lot agriculture is inefficient, and that is what we have here in the West Kootenays."

Among the infrastructure issues and needs identified are:

- regionally-based extension services, providing professional support to fledgling and established farmers - this used to be provided by the Ministry of Agriculture but has not been in place for many years now;
- education across the population about food and farming: school-based programs; agriculture how-to books well stocked in our public libraries; on-farm apprenticeships and mentoring;
- One region-wide branding and promotion initiative of local farm product would benefit many farmers - for most farmers, the costs, skills and resources necessary to do their own marketing are difficult to acquire;

- Ongoing loss of farmland means that young farmers may not have land to return home to after they leave for off-farm educational opportunities;
- Need to eliminate speculation on farmland completely, complemented by no further removals or subdivisions in the ALR;
- creative and locally based distribution systems are necessary this may include revisiting railroads and waterways for shipping product around the region.

"Roads actually undermined the transportation and distribution of farm product." Roy Lake on the loss of lake-based distribution systems in the 1950's

• permanent farmers markets, with in-door option for cold months - farmers markets benefit greatly from a consistent location as that helps to establish this alternate food outlet in the consumers' minds and incorporates it into their food purchasing routines. Farmers will not participate in farmers markets if there is no demonstrated

financial benefit to them in return for the considerable effort necessary to prepare for and staff a farmers market and to deal with leftover product.

"We've never been able to figure out how we could afford a day off the farm to participate in a farmers market."

• Locally-based markets (retailers, restaurants,

buying clubs, etc) generally have less challenging product requirements than the dominant grocery chains - the grocery chains require particular packaging and labeling (usually with a bar code) but most prohibitively require expensive liability insurance to be held by the farmer suppliers. According to Don Low, Ministry of Agriculture's Senior Manager of Business Development and Forecasting, even the very large farms in the Fraser Valley are having difficulty selling to the grocery chains because they are requiring year-round supply, which our northern climate does not readily enable, even in the warmer coastal climates.

Tackling the food / farming infrastructure issue is clearly only possible with many players involved. As we explore these issues we will be considering possible roles for not only the RDCK but also the School District, the Columbia Basin Trust, our regional colleges, agricultural organizations and industry (food and farming).

Regulations

Relative to other issues, regulations were not a dominant theme in the community consultations, with one main exception: the provincial meat inspection regulation. Shifting the whole province into a meat inspection area has had a devastating impact on small-lot farmers in the RDCK, as it has done throughout in the province. The loss of local meat production capacity and access was raised at each meeting.

Among the identified negative repercussions of this regulatory change are:

- wide-spread loss of livestock on many farms: farmers simply stopped raising animals now that they no longer have a legal option for slaughtering (other than one red meat plant operating one day / week in Creston);
- loss of manure for a soil amendment both for the farmers as well as the gardeners who purchased it from them;
- loss of income from meat and manure sales as well as increased costs with the need to bring in off-farm soil amendments;
- consumers are frustrated by their inability to legally access meat from local farmers and retailers have listed local meat high on their local product "wish list".

Other regulatory matters that were raised in the meetings include those governing water access and use. Water is clearly an essential component of all food systems (for humans and others). Concerns were raised about the quality and availability of water for food production.

Farmers also expressed frustration that bylaw enforcers and other government agents are often poorly informed about farming, including the protection provided by the Farm Practices Protection Act. Related to that is the interpretation of what constitutes farming. Farming is legally defined for purposes of taxation and activities permitted within the Agriculture Land Reserve. These definitions often guide local government zoning bylaws. However, they may not fully capture the range of farming activities that occur in our very diverse region. Nor is on-farm processing adequately understood or defined, with activities like the slaughtering of animals falling into a grey zone, somewhere between harvesting and processing.

Most of these regulatory matters are within the purview of the provincial government. However, that does not preclude the RDCK from taking on an educational and advocacy role on these matters. What remains to be explored in the Project research phase is to determine the critical messages and the most effective media and targets.

Beyond Farmers

This past October, the Columbia Basin Trust held a symposium entitled "Shaping our Future Together". Almost 300 people gathered in Revelstoke over a three day period to envision and plan for the future. They were guided through exercises to determine the most likely future scenarios to frame this planning. Sixty percent of those present thought that the future would continue along the trajectory we have experienced over the past several decades. However, a full forty percent of those present chose a scenario where the impacts of climate change, peak oil and global political unrest pointed to a clear need to relocalize the essentials of our lives, to the degree possible, in order to plan for resilient communities.

Whether or not we are among the 40% who subscribe to that latter scenario, there are clear indications that the global food supply is not as secure as most assume - at least as manifested in their daily life practice in much of North America. Yet food riots in response to rapidly rising costs have become standard in news reports from around the world since 2006. Dramatic weather events are also wreaking havoc in some of the key food producing areas of the world.

Simple risk analysis points to the wisdom of having a secure supply of food staples close to home - an idea embedded by the RDCK in this project and one with a long history, dating back to the biblical Joseph's interpretation of the pharaoh's dream.

However, with only 1% of the residents of the RDCK involved in commercial agriculture (where goods are for sale, not just for own-use), they have little political clout and perhaps even less free time. Rebuilding our regional food systems will need the efforts of more than just the farmers, even with pro-active measures taken by the RDCK.

During our community consultations we heard the following:

- Dating back four decades, national "cheap food" policy has devalued food for generations;
- This devaluing is manifested in the galling reality that even in the barter system, it takes 75 pounds of carrots to trade for an hour's massage;
- The irony of farm workers being paid much higher hourly wages than the farmers who hire them;⁴

"Food security is **not** a spectator sport."

• We need more young and new farmers;

⁴ Note that this is a reality of small-lot agriculture in our Region that may not be the case for larger farms accessing, for instance, the immigrant farm labour programs.

- It is difficult to access a level of funding to do food security work well the funding is spread too far to be effective;
- The Columbia Basin Trust has a pilot project aimed at youth entitled "Know your watershed" what about one called "Know your foodshed"?

Engaging the broader population and other organizations and levels of government will require education and outreach. As the project moves forward, we will explore existing models, likely partners, funding options and other means of addressing the issues raised.

Conclusion

We held significantly more community meetings than we had originally proposed. Given the diverse nature of this Region, we felt that this was necessary - in part to better understand the needs and considerations particular to each community, but also to build awareness of and, ideally, citizen ownership of the eventual Agriculture Plan.

However, the focus on the community consultations meant that other tasks slid down the priority list. While talking with people may be one of the more effective means of communication, the Project would likely have been helped by more regular outreach to area media. It is our intention to address this in the coming months, with the hope that it will keep people informed and sufficiently interested that they will participate in the refining of the Agriculture Plan itself. Ongoing public outreach (which will include the Forum up on our website) will also enable us to engage area citizens in delving more deeply into some of the more challenging issues, hopefully resulting in creative, Kootenay-made solutions.

The consultations have provided us with a wealth of information to complement our research for the upcoming Background Report and drafting of the Agriculture Plan. They have also demonstrated, by the enthusiasm evident amongst the participants, that there is a genuine interest in and support for this initiative. Many of those who have had contact with the Ag Plan Project via the community consultations, the surveys and the website contact page have indicated a desire to be more involved with this project. The belief in the efficacy of local government, even with its limited purview, helps shift consumers into citizens.

Appendix A: Community Consultation Tools

Conversation Starter

Community Consultations RDCK Agricultural Area Plan

Getting beyond the wish list and gripe sessions to action

Wish List:	Gripe List:
Better compensation for our work what I need to make a go of it	ALR stops me from doing
Easier land access weed pressure on my land	Fallow land increasing
Better educated & more supportive public who don't like what we do	Non-farming neighbours
Extension agent to help us learn	No more large animal vets
Regional distribution service seasonality and crop failures	Markets don't understand
Group purchasing to cut costs and inputs) cost too much	Farm inputs (equipment
Reliable contracts with local purchasers for a farmer to manage	Land values are too high
Want to be price setters	Don't like being price takers
Marketing and packaging support beling	French and nutritional la-

Concerns:

climate change water quality and availability ongoing loss of infrastructure to support farming: vets, storage, processing, distribution, training Farm succession Qualified and energetic farm help

pg 1 of 2

Local Government Possibilities

Since 2004, local governments (municipalities or districts) can provide any service the community feels is needed. The main areas over which they have control and that impact agriculture are:

Land Use Planning	Taxation	ALR	Water & Waste Dis- posal Services
Zoning - what is al- lowed or not; per- mitting	who pays how much	veto over applica- tions to ALC	methods of treat- ment
Who and what can live next door to a farm	farm residence - taxed at what rate	The local voice in regional ALR deci- sions (exclusion, subdivision, non- farm use)	landfilling or com- posting services for off-farm disposal options
urban ag, including livestock	municipal tax break for farm residences		maintenance of wa- ter system infra- structure
on farm processing - ag activity or not	Taxation structure that would discour- age / disallow the purchase of farm land for "develop- ment"		
Creative retirement of sale of the land	option for farmers that	does not require the	

Other possible service areas of use: recreation and libraries - how can be harness them to better support this and future generations of farmers? Slocan Valley Recreation Commission has a history of supporting classes related to food systems. Emergency Planning - could incorporate food stocks for distribution in the event of an emergency.

pg 2 of 2



Adapted from the "Development of local agriculture" diagram, by Jeremy Lack

Appendix B: Community Consultation Preliminary Analysis

Chart of Comments Relevant to the Agricultural Plan



Note: Segment description is followed by the number of comments

Summary Data Chart Relevant Comments

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	Nelson	Castlegar	Argenta #2	Creston	Creston #2	New Denver	Kaslo	Argenta	Winlaw	Nakusp	Salmo	Creston #3	
General comments	11	27	16	19	5	43	27	23	14	26	22	14	247
Water concerns	2	2	1	1	1				3				10
Farmers Education	6	6	8	13		4	6	14	11	6		14	68
Provincial problems	1	6	5	13		4		7	4	2		3	40
Maintain land in ALR	7	5		5	4	2	20	2	6		4	14	51
Urban agriculture	15	2		2			5	1					25
Scaling up production	1	2	16	4	1	9	10	13	1	9	6	3	57
Land availability	5	3	2	2		3	11	7	6	1	4	4	39
Organic vs Conventional	2					1			2	2	1		5
Right to Farm / Legal	4	1		6	3	2	1	1	1			3	19
Need Municipalities on board	10			3	1	4	8	1				3	27
Low income support	1							3					4
Public education	9	7	19	7		21	7	7	2	6	8	10	79
Zoning control	4	8	1	4	4	6	11	5	3		1	7	46
Agricultural facilities	2	4	9	13	1	17	4	6	5	16	7	13	61
School education and gardens	2	1	5			2	1			3	3		11
Economic Support		13	3	3	3	3	8	13	7	2	1	5	53

	Brief and general description of the headings used
General comments	Comments not readily catgorized or that may not relate to the Ag Plan.
Water concerns	Concerns relating to water quality, availability and infrastructure.
Farmers Education	Comments about the lack of educational support or professional development for farmers.
Provincial problems	Concerns about provincial level policy and regulations that limit food production and access.
Maintain land in ALR	Comments relating to maintenance, expansion and adjustments to the ALR.
Urban agriculture	Comments on the need and wish for food production (commercial and private) within city boundaries.
Scaling up production	Comments related to the need to increase production for farm income and food security.
Land availability	Comments on the limited agricultural land base in the RDCK and access issues.
Organic vs Conventional	Comments relating to the expansion and benefits of organic production.
Right to Farm	Comments on the enforcement of the Farm Practices Protection Act & other supportive policies.
Need Municipalities engaged	Comments relating to the need for municipalities to be involved in the agricultural plan.
Low income support	Concerns relating to income levels of farmers.
Public education	Comments relating to need for public education about food production here and globally.
Zoning control	Comments on land use planning and zoning that is supportive of food production.
Agricultural facilities	Comments about the physical infrastructure needed to produce, store, process, and distribute food.
School education and gardens	Comments on the need to teach children in the schools how to garden, cook and understand food systems.
Economic Support	Comments regarding economic support required for farmers and food systems.

	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic Support	
Nelson	13%	2%	7%	1%	9%	18%	1%	6%	2%	5%	12%	1%	11%	5%	2%	2%	0%	



	ieneral comments	Vater concerns	armers Education	rovincial problems	Aaintain land in ALR	Jrban agriculture	caling up production	and availability	Jrganic vs Conventional	ight to Farm	leed Municipalities on board	ow income support	ublic education	oning control	gricultural facilities	chool education and gardens	conomic support	
1. An ag plan should contain an educational component for farmers	0	>	1	-д	2	ſ	S		0	R	2		4	Z	4	S	ш	
2. There's a whole component of town that eats Safeway	1																	
 Provincial gov't came down with new regulations that would have sunk their farm, the trend has been to discourage people from ag 				1														
 Gov't has power over the ALR and they can reverse the trend of land coming out of the ALR 					1													
5. Gov't also has an option of being proactive about ensuring that we have a safe and adequate water supply - unlike how they've been dealing with things over the past 30 years		1																
Agriculture is very broad and includes urban ag as it is essential to food security						1												
7. Sometimes we have planning exercises and jump through the hoops, yet the practitioners are those who keep up the on the ground activity and he's wondering how to keep the continuity up on this plan once its created	1																	
8. If the RDCK wants good water quality, they need to stop putting raw sewarage into the Salmo river through the municipal dump; the RDCK has bought all the land around the dump to try to keep under cover		1																
9. Harry Quesnel - feels we need to look at the demand and supply to determine how many people need to be fed, what people eat is important - veggie protein is less intensive than animal protein; we probably need about a hectare a year to feed a person; availability of different classes of good soil is an issue, and there is an issue of organic versus other systems - organics tend to have less tendency to pollute yet they also tend to produce less because of less nutrients put in							1	1	1									
10. Bonnie - land can be classified 1-4, yet she had very dense clay soil and over time was able to build up very good quality soil by adding amendments over time, so there's potential for agriculture even on poorer quality land								1	1									
 One needs to think about the energy required to build up soils - might be more possible in one's backyard rather than on large farm tracks 						1		1										
12. Can homeowners sell their additional produce/garden goods from their homes? If it's not legal, can it be made so, so that people don't get busted if someone complains						1												
13. Can we create a 'right to farm' law in all new subdivisions?						1				1								
14. The way the ALR has evolved, the ALC is using it as a planning tool in that they won't allow subdivisions in ag area to try to keep issues between uses at bay					1													

	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic support	
15. Issues of urban ag is that people don't want the country in the city, if we get to a point of allowing backyard chickens we need an urban ag plan in the city to make a positive statement of acceptance						1				1	1							
16. Currently there is nothing that prohibits people from growing whatever they want that's legal in town, but there is a bylaw prohibiting the keeping of livestock in yards - if people wanted to grow and sell food from their properties, they would need to apply for a business license						1				1								
17. We have a situation where we try to isolate uses, but that is hard in urban centers where our uses are a lot more diverse						1					1							
18. The precedence that says mixed use is good is one that urban centers can adopt as its of value, therefore we don't have take valuable land out of use and it can continue to be used to produce good food	to					1												
19. The people who run municipalities are like everyone else - some know what food security and the possibilities it holds are - and some don't know; we need to each take responsibility to be democratic citizens and we need to educate one another and not take people understanding of linkages in the food systems for granted						1					1							
20. The city is just ramping up its long term planning process, and they recognize that food and ag is part of a long term sustainable nelson						1					1							
21. Using the greenhouse gas reduction forum can be used to show how food fits into plans for reduction of climate change - use these plans etc. To educate the city for how these all fit into the resiliency of the city						1					1							
22. Traditionally ag took place outside of the city It would be good to know what we can actually do within the city of nelson - we don't appreciate for example how much grain it takes to feed chicken, but we can grow more veggies						1												
23. If people have a few chickens, they don't necessarily need to bring in lots of grains to feed them - generally animals are more intensive in terms of resource consumption, yet there is definitely a place for them						1												
24. While recognizing how diverse our area is, we'll also would like to see the entire area doing more what Kaslo is doing in terms of the food hub, bulk buying club, lower income people - whether that's through the RDCK or through the city											1	1						
25. With activities like this come info sharing which results in education													1					

	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic support	
26. Wondering about technology's roles - greenhouse or rooftop gardens - is this part of a plan? The city doesn't need to do anything around this - residents can do what they want in terms of rooftop gardens						1					1							
27. Wondering how much other levels of government can sabotage the plans that we are creating	1										1							
 Sounds like zoning is a big issue in terms of keeping ag land around the urban lands 											1			1				
29. Curious about abattoirs and where they stand now The Slocan valley abattoir is dead now, but there was a local gov't who were interested and willing to look at how they could contribute to local food systems															1			
30. Better education and a more supportive public is so key to this initiative - when people buy at the big box stores, it is hard for them to understand the gravity of food security and our perilous relationship to oil in relationship to the food we eat - education not only about growing food, but that there is a reason to grow it			1										1					
31. School boards are a political entity as well and they should be included in these discussions; the next generation needs to be educated in terms of ecological literacy including our limits, every school should have a garden																1		
32. Perhaps home gardens are less about production but more about skill building and really understanding about growing food and an appreciation for farmers, natural limits - would really like to see this regional plan include bringing it back to school boards													1			1		
33. How do we build this culture - is it the organizational structures or is it the people? Are we willing to look at changing how we go about land use planning, changing permitted uses of structures on farms There are significant challenges that need to be identified. Planning is sometime a hurdle because of the structures we need to work within.														1				
34. Not really clear on how this project is concrete - everything seems to be in jeopardy and val would focus on going where the money is because we need everything right now	1																	
35. We have the education and infrastructure issues, yet we need to light a fire under everyone and get people more passionate about food, we need to prove to people that this is something that we need - perhaps then we could hold onto the infrastructure that we have			1										1		1			
 The plan will recommend issues and make funding priorities, including easy win scenarios 	1																	

	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic support	
37. Should we look at budget shifting to make food a bigger priority within the region	1	-					•,						_		_	•,	_	
38. Young people who decide they want to grow food are on their own, the extension agent service or a place of support needs to be available because people want to do it but it's very difficult to do it			1										1					
39. Jon - a regional ag area plan is a huge endeavor, but when he looks at what the RDCK can do is a much narrower focus and he fears that calling this an ag area plan might be a disservice because the RDCK only has a small purview over the entire food system	1																	
40. If we can formulate helpful partnerships to help the RDCK - in terms of resources and funding - would be helpful	1																	
41. Different areas went through OCPs and it would be good to ensure that this plan will build on the existing OCPs														1				
42. Motivational education is about doing something when we understand that its essential - we need people to 'get' that food and its production are essential - we don't have the motivation right now, we know that food is in Safeway and people don't get that there is a runaway train called food shortage coming right at us			1										1					
43. If there was enough interest in the population, the gov't would respond - we need to show them that this matters, we need to motivate people and things will start happening that will motivate people	1																	
44. Kim - on partnerships - community futures could possibly run training programs for ag training; federal gov't is looking at things to be developing new programs in (possibly ag training like the jcp program)			1										1					
45. From the municipal perspective - making it as easy as possible and very specific is highly desirable; what kind of things in regards to zoning in the municipality would be very helpful; ensuring there are no roadblocks in terms of food distribution, backyard livestock, markets, supporting groups around community gardens/greenhouse						1				1	1		1	1				
46. People need to be inspired, yet we also need to educate people about why we need to be concerned													1					
47. So difficult for young people to be buying land, it's becoming so prohibitive, young people have the enthusiasm, joy, and education to go into the field, but it is prohibitive from a cost perspective								1										
48. Can we do anything about people who are petitioning to remove land from the ALR - we shouldn't allow land to be removed from the ALR					1													
49. There are issues around the ALR like people who can't build a structure to home other farm workers who might be able to come and farm the land (other than the land owners)					1													
Public Consultation Nelson 23rd November 2010

	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic support	
50. Why aren't we talking about new models of land tenure - the kind that would keep it off the speculative market					1			1										
51. Ramona Faust has suggested that any applications to remove land from the ALR are just rubber stamped right now					1													
52. Its hard role to be in local government - the capacity doesn't reside in the gov't, it resides in the people - the municipality makes a lot more money on development than on agriculture	1																	
53. What governance model should we have around the ALR? They are looking for suggestions; local control over local resources always seems to work better	1				1													
Score	11	2	6	1	7	15	1	5	2	4	10	1	9	4	2	2		
	13%	2%	7%	1%	%6	18%	1%	6%	2%	5%	12%	1%	11%	5%	2%	2%		

	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic Support	
Castlegar	31%	2%	7%	7%	6%	2%	2%	3%	0%	1%	0%	0%	8%	9%	5%	1%	15%	



- General comments
- Water concerns
- Farmers Education
- Provincial problems
- Maintain land in ALR
- Urban agriculture
- Scaling up production
- Land availability
- Right to Farm
- Public education
- Zoning control
- Agricultural facilities
- School education and gardens
- Economic Support

	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic support	
1. Punitive taxation on ALR land would need to reexamine boundaries all together because sometimes the best farmland isn't in the ALR and land that is in it is marginal at best at times				1										1				
2. RDCK might be looking out of both sides in that some good sized areas that were in the ALR were eyed to come out by the RDCK because they wanted to access more taxes				1										1				
3. Frank - our land is very productive and it is not in the ALR and we wanted to get it in the ALR but they wouldn't put it in				1										1				
 The land might not be the best land, but we have the best climate 	1																	
5. I think you need to take a close look at soil conditions, sometimes land is rocky and you couldn't bring a tractor or tiller in, but you could plant an apple tree and its roots would find the clay that would sustain it				1														
6. In Ootischenia there is an excuse that there is no water, but the doukhobors used to farm there very successfully, but when their systems fell apart nobody else has been able to come in and make it because of the water scarcity now (same as Robson too)		1																
7. We might want to see a bigger water distribution system - in glade we are limited to the same amount of water as our neighbors who use water just to water their lawn and we are trying to farm 2 acres		1								1								
8. It seems backwards in that in the grocery store, stuff grown far away is so much cheaper than the stuff grown locally	1																	
 It's hard for a farmer to make a living similar to what those around them make - it's not sustainable for us to all be rich 	1																	
 Agriculture used to be here If there were higher taxes on imported food that might 	1																1	
improve things 12. CIDA agreement between Canada and European union with further controls on our production and on local hires - will have more controls than ever before (NAFTA on steroids)	1			1													1	
13. There are things that can be done within a region to make food more affordable like CSAs													1					
14. I am interested in the larger tracks of arable land and knowing where it is and whether it can be protected	1				1			1										
15. The Okanagan group 'locomotive' is trying to organize a co-op of farmers so that they each specialize in different things so that they aren't competing with one another	1		1															
16. Strongly publicizing local foods would be a good thing													1				1	

	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic support	
17. The provincial buy BC program was very helpful, nothing should stop the RDCK from doing the same thing													1				1	
18. Our local farmers aren't producing enough to stock the grocery stores	1																	
19. Can we get educational seminars for new farmers so that they know the grants available, so that they know where to get additional training, and how to start a CSA			1														1	
20. Greenhorns in the us are young farmers that are providing lots of information with young farmers and mixers to try to get young farmers past the first 5 years and more successful			1															
21. We have large grocery stores are bringing in stuff from the us even in the summer	1																	
22. You can do all these incentives, but there aren't people there growing the food - land is very expensive to buy and it is very hard work, weather and market can change, and the money is terrible - that's why they quite before and that's why they'll quite now, most people wouldn't choose to live this way and it won't change unless the price of food triples	1																	
23. Until there's some serious shocks to the system, we probably won't see major change	1																	
24. Unless you are growing 1000 cows, the system is rigged against you, you can't make money	1																	
25. People don't know why it matters to buy local - marketing the local advantage matters because most people don't know													1			1	1	
26. Education and marketing is so important - local food protects not only the farmers but ourselves			1										1				1	
27. What are the biggest hurdles from starting and getting through the first years	1																ļ	
28. We need to figure out more reasonable ways of getting people onto the land 20. What if we did the same thing as they do in the East Keete, and	1																	
agricultural land conservance					1									1				
30. One of the largest land holders in the Koots is the USCC	1							1										
31. The RDCK could have some influence over innovative land- ownership/leasing arrangements and there needs to be some flexibility over the number of homes that can be on a piece of land								1										
32. now in the ALR there is an accommodation for agritourism that makes some exceptions for further residences on ag land					1									1	1			
33. Sharing backyards is a program that has worked really well on Vancouver island - perhaps the RDCK could protect the people who are urban farming on other people residential land - perhaps the RDCK could help produce lease agreements with stronger stipulations						1								1				

	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic support	
34. Farmers can't afford to produce low price products to then sell to producers to make value added products	1																1	
35. We could easily make more money if we sold our apples or pears as gift packs, but that's taking food and turning it into something else that's not food	1																	
36. I would like to see incubator programs for processors			1			1											1	
37. Rules are made by corporations that aren't' looking out for the smaller producers	1																	
38. If there was government assistance to help producers get to next levels of production would be helpful, get them past the regulatory barriers			1														1	
39. My greatest hope is that the RDCK could partner with the CBT to take more responsibility for our region, coming together to run this place to a much greater extent	1																1	
40. When you join together there is more power and more voices, more and more municipal government are hearing this and this message is percolating up	1																	
41. This area isn't reinventing the wheel - what are the sister communities who can show us the path, where we can learn from	1																	
42. Real issue with realtors/real estate board advocating land speculation and getting it out of the ALR	1				1									1				
43. Disincentives might be a good option in terms of taxing people who aren't using farmland as intended					1									1				
44. If the RDCK could do anything, it would be to bring these issues out a little more and offering education	1												1					
45. Is there any way the RDCK could make it profitable to be a farmer?	1																	
46. In Nevada farmers get extra tax rebates if they let younger farmers use some of their land and/or equipment				1			1										1	
47. Could we establish priorities for agriculture48. Thoughts on how older farmers should be dealing with	1						1											
49. People feel entitled to a very high standard of living, and they don't necessarily want to work as hard as is necessary	1																	
50. Storage is a big issue - it would enable me as an orchardist to keep my products longer and not loose so much of my income to the packing house															1			
51. Are there credit unions or others who might create a fund for starting long-term food storage facility															1		1	
be region?													1		1		1	
53. Lower brilliant terrace is a really productive spot, and wondering if it could be brought into agricultural use - it's under land claim right now for first nations	1																	

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Score	27	2	6	6	5	2	2	3		1			7	8	4	1	13	
	31%	2%	7%	7%	%9	2%	2%	3%		1%			8%	%6	5%	1%	15%	

	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic Support	
Kaslo	23%	0%	5%	0%	17%	4%	8%	9%	0%	1%	7%	0%	6%	9%	3%	1%	7%	



	General comments	Water concerns	⁻ armers Education	Provincial problems	Maintain land in ALR	Jrban agriculture	scaling up production	and availability	Drganic vs Conventional	Aight to Farm	Veed Municipalities on board	-ow income support	^o ublic education	Zoning control	Agricultural facilities	school education and gardens	Economic support	
 The RDCK has a sustainability service now - to develop community sustainability and that would include food security 	1	/	<u>u</u>	<u>u</u>	~					Ľ.	2	_	<u>u</u>	7	/		В	
 There is currently legislation around a requirement for an integrated community sustainability plan which is necessary for receiving gas tax credits 	1																	
3. If a municipality does wrong, they will be getting sued	1										1							
4. An integrated community sustainability plan has the opportunity to build in a monitoring and adaptive management plan for food security without the risk of getting sued	1										1							
Some communities are integrating their OCP with their integrated community sustainability plan	1													1				
6. Every community will make an integrated comm. Sustain. Plan that will be reflective of their own regions, and will build in mitigative and resiliency plans unique to their regions	1																	
7. It would be really useful if the report include recommendations for what the RDCK can do within their purview as well as what they should be lobbying for at the BC level - stuff that local politicians can lobby outside this particular region	1																	
It isn't logical that the farm practices act only applies to land within the ALR	1													1				
9. One of the things that would be helpful is knowing what the agricultural land is in terms of its soil classification (1, 2, 3, etc.) for each of the areas in the regional district	1							1										
10. It is a hard conflict deciding whether or not to take land out of the ALR, and knowing the percentage of good quality of soil available would be helpful					1													
 If there is a willing buyer and willing seller that is our democracy 					1													
12. An idea is if someone were to take land out of the ALR, they would have to put significant money into making other land workable					1													
13. It's a real challenge to find the stakeholders and bring forward an idea, and get the people who don't come to meetings to find out what they really want	1																	
14. Trying to enforce bylaws and find a willingness to create the culture of food sustainability is a real challenge	1												1					
15. The idea that raw land is the source of our wealth and agricultural use is fading because we do have the technology to produce more food on less land							1											
16. David has a farm in the ALR but he can't afford to farm it, the ALR protects land yet it doesn't protect farming. If he could sell 2 of the 3 homes on his land in the ALR he could farm it, but he can't afford farming on his land the way it is right now					1			1						1				

	General comments	Water concerns	armers Education	Provincial problems	Maintain land in ALR	Jrban agriculture	scaling up production	and availability	Drganic vs Conventional	sight to Farm	Veed Municipalities on board	-ow income support	Public education	Zoning control	Agricultural facilities	school education and gardens	Economic support	
17. A few perks were worked out back in the day for those who were on ALR lands, but it's not very helpful/significant now	0		4	4	1	2	01		0	1			4	14		0,	8	
18. Another issue for consideration within the ALR is making enough money in farming to actually pay a mortgage					1													
19. The ALR's relationship with lofsted worked very well - the removed 1/3 of the farm from the ALR to accommodate the needs of the farm	'				1													
20. Where there is no zoning in an electoral area, the applications to the ALR, the RDCK director is notified and they can send them to the regional board in the apc					1													
21. It's really problematic that market pressure has pushed up the price of land, but no young person can afford to buy the land to farm it								1										
22. The number of people who have farmed in this areas over the past several years has totally dropped, and now people can't buy milk and meat legally	1																	
23. The repercussions of interpreting what a small scale abattoir is enormous - are they agricultural or industrial etc. Etc.													1	1	1			
24. Andy would support approving regulated agricultural/processing activities - small scale - within the region														1	1			
25. 2 things we can do - and show best practices and areas around the province where there are exceptions in place which are working well	1																	
26. Two recommendations: help in navigating the ALR and navigating the regulations for working within it			1		1					1			1					
27. We have almost no tools, other than the ALR designation to protect farmland and to keep it in use agriculturally					1													
28. We need to approach recommendations to the ALR very carefully and thoughtfully because it is one of the only tools left, yet it isn't very navigable to farmers and we need to understand how to make it more so for farmers			1		1													
29. Could the RDCK lease ALR farmland to farmers?					1		1	1						1				
30. Finding out what is arable unused land within the region and finding out the contact info of the owner would be helpful in trying to get that land becoming more productive					1		1	1						1				
31. Perhaps a suggestion sheet could go out with the yearly property taxes so that if someone is sitting on ag land and not farming it, it could be suggested that if they were to have it being used agriculturally it would save them on taxes.					1		1	1										
32. The ALR land in this region that is forested is still good soil and makes sense to maintain it within the ALR					1			1						1				

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33. Any area that is suitable for pasturing should be included in the ALR, doesn't make sense that it isn't included					1		1	1						1				
34. It shouldn't be allowed to remove land on farms that include the farm infrastructure as some people have tried					1													
35. Very active agri-tourism in new Zealand - when he looks at opportunities for people in the Kootenays, he thinks we should be looking at combining the tourism and agricultural possibilities here to offset the hard costs of farming														1			1	
36. Encouraging people to garden It's a constant tension to densify town, with more people in less space and still be able to have a home and plant a good size garden on your lot						1	1				1							
37. We aren't building homes that can actually store good food for six months															1			
38. The RDCK has funded a destination tourism program - they helped create an organization and funded it to market tourism in the area and agtourism could be part of that	1																1	
39. Education and training			1													1	1	
40. It's a big jump to go from farming to making your farm suitable as a tourism destination - it's not the same people who are going to Acapulco	1																	
41. Making it on pure farming around here - making \$40-\$50k /year - he can't imagine what they could grow, other than mj	1																	
42. Nova scotia has an thriving agtourism sector 43. Saskatchewan once had a land bank which would allow retiree	1																	
farmers to retire and allow young people to come and lease to own land for farming					1			1										
44. Would approve a microloan program for farmers if it was available																	1	
45. You got to fence the community gardens to keep the bears and deer out Hopes there will be sufficient village land in the future to provide seasonal food, fruit trees						1		1			1							
 Why isn't municipal parks workers planting food plants instead of peonies Support for maintenance would help a community garden to 	1										1							
survive	1					1					1							
48. Johnson's landing retreat center gets people coming from the big cities willing to spend an hour or two a day to work in the garden, yet because the retreat center is only operational a few months a year it is challenging to make to profit spread out							1										1	
49. Finhorn has a major following - people at places like this are looking for community, which takes effort and time to cultivate	1																	

	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic support	
50. Agtourism requires that you are wearing your Sunday best and that you are willing to play host/ess - it takes a certain personality to make it work	1																_	
51. There are enough farms in the area that it would be worth mapping them and promoting it within the region													1				1	
52. The retreat center is working to include more and more agriculture into their existence, so they've put up deer fencing and have become KMG-certified, so that they can feed themselves and put more food into their community							1								1			
53. Establishing a better precedent for what agtourism is in the area is important for its long term viability	1		1										1					
54. Andy wants to know what we have to put in place and what are the impediments for ag producers, as its inevitable that o & g costs will go up - starting with a list of essential priorities	1																	
55. Rhonda feels such a high degree of anxiety because people won't do anything for their self-sustainability until they understand that the threat is real. She believes that this is one of the safest places to be because we have the land, the people who can grow it, and she is learning the skills to contribute to the wellbeing of her community through her skills	1																	
56. This plan should do everything to preserve the land so that when it is needed its available, and that there are people who are able to farm the land, and that we are keeping the skills alive to sustain ourselves			1		1								1					
57. Waiting to see how she's going to fit in - willing to be part of a larger agricultural plan of people who are willing to collaborate together to sustain people within the community	1																	
58. More emphasis should be put on small tracts of land - not just what's sustainable as a farm, but land that could be used for market-gardeners and smaller producers willing to use agriculture to supplement other incomes					1	1	1	1			1			1				
59. Farms where people spend \$1200 on farm bucks and the people come out each week and they can determine what they spend their farm bucks on - chickens, pork, beef, etc and it would give the city folks an outing to the farm - if there was a program to promote this	1												1				1	
60. Kaslo doesn't have enough of a population to make things economically viable - we do have the infrastructure now to become a more food secure community	1					1	1				1							
61. A new kind of farmers institute could be a very worthwhile structure within the community			1														1	

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Score	27		6		20	5	10	11		1	8		7	11	4	1	8	
	23%		5%		17%	4%	8%	%6		1%	7%		%9	9%	3%	1%	7%	

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Argenta	22%	0%	14%	7%	2%	1%	13%	7%	0%	1%	1%	3%	7%	5%	6%	0%	13%	



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	seneral comments	Vater concerns	armers Education	rovincial problems	Aaintain land in ALR	Jrban agriculture	caling up production	and availability	Organic vs Conventional	kight to Farm	Veed Municipalities on board	ow income support	ublic education	coning control	Agricultural facilities	chool education and gardens	conomic support	
1. Challenge around the meat regulations - needing to get to Creston	0	~	ш.	1	4		S		0	н	2		д	Z	1	S		
Abra gave the run down on the new class e meat regs, because of the interest of the people in this group	1																	
3. Would be good to get momentum going in areas that are easier to address, and then look at tackling meat and dairy	1						1											
 Important to have good veggies and such, but we need good protein sources too 	1																	
5. Good success had in mixed farms Grains, veggies, proteins	1																	
Access to land is so important for a farmer, and concerns around farm succession	1							1										
7. Could the RDCK consider purchasing a farm to give access to								1							1		1	
8. Ffcf/tlc is a model where they are accepting donations of farms that people are no longer wanting to farm								1										
 There is a lot of concern from people about the gov't owning land and what might be expected of farmers because of the ownership 				1				1										
 Some of the best farm land is owned by nature reserves and it cannot be farmed 				1										1				
11. Not impossible to access the land, yet you need to get organized and come with a plan to access a lease for long-term tenure on the land								1										
12. Food security is too big an agenda on cbts table - they asked 'what part'?	1																	
13. Jade has a hard time figuring out who to write/talk to in terms of grants etc he's much better with a pitchfork than figuring out grants	1		1															
14. Instituting a modern day farmers institutes to support farmers annual core funding would be important, infrastructure support, development of a business/social enterprise plan so that there is focus.			1												1		1	
15. Core planning and core funding (for farmers institutes)			1												1		1	
16. Tax the alr land that isn't being farmed, use the funds to support the farmers institute, which will then support the farmers on the land					1								1	1			1	
17. Really important of the home producers because of their diversity						1												
18. We need someone doing experimentation to yeild crops which are best for different soil types etc. Ex - potatoes that don't scab and that are bigger			1														1	
19. We need more farmers growing a bigger variety of things - things that are suitable across the range of microclimates in this region			1				1	1										
20. Would be great to try out a bigger variety of crops			1				1											

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21. Because of the cheap food imports, she's started to produce less variety over the 20 years she's been farming because she can't make a go of things - she has to stick with crops that she can make a good return on	0	7	1	Ш	J	ו	1	Γ	0	Н	2	Γ	Ц	Z	1	0)	1	
22. Too much cheap food out there We need more public education	1												1					
23. Retailers have a big part to play in terms of educating the public	1												1					
24. Bulk buying club was created to help people adapt to what is local, what is seasonal, what is affordable							1						1		1		1	
25. To deal with trade issues is to make our own system	1																	
26. Is there any way of using business permits to require certain things - buying a certain percentage of local?	1										1		1				1	
27. Alternative retail system is the answer to accessing our local food							1											
28. Higher percentage of lower income people in this area	1											1						
29. Would be good to lower the cost of the farmers so that local, low-income people can access better quality food												1					1	
30. It's cheaper for some homesteaders to eat their own food than to try to sell it							1					1	1				1	
31. Farm income is relative to the farm's overhead People are farming it through leasing, or they've been invited.																	1	
32. Starting a farm is the hard part - sorting irrigation, getting courageous to do it	1		1															
33. Really hard to get established with save-on - they treat him as a nuisance, 5 milliion liability, they would like him to have a barcode for each of his products							1											
34. Is there grant money out there for setting up things like getting farmers insurance, barcodes, etc.	1		1				1										1	
35. Big retailers have come around looking to get some of the product from the area, yet it seems that they'll always end up finding it cheaper on the lower mainland or washington	1																	
36. It was fine dealing with quality produce - they wanted just certain types, and they had to be cleaned	1														1			
37. Now we are talking about viability - we don't need food on palletts etc. To get it to our local market	1																	
 We need more work on the tricky things to grow, the harder things to store or cultivate, etc. 			1				1											
39. This land here is owned by 5 different organizations - 3 involved in wildlife, and so we need to broach the idea of agriculture taking place in significant wildlife zones as these have traditionally been opposed					1		1	1					1	1				
40. Wildlife do better when there is some farming taking place	1																	

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41. There needs to be an understanding and a 'meeting of the minds' of wildlife and agriculture groups	1																	
42. Have we ever done a survey to determine what new farmers are interested in producing? To support both small scale diversified farms and those who are happy doing 4-6 crops			1				1											
43. Important from a food security perspective to understand what we have and what we don't in terms of crops in the area	1																	
44. Knowledge and skills necessary for handling the differnt crops			1															
45. The rdck could relax the regulations in terms of permits because they are costing the farmers so much that they can't deal with it														1				
46. The rdck should be working to enable local farmers and not disabbling them	1																	
47. It would be really nice if they could ease the laws so that farmers could just do what they are doing and not feeling guilty for raising animals and selling them to people in the community				1			1			1				1				
48. Farmers dont' want to be feeling like criminals				1														
49. Local retailers are sometimes calling the farmers and presurring them - the mentality that competition is bad and threatening farmers not to be selling their 'illegal' products	1																	
50. More and more concerns and regulations about meeting proper procedures and regulations around food safety and health				1														
51. Would be great to do some research on food borne illnesses for justification for returning to what was the norm around this area a while ago			1															
52. We need a health and safety protocol based on a local food system, not one harmonized for international trade	1																	
53. Can we have an anti-propaganda agent at the rdck to dispel the worries perpetrated by the federal health and safety departments				1														
54. We could have a department of agriculture for this very region			1														1	
Score	23		14	7	2	1	13	7		1	1	3	7	5	6		13	-+
	22%		14%	%L	2%	1%	13%	%L		1%	1%	3%	7%	5%	%9		13%	

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Winlaw	22%	5%	17%	6%	9%	0%	2%	9%	3%	2%	0%	0%	3%	5%	8%	0%	11%	



	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic support	
1. Over-regulation makes it difficult to make a go of things on small parcels of land				1														
2. In Scotland people would put whatever extra eggs, veggies, fruit, etc. At the end of their driveway, put prices on things and rely on people to buy them and leave money in the drop box	1																	
 She grows incredible berries and peaches in the Slocan valley - the soil and climate are really good for it 	1																	
4. Wondering about the rock's stance on ge-free - the RDCK wasn't supportive of it because of ge in forestry. Nell suggested that people should be in contact with the regional district to push forward with this idea	1																	
 We don't want to be overly regulated Corporate farmers are supported here - little farmers are 	1																	
being squashed out 7. Can't find good hemp seeds to grow, you need a license to obtain seeds and that's ridiculous because it is an excellent crop for food toxtiles of	1			1														
 Historically, the RDCK has not been very supportive of the ALR have they changed their position? I think the ALR is very important 					1													
The ALR is a broken system in that all this good land has been put aside for farming, but then it's been overly regulated that it makes it very challenging to farm					1													
10. At one point she tried to have more than one house on her 18 acres of ALR land, but she couldn't get another home on it and she is very challenged to maximize the use of her land because she doesn't have enough laborers to work it - she wants to farm it and keep it in the ALR, but to get another residence on it					1										1			
11. The regulations aren't as big a stumbling block as most people experience it, but it is challenging to make your way through the documentation if you had some help			1															
12. To make a small holding economically viable you have to engage in high value operations - livestock, dairy, value-added however all of these are heavily regulated under the guise of food safety to keep the market open for large corporations with ties to the government			1	1														
13. What i see as standing in the way of people growing is a lack of education - people would flock to the Slocan valley farmers association meeting to learn more however those who were running it were burnt out trying to organize these things			1															
14. The KOGS board is also burnt out and they can't serve the community to the best of their ability anymore	1																	

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	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic support	
15. We just lost our farming extension agent, and when i had mites in my chicken there was nobody around to help me - we have a serious lack of education			1															
16. She got funding to learn more about farming but there was a huge lack of education around small scale farming, farming organically in this area			1						1									
17. People in this area burned out trying to figure out how to build capacity and community in the farming community - they get an email out once a month now, but meetings are done	1																	
18. There seems to be resistance in our culture to sharing tools etc.															1			
19. I don't have lots of faith in governments, however i think if you are going to have faith in any level of government it is with our local government because you can see them and talk to them directly	1																	
20. There is a lot of young energy of people wanting to farm, but there is a lack of access to land for those who are willing to farm it								1										
21. The RDCK can put money towards 'services', so if we decided we wanted an agricultural service, money could be collected and funneled towards that			1														1	
22. Farming and agriculture are so important and need funding, and i think that some of the money that gets collected through the community sustainability plan should be going towards food and agriculture																	1	
23. CBT needs to start looking at how they can become more involved in agriculture - extension agents, education - if the RDCK could create a clear picture of needs, it would be helpful in ushering CBT's involvement			1												1		1	
24. If funding could be secured to usher projects through the long- term (ex - the grain CSA is struggling this year because it's all relied on volunteers)																	1	
25. Volunteerism isn't sustainable - it might be good to get the ball rolling, but we need long term funding to keep serious food projects going																	1	
26. We need to engage the citizenship and keep this on the governments agenda													1					
27. There is a very active group of active farmers in Powell river, and they got the regional district to help them get special regulations in regards to meat slaughtering				1											1			
28. I think the RDCK could change the zoning restrictions of rural residential areas because we can't have many animals at all - it's too restrictive														1				
29. The number one issue is land value and the speculation of it								1										
30. Is there an incentive to farm land that's in the ALR? Could we make it happen?					1									1				

	3eneral comments	Water concerns	armers Education	Provincial problems	Maintain land in ALR	Jrban agriculture	scaling up production	and availability	Drganic vs Conventional	kight to Farm	Veed Municipalities on board	ow income support	Public education	20ning control	Agricultural facilities	school education and gardens	conomic support	
31. If you have a farm on the ALR, you have a right to farm, yet the RDCK bylaw officer didn't know the rules around this - and this should apply to all farms (regardless of whether you're in the ALR or not)	0	^	<u>ц</u>	<u> </u>	1		5		0	1	2		<u> </u>	1	/		Β	
32. Does somebody know what population can be sustained by our water levels? No, we don't know how much water we have		1																
33. Has there been an inventory done of what percentage of the food we produce in the Kootenays? 10% apparently - how do we learn what's worth growing	1																	
34. Lack of educational training is depressing the agricultural potential of the area			1															
35. Part of sustainability is pooling resources together36. KMG produce is being promoted as being as good as organic produce, but it isn't as properly inspected and their base of farmers is too small	1														1			
37. KMG has used community resources to convince our co-op that their produce is just as good and worth the same price, but they don't keep the same standards that i do as an organic farmer	1																	
38. I think it worth linking the consumer directly with area farmers because then the accountability is direct													1					
39. This valley has huge potential to being a leader in food sustainability and it could be a hub in leading the way	1																	
40. Why look at funding a particular venue around education - we should instead hire a particular person who could travel around and teach people			1															
41. We live in a golden age of everything being on the internet - we've found answers to almost every question we've gone looking for, yet you have to know what is false info			1															
42. It would be great to have more webcasts for farming education so we don't have to leave home			1															
43. What sort of size down should we allow parcels to be subdivided too, that would make ALR land more affordable for families that are wanting to get into					1		1	1										
44. Is there any group or organization that could buy land?	1																	
45. Maybe grants could be made available for land to farmers with business plans who were intending to farm it - and stipulated that you could only be on it for farming								1									1	
46. Transferable development credits and conservation banking are interesting ways of creating land opportunities to others								1									1	
47. He's a director of RARTS rural alternative resource training society - valican hall (james rodgers - james@greenerhomes.ca)	1																	
48. Kaslo food hub has a directory to link farmland and farmers								1										

	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic support	
49. Any plan for farming needs to be organic here, otherwise this area will not be as healthy and livable as we see it now									1									
50. This plan should definitely address what's going on on perry's ridge because we rely on the water coming off there, so if that's not addressed well every farmer will be vulnerable		1																
51. All resource extraction activities are exempted from the water act, and that is a terrible situation for our clean water source		1																
Score	14	3	11	4	6		1	6	2	1			2	3	5		7	
	22%	5%	17%	6%	%6		2%	%6	3%	2%			3%	5%	8%		11%	

Argenta 1st December 2010

	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic Support	
Argenta 2	19%	1%	9%	6%	0%	0%	19%	2%	0%	0%	0%	0%	22%	1%	11%	6%	4%	



Argenta 2

Argenta 21st December 2010

	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm / Legal	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic support	
 Patrick and Colleen from Stellar Seeds are willing to coordinate people from around the region who could grow seeds for their seed business 							1											
 Richard - was thinking about transportation, getting things to and from market and equipment - it would be great if we had some sort of transportation system to move food and equipment around the region 															1			
 Trailers - like what Greyhound uses - would be a really good thing to move things around 															1			
 bruising is a serious issue for moving food around on these bumpy back roads 	1																	
 there's probably at least a couple hundred acres of unused land in Johnson's Landing that could be used for growing food 								1										
6. the market needs to be in place to justify adequate transportation systems, so it's a chicken and egg situation	1																	
 Living in Johnsons Landing we'll be limited by what we can produce and bring to market somewhat because of the bumpy road 	1																	
8. I think that transportation by water is a good idea, yet I think that more people need to start making a living from agriculture before that needs to happen	1																	
9. What do you need to produce to not have to think about jiggling, distance from market etc. and I think you need access to processing kitchens etc. because I think people need to do value- added products to be able to sell things out of the region somewhat								1							1			
10. Ken Hueston made the point that a lot of food from here could be going into the restaurants - and the ICC had a good model of farmers were bringing their products into a central place where they could hand over their products to someone who could represent it well															1			
11. Somewhere like the food hub is a good option for this sort of thing															1			
12. Growing for restaurants can have its downside in that chefs can have some very particular needs for food - clean, good looking, etc.	1																	
13. I have a sense that chefs in Nelson could be interested in something like this	1																	
14. having a meeting where chefs and farmers could meet in advance of the growing season to give one another ideas and order is a great idea							1											
15. I think there is a volume issue here - the number of restaurants who are willing to buy local food isn't many							1											
16. The chef at the meeting spoke about other chefs needing educating							1						1					
17. If you can get one restaurant to really profile local food its helpful for bringing others on board							1						1					

Argenta 21st December 2010

	Seneral comments	Water concerns	⁻ armers Education	Provincial problems	Maintain land in ALR	Jrban agriculture	Scaling up production	and availability	Drganic vs Conventional	Right to Farm / Legal	Veed Municipalities on board	-ow income support	oublic education	Zoning control	Agricultural facilities	school education and gardens	Economic support	
18. Trying to figure out how to get chefs excited and out of their realm of regular habits	1				~		01		0		2		<u> </u>	18	-	0)		
19. Buyers don't understand the range of the possibilities here	1																	
20. The vast majority of restaurants in this area were interested in buying and selling local food but they wanted consistency and quality			1				1											
21. As a seller if you sign up with Sysco, you need to need to pretty much just deal with them							1											
22. Some of the perception from chefs is that you can't have good quality consistent produce if you are a small, local producer			1				1						1					
 Chefs need to go with what's' seasonal too - if it's not grown now, tough luck 	1																	
24. Chefs can play a role in educating people													1					
25. One of the things working in terms of agriculture around here is that the volume of people around here is high in the summer exactly when all the produce is coming off the fields							1											
26. One thing about the summer is that produce is so widely available from everywhere and there's no way you can begin to compete on price							1											
27. Education of the public seems to be a key piece in this puzzle - there needs to be motivation, this is our local people and our regional economy - this needs to be an ongoing campaign													1					
28. The story of the 100-mile burger is a really encouraging	1																	
29. There's a ton of info out there, yet there are still a lot of ignorant eaters, but I think this plan needs to focus on producers			1										1					
30. The biggest expenses as a farmer are equipment and infrastructure - fencing, irrigation, cold storage, tractors, fence post diggers - this makes it quite daunting as it costs a lot of money - some shared equipment and tools is a great idea															1		1	
31. There was a community cold storage/walk in cooler in the past and this is necessary now - capital expenditures for young farmers is daunting															1			
32. Marketing help would be beneficial too - having some help with product profiles, labels, etc. as graphic designers can be expensive for each farmer to afford							1										1	
33. Around here there are some growers who are coordinating themselves just by talking and sharing about what they each need			1															
34. I teach Beyond Recycling and we do a whole unit on local food for the kids															1	1		

Argenta 21st December 2010

	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm / Legal	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic support	
35. There are a few school gardens around here and the kids get pretty excited about getting into the gardens and planting seeds - kids in Vancouver who had access to planting and weeding in their school garden showed such appreciation for local food and they changed their eating habits some by trying new foods that they proudly grew																1		
36. We need to think of education of push and pull - the demand side needs to be expanded - using inter-generational education to push local food would be a good thing like how recycling grew													1			1		
37. I think we need to reach out to that demographic of people who can't afford good local food and help them learn how to grow their own food													1					
38. I think we need education about farming and the social status of farming - our major expense by far is labor - there's this perception that you are a few steps below, a peasant if you work with your hands, without fossil fuel													1					
39. I would really like to see a local fair trade - people should be able to make a reasonable wage as a grower and as someone working with their hands and this education could start in schools													1			1		
40. There are three levels of education - children, the restaurants & retailers, and the big chunk is the general public													1			1		
41. Perhaps a publication about local produce funded by retailers etc. could be helpful - telling people about who is growing what and share some of the story of their produce													1					
42. If people could more easily tell of what they are going to spend on local produce that could be helpful and having local sections in stores							1						1					
43. Having a local only section could really help educate around seasonality as well							1						1					
44. In the Shuswap the local food group produced a calendar of what was produced local and when													1					
45. Showing people and example of the true costs of a single item could be really cool													1					
46. Maybe we need cooking classes for seasonal produce													1					
47. Stores need to get over their phobia of not having everything that someone might want at every time of the year													1					
48. Food habits are one of the last things they change - like once they move to a new country, people tend to be fairly engrained	1																	
49. When the Co-op expands, we might do a cafe that seriously profiles local food and this can help generate interest							1											
50. People asking for things at stores and restaurants can have a really huge impact							1						1					

Argenta 21st December 2010

	General comments	Water concerns	⁻ armers Education	Provincial problems	Maintain land in ALR	Jrban agriculture	Scaling up production	and availability	Drganic vs Conventional	Right to Farm / Legal	Veed Municipalities on board	-ow income support	oublic education	Zoning control	Agricultural facilities	school education and gardens	Economic support	
51. Meat and milk are such a huge part of local food because of the winter weather	1		1				01			1								
52. One of the things that the RDCK could do is make sure that agricultural zoning doesn't preclude having an abattoir														1	1			
53. If particular food isn't legal, it will always limit the amount of producers growing something				1														
54. Food safety is starting to become more of an issue				1														
55. Sharing the costs of the farmers to get over the hurdle of expense and time involved in following food safety protocols that will surely be coming down the pipe			1														1	
 Making structures of things like getting into dairy more accessible is major 				1			1											
57. Review, reduce, and streamline regulation as these can make it so difficult for producers			1	1														
58. I see the whole food safety thing moving in and I would like this to be monitored so that it doesn't unduly affect small producers who haven't been the ones bringing illness to consumers - it's the big producers with problems			1	1														
59. Running a retreat center, when the healthy inspector first came and realized that we didn't serve meat, the health inspector became much less concerned about our practices	1																	
60. New, stricter regulations seem to be coming to producers though, and veggie growers are going to start needing to meet more requirements - this would put us out of business (Tipiland and Vince)		1	1															
61. There should be some scale for food producers when after someone's been in business for a while and doing a good job, that they become less regulated, inspected	1																	
62. If you control the food supply, you control the people and this is often done through fear	1																	
63. There is the possibility of determining a particular area as being outside a particular regulation (food safety) zone	1																	
Score	16	1	8	5			16	2					19	1	9	5	3	
	19%	1%	%6	%9			19%	2%					22%	1%	11%	%9	4%	

	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm / Legal	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic Support	
Creston	20%	1%	14%	14%	5%	2%	4%	2%	0%	6%	3%	0%	7%	4%	14%	0%	3%	



- General comments
- Water concerns
- Farmers Education
- Provincial problems
- Maintain land in ALR
- Urban agriculture
- Scaling up production
- Land availability
- Right to Farm / Legal
- Need Municipalities on board
- Low income support
- Public education
- Zoning control
- Agricultural facilities
- Economic Support

	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm / Legal	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic support	
 Major concerns include the loss of prime farmland and genetically modified organisms 					1													
2. Concern about genetically altered food - once you alter it, it takes all the native breeds away, once it crosses the old stock is gone forever. There are negative health aspects and we don't have any labeling system to inform the public of what they are eating. In Europe people know whether they are getting GE foods or not, because the people have pushed for it. Unless people scream and holler about it, Monsanto will bulldoze over us.	1																	
 It's the consumer, not the farmer, that needs to put pressure on the government about this because farmers are only 1% of the population 													1					
4. Trying to make the Creston valley non-gmo would be nice, but the fact that our prevailing wind comes from the south, we are limited in luck because pollen can travel from the us up	1																	
 Education is the key - if people don't know what GE is all about, they won't care 			1										1					
6. There was discussion within the RDCK at one point about making statements against GE, but when provoked about GE in shrubs and grasses in municipalities etc. It seemed that the sentiment was that it was ok for some and not for others to use it, and again this comes back to education													1					
7. There is a difference between traditionally bred and genetically altered crops	1																	
8. We run sheep - and this whole new system is putting the cost right out there and so many people are just getting out of it. This is all about the Americans getting into our food system and perceived risk				1														
9. What are we protecting society from?	1																	
10. If you talk to any brand inspector, they'll concede that some animals have gone into the food stream that shouldn't have - the question is, is this current regulatory scheme worth it?	1			1														
11. It's an export issue and we're trying to grow small local markets				1														
12. The average age of the farmer in Lister is 70 and they won't be running to plant vegetables, though the farmers markets are a great thing and i think they are the future															1			
13. It took 9 years for all the canola in Canada to be contaminated and soon wheat will be allowed - in no time the corporations will be owning our fields because of all the GE crops	1																	
14. There are severe problems coming into our food system through GE foods and we don't have control over it	1																	

	3eneral comments	Water concerns	armers Education	Provincial problems	Maintain land in ALR	Jrban agriculture	scaling up production	and availability.	Drganic vs Conventional	sight to Farm / Legal	Veed Municipalities on board	.ow income support	oublic education	20ning control	Agricultural facilities	school education and gardens	conomic support	
15. I think the biggest cause of disruption to the local food system is the change in meat regulations - it caused us to lose \$20k/annum income. Unless we start building local abattoirs, we'll never have a stable local food system - you need the animal fertility to cycle through your fields. The RDCK needs to pursue putting in an abattoir.				1											1			
16. Changes as drastic as putting in an abattoir, needs to go to public process and we need to keep good faith in that. We need to get people to understand and support public process around these food system changes so that it has stick				1										1	1			
17. The RDCK doesn't own land per se - we own some landfills and otherwise lease tracts of land. We have discussions about creating some land reserves for parkland purposes, but we're not there yet	1																	
18. Farmers need to make clear what they want to RDCK directors so that we know what we can do to support	1																	
19. No competition in abattoirs is making our options lessened				1											1			
20. We used to have 60 lambs, now we're down to 8 just to keep our borders fire-safe	1			1														
21. An issue for us is abandoned and/or neglected orchards - there is no regulation that requires people to take care of pest outbreaks, and this is a major issue for commercial producers.				1						1								
22. Spotted-wing drosophila (SWD) is going to cause major issues with anyone who has any fruit - including over and under ripe fruit. It's very hard on organic producers because conventional producers will have to be going back to old chemicals to deal with this. We're hoping it will be killed by the cold - will see after this winter.				1						1								
23. We've discovered our export standards for fruit are much stricter than our import standards			1	1						1								
24. A few years ago we (the RDCK) got rid of the regulation that made weed/pest control a necessity										1	1							
25. Weed control is not an AG problem - it's an environmental problem										1	1		1					
26. Gravel pits are a spot where this is a serious issue, there's major weed overgrowth and it spreads all over when people get order gravel	1																	
27. Subdivisions are an issue for orchardists - the more neighbors you have, the more issues you have.					1	1				1	1			1				
28. George Penfold did research on the amount of land required for different land uses - i think this might be a number that is almost impossible to give, every farm is so varied. In terms of farming within the ALR makes any divisions within the ALR a bad thing - it's there to protect farmland and we have so little of it.					1	1	1							1				

	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm / Legal	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic support	
29. There is an argument though that if you are going to restrict farmland you need to help farmers too - we have the worst AG support in Canada and in BC. Farming is taking a good kicking, but we are being supported, there's very little income to be had.			1														1	
30. The biggest issue with land is there are so many people with lots of money but you can't afford to buy it and farm it - if the gov't owned it, they could pay farmers when they are ready to retire for their land, and then 'sell' it to others								1										
31. The biggest pressures for getting land out of the ALR is from producers because of the lack of support they get financially anywhere else.					1													
32. In the UK, if a farm comes up for sale within a greenbelt, a council has an opportunity to keep the land and then rent it out to new people who are willing to farm it. In BC, in a rural area, there's no money to move around except for limited grants and all the other money needs to go to services for the population - you need to introduce a service and then get voter consent for this. The ability to buy is key, as the RDCK doesn't have a slush fund for purchasing land like this. The public needs to be educated and needs to support getting taxed for a service like this.	1				1			1										
33. This sort of move needs to made provincially We need a huge leap like this, yet everything in government has recently shifted.				1														
34. We've all bought in to this North American attitude that taxes are bad and we are suffering the consequences - it's a mindset.				1									1					
35. The only local tax that RDCK can implement is a resort tax, but we can use economic development as a catch all - showing the economic benefits attached to agriculture can be advantageous is getting additional funds.	1													1			1	
36. There's probably ways of helping agriculture without buying farmland - extension services established within the central Kootenays would have a huge impact on AG throughout the region with a relatively small budget			1												1		1	
37. The economic discretionary money is decided upon by the RDCK, it just can't be seen to benefit an individual business			1												1			
 We can pool our economic development funds to hire extension agents 			1												1			
39. We use glass bottles for the cherry juice - trying to be smart about it. We haven't experienced any difficulties with packaging or marketing. We went and had our product tested to have a nutritional analysis done, yet realized we didn't need to because we could just go on to the USDA site and get a reading that wouldn't have been sufficient.			1															

	Seneral comments	Water concerns	⁻ armers Education	Provincial problems	Maintain land in ALR	Jrban agriculture	scaling up production	and availability	Drganic vs Conventional	Right to Farm / Legal	Veed Municipalities on board	-ow income support	^o ublic education	Zoning control	Agricultural facilities	School education and gardens	Economic support	
40. Major money can be saved on bottling etc. If you can start with a large scale - problem is we don't all use the same things for packaging. The more quantity you can bring in, the cost becomes much more reasonable.	1		H	4	J		0)	1	0	H	2	1	4		1		B	
41. For this coming year we need to expand our operation because of a grant we received and we'll need to ramp up our production this year so we'll be bringing in more packing stuff and should benefit from that.	1																	
42. We can make much more selling it as cherry juice than selling it as prime export							1											
43. A marketing specialist could help new producers/people starting new markets to research some of their unique issues and problems - we could really use this sort of help. Production isn't usually the issue, it comes down to marketing			1												1			
44. If you are setting up a new business, you've got your hands full with setting up an operation and we usually only give marketing lip service			1												1			
45. Community futures has been a really great resource for us and often people don't know about these things - business marketing could keep track of the programs etc. To help farmers.			1												1			
46. A lot of big chain stores won't even buy your local products anymore - the managers have no control over it. The big chains want to exclusively deal with someone who can provide for them year round. The growers need to take a look at this and determine whether they can meet this, or we need more support for local farmers markets and local retailers							1						1					
47. It's in the public interest that local produce is used locally - there must be a way to sanction these buyers to buy locally. How can we help producers minimize their costs and maximize their production?													1					
 Nine states in the us are now outlawing corporate farms That's interesting 	1																	
49. Looking at leveraging in terms of looking at whether RDCK could partner with community futures towards a marketing specialist - perhaps accessing western economic diversification funds			1												1			
50. I pay someone \$20k/year for marketing and i ask him to look at local markets, but the money is just not there I need to bring them out of this region - out of Canada to make the most money at it	1																	
51. I would look at putting something other than my cherry trees in to produce something to keep it local, yet i look at things like carbon footprint etc. And the benefits need to be there (and of course timing - length of maturity for crops - plays into this)	1																	

	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm / Legal	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic support	
52. Part of our problem is our size - we're so small. Nobody around here is 40 acres in size, so we aren't at the critical mass where we can look to some of the alternatives possible.	1																	
53. Other options are 'not-fresh' products - dehydrated, canned, processed							1											
54. I think extension agents are a really significant contribution that the RDCK could provide - this seems actually attainable			1												1			
55. If we find the wherewithal locally to find extension agents, are they just let off the hook?			1	1											1			
56. As we look at freshets and the changes in water flow etc., this discussion needs to be tied in to farming - the convos around the Columbia basin treaty are at a high level and we need to bring this back to the public and farmers (Larry Binks would have a good handle on this)		1																
Score	19	1	13	13	5	2	4	2		6	3		7	4	13		3	
	20%	1%	14%	14%	5%	2%	4%	2%		%9	3%		7%	4%	14%		3%	

	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm / Legal	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic Support	
Creston	22%	4%	0%	0%	17%	0%	4%	0%	0%	13%	4%	0%	0%	17%	4%	0%	13%	



	seneral comments	Vater concerns	armers Education	rovincial problems	Aaintain land in ALR	Jrban agriculture	caling up production	and availability	Drganic vs Conventional	kight to Farm / Legal	Veed Municipalities on board	ow income support	ublic education	oning control	Agricultural facilities	chool education and gardens	conomic support	
 Not opposed to the alr - we just need more work arounds for the issues of housing of children (farm successors) 	0		Ш	н	1		5		0	<u> </u>	~~			1	1	5		
 Has anyone looked at the land ownership/succession models used for farming in europe? 					1													
3. In europe if land is designated as farmland, people can only build on the boundary and the area around the house can't be in exess of the footprint of the house. Additional homes on the land can be used for family (parents) of the farmers, or for farm labourers, otherwise it sits empty - to use it for another use means they have to pay 10x the tax amount.	1																	
 There is also a greenbelt system around many cities in europe which is infallible 	1																	
5. I realize and don't want the gov't to bail us out - the pressure on farmland by non-farmers though is a major issue, and dealing with these people who want to live on rural estates is an issue the rdck could deal with for us.					1					1				1				
6. We live amidst alr land, yet people are coming in and building their big homes and only having a couple horses etc they are living on alr land but not farming at all					1					1				1				
7. A lot of older people have been farming and now are ready to be retiring, and there is a group around chilliwack who pooled their money and bought another farm so they get to retire on ag land where they want to be, have extended care built in, and they've hired young people to work the land	1																	
8. One of the classifications i'd like to see is agri-tourism - we're right on the lake but we are restricted from having rvs on our land - i'd like to see an exemption for this (this is a zoning issue, because we are not in the alr)														1			1	
9. We get charged xx/acre to the dyking district for water issues		1																
10. More funding is neccessary for our farmers market - if we can't advertise and build the atmosphere at the farmers market we simply cannot support our farmers and ultimately change consumer habits											1						1	
11. We don't want to be a burden on the gov't, we want to pay our own way, we just want a good system for doing that	1																1	
12. If the creston valley were recognized as pesticide-free and gmo-free we could much more easily set our own prices because we'd be giving them something better										1								
 Pretty tough to farm on a big scale without gmos - no! Not at all! 	1																	

	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm / Legal	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic support	
14. We've talked alot in the past few years about a regional food distribution system - there are lots of plans getting made - are you collaborating?							1								1			
Score	5	1			4		1			3	1			4	1		3	
	22%	4%			17%		4%			13%	4%			17%	4%		13%	

	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm / Legal	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic Support	
New Denver	36%	0%	3%	3%	2%	0%	7%	2%	1%	2%	3%	0%	17%	5%	14%	2%	2%	


	General comments	Water concerns	armers Education	Provincial problems	Maintain land in ALR	Jrban agriculture	scaling up production	and availability	Drganic vs Conventional	Night to Farm / Legal	Veed Municipalities on board	-ow income support	^o ublic education	Zoning control	Agricultural facilities	school education and gardens	Economic support	
 One thing that is wonderful about ND is the incredible gardening culture, people who know what they are doing within the community 	1	~					01	_	0		_	_						
 Ray Nichols is a wonderful teacher and gardener up in hills and he could be a teacher for the entire RDCK 	1												1					
 There is a group in the community that is working on getting a greenhouse going 							1											
4. Slocan lake urban gardeners from the ground up was a group that did small educational workshops on canning, root cellars, etc. In the past - Jane Murphy, Steven Lomas, Stan Lowe	1												1					
5. Harvest share/fruit tree project is now going well	1																	
 Lace - some sort of group There are going to be more carious papalties for people 	1																	
who are keeping bear attractants around - and this could have repercussions for people who have fruit trees as they might need to pick their fruit before its fully ripe to get the bears away													1					
8. In ND and Silverton, after the harvest share program started, 22500lbs of fruit was collected	1												1					
 Why aren't foragers used on a larger scale Real problems with access to markets 	1						1						1		1			
 Could a family produce enough food for themselves and then enough to sell \$10k in profit? 	1						-						-		-			
12. There might be a way for small scale, family-sized production	1																	
13. Why aren't we doing more along the lines of victory gardens	1																	
14. The ability to have animals is an issue around here										1	1		1	1				
15. We are forgetting about the symbiotic relationship between the animals and the produce - the animals provide the fertilizer										1	1		1	1				
 Just read 'animal, vegetable, miracle' and it's about being a locavore and asking your retailers what they are stocking that is local 	1												1					
17. Are there barriers to taking local products in our grocery stores?							1											
18. The abattoir issue is a real problem - there's nothing around here and we have to go to Lumby to get local meat				1									1		1			
19. I wonder if the RDCK could lobby the provincial government for a piece of remote land to put an abattoir				1									1	1	1			
20. It would be really great if we could find a solution to the abattoir issue				1									1		1			
21. You need real composting expertise to deal with animal wastes													1		1			
22. For around here, you can use some pretty simple and small scale composting to deal with animal or vegetable wastes														1				

	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm / Legal	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic support	
23. I find it irritating that they bring in regulations although I've never heard about the issues in the first place - are these coming in because of pressures from corporations?				1														
24. When i first moved here, you could get your chickens and raise them and then find people to come and deal with processing them if you didn't want to - where did this go?															1			
25. Just about any proposal for an abattoir etc. Will really run into issues, and if there is support, it is really important to make that loud and clear													1		1			
26. RDCK is the one group that can positively affect agriculture around here because they have control over those things that affect it	1																	
27. It's great that there is a farm status tax break, but if you are growing ornamental shrubs or tulips you are getting the same break, so if the RDCK really wants to support food production, that tax break needs to be given to a smaller group of farmers who are growing food							1							1				
28. Leave what's there for the farm tax status, but make it a bigger break for those who are producing food							1							1				
29. I think everyone should get a basic tax break of \$3500 for food production (income tax level) and \$7000 for seniors	1																	
30. Is there anything the local government can do to make it easier to lease land?					1		1	1										
 We should have more ALK lands One idea for the RDCK would be to channel the funds/grant money they have towards food production 					1												1	
33. It seems to be that the CBT comes into being because of a big loss of our agricultural land, so it makes a lot of sense that they start really funding ag in a big way	1																1	
34. Distribution and transportation is what made the growers vulnerable around here in the past - and scale is an issue too because large purchasers need to be able to get 100 pounds of products that one farmer might not be able to provide, but if it was collected and pooled that would be possible							1								1			
35. People who are purchasing and selling good quality in this community is a value-based statement	1																	
36. Sometimes as a consumer it's really hard to deal with boutique prices - should good food be so expensive and does getting good food depend on your ability to pay for it? What can we do to make organic, wholesome food cost competitive?									1									

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	Seneral comments	Water concerns	armers Education	Provincial problems	Maintain land in ALR	Jrban agriculture	scaling up production	and availability.	Drganic vs Conventional	kight to Farm / Legal	Veed Municipalities on board	ow income support	oublic education	20ning control	Agricultural facilities	school education and gardens	conomic support	
37. The closer you can bring between people who produce food and those who buy it is important because it fosters that relationship between the two and so farmer should spend time at farmers markets to cultivate this	0	1	H	Н	2	I	01	1	0	H	2	1	1	Ž	1	01	E	
 The cost of oil will change everything in terms of what we are paying for our food We have to make a distinction between those products 	1																	
which are totally local and those which we are relying on as imports	1						1											
40. Secondary processing for things like sunflower seeds etc for oil - would be beneficial							1								1			
41. Poverty is an issue around here, BC has the reputation of the most child poverty - getting good quality food shouldn't depend on your ability to pay for it	1																	
42. At David Thompson university they use to butcher their own animals and used every part of it in all they made	1																	
43. Meat processing used to happen in every grocery store	1																	
44. George Marx used to cut up meat and everyone would have their own meat locker where it was stored for you to use when you were ready	1														1			
45. I think that we don't eat food as fresh as we used to is having an impact on our health	1																	
46. We've lost a lot of the wisdom that comes with eating good, healthy, fresh foods	1																	
47. Japanese internment camp people and skills came to this region and it's not dead yet - we can still access it	1																	
48. The apple tree was the first bulk 'store' in the region, before it became widespread	1														1			
49. It seems there is a lack of knowledge sharing and an ability to share knowledge across the region - like raising and slaughtering chickens - how can new, young people in the region access this information			1										1					
50. We should be teaching skills regarding food right in the schools			1										1			1		
51. Why couldn't we have a direct relationship with employment programs in terms of food production													1			1		
52. There is a problem with funding projects in this area because nobody can get the money to do what they need to do well, instead they are giving out little drips and drabs and nobody can do much with it If there was a partnership with CBT so much more could be done for funding real and bigger projects	1																1	
53. I think those who are administering grants lack the big and strategic vision to know what they are doing and they don't have clear vision for what to support and how best to do it	1																	

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	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm / Legal	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic support	
54. In the summer, mick hires students from the school to help him out, though he pays more than he makes	1																	
55. Mick would be interested in mentorship possibilities - he's hosted many people on his farm in a learning relationship. He would be interested in working with people over the course of a year, and he would like support in terms of paying people for the work he's doing as well as help with housing people who would come and live on his farm	1		1															
56. He's looked at the wage-top-up schemes, but all the paperwork involved makes it less tempting to pursue	1																	
57. CBT is willing to fund something, but they seem to need major community support to really be behind it	1																	
58. Where do the municipalities fit into this plan - how are they supporting this plan?											1							
59. It's bizarre the disjunction between the municipalities and the greater region - the cities around here rely on the greater region as their economic watershed											1		1					
60. Get hold of Olly and Frank who were behind quality produce	1																	
61. There's way more restaurants and other purchasers who could be sustaining a local produce distribution unit															1			
62. When i was 5, my grandparents had a big truck that would come by and sell to people - used to look like a big double decker truck that stocked everything	1																	
63. There was a problem with the grain CSA in that we were apparently in the dwarf bunt quarantine area, so suddenly the farmers had to grind all the grain to stop it from infecting other parts of the region	1																	
 64. There was a flour mill in the orchard 65. I think communication around the region is not great - we don't have much of a relationship as communities or get together and collaborate on things 	1												1					
66. Is there a role for someone to communicate and share who is doing things/growing things who can facilitate distribution and communication between producers and consumers															1			
67. I think we should learn from one another, yet i think we should focus on what we do can do right within our community			1										1					
68. I disagree, we need to focus more on what we can do regionally and make plans that make sense for all of us - we need a higher level of infrastructure to make the impact we are needing so we all need to work together to make this happen													1		1			

	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm / Legal	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic support	
69. Anna and Jeff tried to create a business something like rideshare where a farmer could post what they had online and purchasers could go online and find what they were wanting															1			
70. I used to do a CSA but it was too much to do, if there was a single drop off spot where i could bring things, that would make a difference to my overall work level	1																	
71. Does the RDCK district own any significant ag property?	1																	
72. You need to be careful with what you do, so that you are not impeding someone else's ability to make a living	1																	
73. The value of real estate is a serious issue in terms of distribution around here - we couldn't afford to buy this building off of Anne for a food distribution center because it was a losing proposition								1										
74. One could make a living just selling compost or manure rather than food	1														1			
 Government won't allow you to claim farm income on selling manure 	1																	
76. I would curious to know what access the municipalities/regional gov'ts have for funding	1																	
 Capital and land are a huge part of the equation for sustainable food 								1										
78. Crown land is our land, yet when the gov't releases it, they are trying to get market rates and trying to make money on development	1																	
79. I would just like to see the RDCK not be land-broke	1																	
Score	43		4	4	2		9	3	1	2	4		21	6	17	2	3	
	36%		3%	3%	2%		7%	2%	1%	2%	3%		17%	5%	14%	2%	2%	1

	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm / Legal	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic Support	
Nakusp	36%	0%	8%	3%	0%	0%	12%	1%	3%	0%	0%	0%	8%	0%	22%	4%	3%	



	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm / Legal	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic support	
1. The coop is different from the grape growers association	1																	
 Exploring the possibility, viability, and feasibility of a coop to support farmers - so that people can make a living on farms, connecting farmers with land (similar to Kaslo), would like to support gmo and pesticide-free, organic from trout lake to Edgewood 							1		1				1		1			
3. We have water, good weather, geographically are in an ideal farming location	1																	
 From Edgewood to Beaton there's lots of class 1 land (45000acres) which could result in many jobs (within 2-5 years employment of 100 people) 							1	1										
5. Need 100 acres of land for coop - freezing units, storage, drying							1								1			
6. Burton would be a good enhancement area for setting up the co-op which could be employing up to 200 people in 5 years															1			
7. A co-op can look at what was in the past and build on that															1			
 Co-ops can facilitate the leasing, renting, partnering, or buying of land 															1			
9. Looked at a piece of crown land with good water and bring the heritage of this area of agriculture and the coop model could do this - must have an agricultural specialist															1			
10. The grape growers association - the valley changes up and down the valley in terms of weather, so they are wanting to conduct a climate study to document the data in terms of frost dates etc.	1																	
11. Since the flooding the climate has changed quite a bit and no new data has been produced since the flooding	1																	
12. The grape growers association is also looking at planting a one acre test plot of ~15 varietals to determine what will work, looking at cold climate varieties, organic varieties requiring little to no inputs	1		1				1											
13. The Linton project did the same thing in terms of research - a network of data loggers, which ultimately resulted in better funding for the project	1																	
14. We hoped to replicate this climate, but because it was already done somewhere else, we couldn't get funding from the same source so we are looking for a funding source	1																	
15. In Linton and Alouette they did the study for 5 years to get a good average - about \$250/station to implement the study along with the cost of software to sort all this data	1																	
16. They've heard that having an ag area plan would be a big benefit for this project, but they won't help them cover the capital costs (investment agriculture, CBT)																	1	

	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm / Legal	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic support	
17. This research would support any sort of agriculture in this region - the data logging could track many different aspects (soil moisture, humidity, temperature, frosts, etc.)			1															
18. What about the idea of creating microclimates (permaculture technique)?19. Optimum growing area is not at the top or bottom of the valleys, but in the middle where all sorts of microclimates can be developed	1																	
20. We had a meeting here with 75 people who showed up with a couple specialists who told us the importance of choosing the right varietal, of having a plan			1															
21. People are growing grapes in their yards for eating - wondering if we can grow grapes to make good wine	1																	
22. What is the RDCK agricultural area plan able to do? Trying to figure out how to turn around the mistakes of the global food system in this area with the small purview of the RDCK	1																	
23. If the RDCK could get an abattoir in this area it would be so helpful - i cannot sell my meat to my neighbor without breaking the law and then maybe more people could have a few more animals to produce for one another															1			
24. We have to do a really good PR fight again nimbyism to support a community abattoir to drum up support - how do we show that the wastes won't be an environmental hazard?													1		1			
25. Most of the farms around here aren't doing much of anything, but there is a bunch of hay made around here	1																	
26. No large market gardening happening, but there is a bit - there is a farmers market here and its quite successful	1														1			
27. Nobody has a place to sell around here - as in a farmers market -	1														1			
 There's not a core organization around here to raise funds, to do and go and get and do more 	1																	
29. How are you going to overcome people's complacency? More PR might help Skills-link group built 40 raised beds and distributed them throughout the region this year, the whole attitude seems to be shifting for people growing food													1					
30. Halcyon hot springs restaurant is looking for locally grown food - veg is not so much a problem, but getting local meat is a problem				1			1											
31. I think the local restaurants would be interested in area meat, but it's just not available				1			1											
32. Why is grape growing so popular around here? More people are drinking wine and they are looking at what the industry did for the Okanagan	1																	

33. We need another 25% of grape production to meet BC demand for wines	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Example the second s	Land availability	Organic vs Conventional	Right to Farm / Legal	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic support	
34. When we started our farm 25 years ago, i had a phone call from someone talking about them growing organic produce - a person who was willing to sell gross amounts of produce to japan if it was organic - we are lacking the leadership to develop the agriculture sector							1		1									
35. The coop is looking to coordinate the production of food in this valley to start supplying the area markets - coops are growing throughout the country as being a good model for business	1																	
 36. The arrow lakes and west Kootenays are probably one of the best areas to grow crops 37. Production isn't the challenging - marketing, selling it to make a profit is the much bigger shallenge 	1																	
38. The costs for equipment are forbidding - we have 8 acres and we can't conceivably buy the equipment to work it but what about the co-op providing laborers and a market where landowners can get these people to work the land using shared equipment with a market to take their product															1		1	
39. One project that CBT has been supportive of is the tool library, and the winter lecture series which is something that has been very beneficial - sharing information															1			
40. When people come into this area to buy land, they tend to get large tracks of land and they are wanting to know who will come and work the land, they want the tax breaks and to see the land being used productively															1			
41. Who could hold the intellectual holdings of agriculture in this region - a farmers institute, the RDCK, the college?															1			
42. I think working to preserve agricultural potential is important because although we live with cheap food now, that is going to change with fuel costs going up etc.	1																	
43. Where are we going to put the infrastructure for agriculture as we work to maintain agricultural potential															1			
 44. Part of a good plan is support for education - getting people talking. Changing the mindsets of adults, or children of shopping locally, of eating well 45. We have better tasting apples here than the Okanagan - the soil and climate produce better apples 	1		1										1			1		
 46. At CBT we have a program called 'know your watershed' - maybe we can develop a program called 'know your food shed' 	1																	

	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm / Legal	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic support	
47. There are teachers around here doing really wonderful things, but for them to get the word out and get more support for their programs, they need to spend more of their personal time or time away from the kids	1																	
 Kids will eat much more healthily if they have some ownership over it 																1		
49. Once the champion in the school moves on, the project dies that's the benefit of permaculture in that it's a sustainable system based on sustainable communities																1		
50. Permaculture was develop 30 years ago by Bill Mollison in Australia and it is becoming more well known as people are using it for food sufficiency - it is allowing communities to grow enough food for themselves and to become economically sustainable - traditionally this area produced enough food for ourselves and to export food to others as we have done in the past	1		1										1					
51. Permaculture is based on observation - what's worked traditionally in the past for us, looking to the forest for examples of what works in cultivated areas - it is being recognized as a viable way of producing food, reclaiming land, increasing the biodiversity	1																	
52. Just as an observation is that the second biggest export around here is garlic - it does tremendously well, is easy to cultivate, and gets a good return							1											
53. We have to remember that this is not the Okanagan, it would be unique to this valley, it would be different from what people are used to at this point - it is important for grape growers or whoever in this region to develop their identity			1										1		1			
Score	26		6	2			9	1	2				6		16	3	2	
	36%		8%	3%			12%	1%	3%				8%		22%	4%	3%	

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	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm / Legal	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic Support	
Salmo	34%	0%	11%	0%	6%	0%	9%	6%	2%	0%	0%	0%	13%	2%	11%	5%	2%	



	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm / Legal	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic support	
1. George commented that the inequity in the valuing of labour for food is galling – as an example, it takes a 75# bag of carrots to barter for a massage.					_		•						_			•	1	
 Joel: education has to be more consistent and ongoing about food and farming – for the general population and those wanting to farm 			1										1			1		
3. George: would be useful to get data on how old the produce actually is when it gets here from California. What happens to the produce when it has sat in plastic for > week?	1																	
 August: they are spraying all produce (organic and conventional) at international ports, so imported organic food is no longer chemical-free Im (Urgust): the way to get higher prices is to differentiate 	1																	
your product. 6. There is still massive production so scarcity is less of a	1		1				1											
 Threat, as far as he is concerned; Shortage / risk situations are exacerbated by speculation for profits; 	1																	
 "the solution to high prices is high prices" – high prices inevitably drives production volumes up which inevitably drives prices down; 							1											
 lower environmental standards from other food producing areas are more of a concern than organic standards; 									1									
 small lot agriculture is inefficient – and this is what we have in the W Kootenays; 			1				1											
 hog prices have plummeted - \$0.65 / # hanging on the rail is what most farmers are getting these days. 	1																	
12. Joel: differentiation needs to be based on more accurate labeling.			1										1					
 Jim: original breeds (heritage) for pigs might help with niche markets. 							1											
14. George: even when they get their product on the shelves of the grocery stores, they sit next to product priced lower.	1																	
15. Laura: chain grocery stores (such as Overwaitea) require that the suppliers carry prohibitively expensive liability insurance – possibly as a result of the spinach scare a few years back.	1																	
16. Laura: Salmo Elementary School parents are fundraising to start a garden at the school.																1		
17. Levi (16 year old new farmer): Lisa, a teacher at the Salmo High School, runs a program called "Inspiring Youth for Change" that has no funding but has been good for getting youth out into the community and onto farms.																1		
18. Maurgo: chefs are the back-door to introducing people to local food.													1					
19. Need to keep a list of local businesses receptive to sourcing locally.													1		1			

	3eneral comments	Water concerns	armers Education	Provincial problems	Maintain land in ALR	Jrban agriculture	scaling up production	and availability	Drganic vs Conventional	Right to Farm / Legal	Need Municipalities on board	ow income support	^o ublic education	20ning control	Agricultural facilities	school education and gardens	Economic support	
20. Part of the education effort needs to be focused on simply getting food in front of people's faces: the move to Baker Street for the Nelson Farmers Market was a really good move forward.	1	2			2		01	-	0	E	2			Z	7	0,	В	
 August: collaborative farmers markets efforts – by pooling goods and sharing the work, more farmers product could get to market. 	1						1											
22. Maurgo: they have never been able to figure out how they could afford to take a day away from the farm to sell at a farmers market.	1						1											
23. Farmers markets must provide shade and refrigeration.															1			
 Jim: livestock is necessary for local food systems; a slaughtering course, like FoodSafe, should be offered for on-farm killing. 			1															
25. Jim: where there is no evidence of bad food, they should leave them alone (i.e. small-lot livestock and on-farm slaughtering for sale).	1																	
26. August: people are afraid of food and especially meat – they want it de-natured since they perceive this to be safer.			1										1					
27. August: people are so detached from food and maybe they would make a different choice if they knew more about energy, methods of production etc.													1					
28. Jim: consumers dominate (not farmers) and they vote.													1					
29. Jim: commercial cattle producers can't make a living because there is no differentiation for their product.	1		1															
 Laura: fear and ignorance scares people from even raising livestock. 	1												1					
 Jim: he makes his income because his animals are differentiated (leading to a discussion on inter-provincial trade in meat). 	1																	
32. Filip: the government should buy farmland at market value and then lease it back to farmers.								1										
 Leaving the process of preserving farm land to the current system is clearly not working. 								1										
34. Each local government needs to buy enough land to produce food for their citizens.								1										
35. Jim: the value of "ag land" is so low that it doesn't work as a retirement fund. The land has to produce enough value – the ALR just holds land for big development.					1			1										
36. Cominco used to own a bunch of acres by the river and had a dairy on it. Bouma Sr had a second dairy nearby – now Bouma Jr grows hay on the land.	1																	
37. The RDKB took the land out of the ALR and now > 80 acres of good farm land is being black-topped over.38. ALR decisions have to be consistent.	1				1													

	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm / Legal	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic support	
39. Communication from the ALR needs to be more timely – is usually a long shot to get any kind of communication from them.					1										-			
40. Local Director (Hans Cunningham) was really helpful in their effort to get a subdivision.	1																	
41. ALC needs to allow the next generation to build a second home on the property, for farm succession.					1									1				
42. Tax options for retired farmers need to be explored – if they can demonstrate a history of farming, then after retirement, they should still be taxed as farmers.	1																	
 Retiring farmers should be able to stay on the land with 5 – 10% of the land base, so they can retire in familiar surroundings and with dignity. 	1																	
 Shortage of skilled slaughterers – is both a crisis and an opportunity. 															1			
45. Filip has wool he would like to use for "value-added" but does not have the knowledge, connections or equipment to do so.															1			
46. Jim: partnering is one way to tackle the "value-added" issue – share costs and equipment, or exchange raw goods for portion of end product.															1			
 RDCK could make their large equipment (ie. Skidders) available to farmers when they need to move land etc. 	1														1			
48. Joel: would like to see listings of farmers and their products for both food access and learning opportunities.															1			
49. RCMP grow-op seizures could be distributed out to bona- fide farmers.	1																	
50. Filip: would like to see a minimum annual income for farmers – Levi questioned the wisdom of this idea based on all the broke loggers, fishers etc.	1																	
Score	22		7		4		6	4	1				8	1	7	3	1	
	34%		11%		6%		%6	6%	2%				13%	2%	11%	5%	2%	

	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm / Legal	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic Support	
Creston 3	15%	0%	15%	3%	15%	0%	3%	4%	0%	3%	3%	0%	11%	8%	14%	0%	5%	



	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm / Legal	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic support	
 Confusion over classification of homes and farm buildings for property taxation – are they all entitled to the exemption for farms. or only the residence? 				1	_	_	•	_		1	_	_	_					
 Issue of farm / rural estate conflict, as well as urban encroachment. 					1					1								
3. Wayne: ALR must be kept – it helps him farm.					1													
 Taxation is not a huge issue – farming supports community and community supports farming, so taxing farms is appropriate. 	1																	
Creston is isolated from the other centers of farming in the province.	1																	
6. BC is not a supportive place to farm – the Ministry of Ag is a joke, without even a district agrologist in place any more.				1														
 Having a good extension service is not a contravention of international trade agreements. 															1			
 Ministry of Ag used to supply three extension agents, providing locally-based / grounded information and research services. 			1												1			
Historically the extension agents had a very strong relationship with both the land and the farmers.			1												1			
10. Ironic contrast is the fact that the Creston Valley now has 3 very available Canadian Food Inspection Agency staff inspecting and enforcing but there is no support for ag.				1														
 RDEK has an agronomist on staff who specializes in noxious weeds. 	1																	
12. Discussion about possible partnerships with local colleges: Donna explained that the College of the Rockies' horticultural program based in Creston was closed because it was undersubscribed. However, this may have been due in part to the fact that the end jobs did not pay well relative to the time and resources necessary to complete the program. They are working on developing a 3 month horticultural program.			1															
13. Suggestion to tax the ALR specifically to fund extension agents – generating \$300 - \$400,000 per year.															1		1	
14. Professional jobs could help bring the kids back home and keep them here.	1																	
15. Agrologist co-op training programs could place them on farms.			1															
16. Municipalities tend to be ignorant of how much farmers are putting into community – they may live and work outside of town, but they spend their money locally, they volunteer in community organizations etc.											1							
17. The Creston Valley Food Action Coalition has been really effective at raising awareness, generally, about food and ag issues.	1												1					
 The general population is more aware but elected officials are still disconnected. 													1					

Creston 3	3
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	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm / Legal	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic support	
19. Rural contributions need to be acknowledged by urban governments.							• /				1		1			•,		
20. Wayne: one wish he has for the ag plan is that the RDCK and municipalities recognize the importance of agriculture.											1		1					
21. Creston Valley Ag Society has been wanting to put on a tour of Valley farms for elected officials, to demonstrate its importance and diversity – they have simply not had the resources to pull it off, despite recognizing its importance.	1																	
 Farmers have to do a better job of promoting ag. Over the past 30 years, ag has become disconnected from 													1					
food – all major products leave here and come back in a different "food" form.	1																	
 The ag community must be consulted on any bylaws proposed in the ag plan that affect farming. 										1				1				
25. Randy is on the Valley Advisory Planning Committee, representing the Creston Valley Ag Society – there are not enough ag reps on the APCs – his is a voice in the wilderness.	1																	
27. When a prime piece of ag plan is under consideration – they principle of the matter is that ag land must be held onto.					1													
28. Real estate agents selling land they know is within the ALR still propose it can be "developed".					1													
29. ALC Kootenay Panel is dominated by E Kootenay members.					1													
 Ag land is being bought by people who don't live on it, don't farm it. 					1									1				
 Randy thinks there will be more people getting out of farming, which will result in even more pressure on ag land for "development". 					1									1				
32. Wayne proposed that idle land within the ALR be taxed super-high to really encourage it to be farmed – use as a carrot / stick incentive.					1									1				
33. BC Assessment Authority Assessors can assess buildings but are not necessarily qualified to assess farming. BCAA tends to be more aggressive re classification if they think it is going to result in more taxes.					1									1				
34. How much is taxation influencing ALR decisions – higher taxes collected for local govt when it is not farmed?					1													
35. How to galvanize voters to get out and vote for progressive officials?													1					
 36. Concern about the average age of farmers being so high – how to get the next generation into farming? 37. System has worked too well – resulting in cheap food that local farmers cannot compete with. 	1																	
38. Top national leadership commitment to cheap food, dating back decades, has contributed to the devaluing of food.	1																	

	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm / Legal	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic support	
 Food security is not a spectator sport – we need more young bodies to farm. 	1																	
40. Funding for scholarships for farmers in training – use the model of the forgiveness of loans for those who practice rural medicine to provide the same incentive to ag students who return to farm.			1														1	
41. Trades have incentive programs and a completion bonus – transferable to farmers in training? There are currently no incentives for young farmers and this needs to be changed.			1														1	
42. Co-op programs at universities could be a model for administering and funding the placement of farmers-in-training on farms.			1															
43. Carmen: the City of Surrey has an farmer incubation program that could be transferable: they have identified fallow ALR land and make it available for farmers-in-training, supported by an equipment pool, business and ag training.			1														1	
 KLAS has an equipment depot in Lister that can help farmers access equipment. 															1			
45. Donna: how can we create an ag training program – link with employment programs where youth get paid to take training of some sort.			1															
46. Wayne: leasing land is relatively cheap – the other capital needs are harder to address (equipment, buildings).								1							1			
 47. Lack of expertise is huge 48. Key to success with start-up farmers is that they can't be commodity farmers – they need niche, high-value crops and the training to do produce them. 			1															
49. We need an extension agent pilot project so we can demonstrate its value and figure out how to fund it.			1												1			
50. On the issue of farmers retiring: Randy "I am aiming for freedom 85 – if I die with my boots on, I don't have to worry about retirement."	1																	
51. Wayne: farmers are responsible for marketing but training via extension would be useful.			1												1			
52. If farmers want to access the growing market for local goods, they have to do the marketing themselves.			1										1		1			
53. There is a role, however, for an intermediary such as Fattoria (meat broker).	1																	
54. Discussion re oil production possibilities for the area: agreement that sunflower, flax and pumpkin are quite possible to grow locally, just need a press.							1											
55. Local branding has a lot of potential (eg, Kootenay Mountain Grown) but needs more promotion and market recognition.							1								1			
56. Labeling and poorly informed consumers – without good labeling, they can make poor decisions.							1						1		1			

	General comments	Water concerns	Farmers Education	Provincial problems	Maintain land in ALR	Urban agriculture	Scaling up production	Land availability	Organic vs Conventional	Right to Farm / Legal	Need Municipalities on board	Low income support	Public education	Zoning control	Agricultural facilities	School education and gardens	Economic support	
57. Single local / regional marketing campaign can benefit a													1		1		1	
58. Distribution is a huge issue and challenge for individual farmers seeking to serve local markets.															1			
 Young people need land to come back to – we can't loose any more farmland. 					1			1										
 There is more and more pressure on the ag land that remains. 					1			1										
61. Rural "Estates" tend to plunk new homes right in the middle of good farmland, making it harder to ever get that land back into agriculture.					1			1						1				
62. Discussion about minimum parcel sizes – cannot really be set across all the ag sectors. Wayne suggested that the many 20 acre parcels in Lister have a 2 acre parcel set aside for the house and the remaining 18 acres come under a "no-build" covenant so it could remain available for farming at least eventually. This would work, from a tax point of view, for the RDCK. If it is too hard to "sell" this idea, we could start with a five-year moratorium on building and then re-assess.					1									1				
63. The Ag Plan project has to make it really easy for eaters to support the eventual Plan, since they are the majority of the voters.													1					
							_				-							
Score	14		14	3	14		3	4		3	3		10	7	13		5	
	15%		15%	3%	15%		3%	4%		3%	3%		11%	8%	14%		5%	

Appendix C: Survey responses

RDCK Agricultural Plan for consumers

\land SurveyMonkey

1. Where do you live? (Please be specific - Appledale, Lister, Kaslo, etc)	
	Response Count
	74
answered question	74
skipped question	1

2. Please state your gender		
	Response Percent	Response Count
Female	74.0%	54
Male	26.0%	19
Other	0.0%	0
	answered question	73
	skipped question	2

3. What is your age group?		
	Response Percent	Response Count
0-19	0.0%	0
20-29	1.4%	1
30-39	17.6%	13
40-49	23.0%	17
50-59	32.4%	24
60+	25.7%	19
	answered question	74
	skipped question	1

4. Do you have a garden?		
	Response Percent	Response Count
Yes	90.1%	64
No	9.9%	7
	Other (please specify)	10
	answered question	71
	skipped question	4

5. Do you raise animals (chickens	s, geese, etc)?		
		Response Percent	Response Count
Yes		20.5%	15
No		79.5%	58
		Please specify	21
		answered question	73
		skipped question	2

6. What types of food do you grov	v/raise?	
	Response Percent	Response Count
greens	92.9%	65
tomatoes	90.0%	63
herbs	87.1%	61
vegetables	85.7%	60
berries	68.6%	48
tree fruits	65.7%	46
eggs	15.7%	11
	Other (please specify)	9
	answered question	70
	skipped question	5

7. If you garden, do you still purchase at least 50% of your produce?	
	Response Count
	71
answered question	71
skipped question	4

8. Where do you purchase most o	of your produce?	
	Response Percent	Response Count
supermarket	58.3%	42
food co-op	54.2%	39
natural food store	25.0%	18
farmers' market	31.9%	23
CSA (Community Supported Agriculture)	12.5%	9
farm stands	11.1%	8
	Other (please specify)	11
	answered question	72
	skipped question	3

9. Where do you purchase most c	of your meat and dairy?		
		Response Percent	Response Count
supermarket		61.4%	43
food co-op		21.4%	15
natural food store		17.1%	12
farm direct sales		41.4%	29
CSA (Community Supported Agriculture)		2.9%	2
		Other (please specify)	18
		answered question	70
		skipped question	5

10. Do you seek out locally grown	foods? If yes, where	
	Response Percent	Response Count
I don't notice where my food comes from	100.0%	1
	Yes, I purchase local foods at (please specify)	70
	answered question	1
	skipped question	74

11. Are you willing to pay more fo	or local produce?	
	Response Percent	Response Count
No	13.4%	9
10-20% premium	47.8%	32
20-50% premium	31.3%	21
50% + premium	11.9%	8
	Other (please specify)	14
	answered question	67
	skipped question	8

12. What percentage of your diet	is organic?	
	Response Percent	Response Count
0 percent	1.4%	1
1 - 25%	18.1%	13
25 - 50%	18.1%	13
50 - 75%	20.8%	15
75% +	43.1%	31
	Other (please specify)	9
	answered question	72
	skipped question	3

13. What does food security or 'the 100 mile diet' mean to you?	
	Response Count
	66
answered question	66
skipped question	9

14. What do you envision for agriculture in the West Kootenays?	
	Response Count
	64
answered question	64
skipped question	11

15. What would you like to see our local governments do to support local agriculture and food security?	
	Response Count
	63
answered question	63
skipped question	12

16. Do you have any any other ideas/concerns that you would like to share?	
	Response Count
	41
answered question	41
skipped question	34

17. Do you wish to be more involved in this Agricultural Area Plan process? If yes, please provide a contacting you!	neans of
	Response Count
	42
answered questio	n 42
skipped questio	n 33

RDCK Agricultural Plan for retailers

n SurveyMonkey

1. In which RDCK community (communities) are your food-related businesses based?	
	Response Count
	1
answered question	1
skipped question	2

2. What types of food products do you purchase for your business? Please specify (i.e. types of vegetables, meats, eggs, processed foods, beverages, etc).	
	Response Count
	2
answered question	2
skipped question	1

3. Where do you purchase most of your food products (i.e. distributor, supermarket, co-op, etc - please g name)?	
	Response Count
	3
answered question	3
skipped question	0

4. What percent of your food inpu	ts are purchased	
	Response Percent	Response Count
% regional or local	100.0%	2
% within the rest of BC	50.0%	1
% within Alberta	0.0%	0
% within Canada	0.0%	0
% Internationally	50.0%	1
	answered question	2
	skipped question	1

5. If you are not purchasing foods	s locally, why not?	
	Response Percent	Response Count
Price	33.3%	1
Quality	0.0%	0
Service	0.0%	0
Choice	33.3%	1
Availability	100.0%	3
Reliability of supply	33.3%	1
	Other (please specify)	1
	answered question	3
	skipped question	0

6. Are you willing to pay more for	local produce?	
	Response Percent	Response Count
No	0.0%	0
10-20% premium	100.0%	2
20-50% premium	0.0%	0
50% + premium	0.0%	0
	Other (please specify)	1
	answered question	2
	skipped question	1

7. What percentage of the foods y	ou sell are organic?	
	Response Percent	Response Count
0 percent	0.0%	0
1 - 25%	50.0%	1
25 - 50%	0.0%	0
50 - 75%	0.0%	0
75% +	50.0%	1
	Other (please specify)	0
	answered question	2
	skipped question	1

\land SurveyMonkey

1. Please give your name	
	Response Count
	16
answered question	16
skipped question	4

2. What is the location of your operation (community and address, please)?	
	Response Count
	20
answered question	20
skipped question	0

3. Please indicate your age range	:	
	Response Percent	Response Count
20 to 29	5.0%	1
30 to 39	15.0%	3
40 to 49	25.0%	5
50 to 59	25.0%	5
60 to 69	30.0%	6
70 +	0.0%	0
	answered question	20
	skipped question	0

4. What percentage of your family net income is derived from farming?	
	Response Count
	19
answered question	n 19
skipped question	n 1

5. In which Electoral Area do you farm?			
	Response Percent	Response Count	
А	0.0%	0	
В	0.0%	0	
С	5.9%	1	
D	5.9%	1	
E	17.6%	3	
F	5.9%	1	
G	0.0%	0	
н	41.2%	7	
1	17.6%	3	
J	0.0%	0	
К	5.9%	1	
	answered question	17	
	skipped question	3	

6. How long have you been in operation on your current property? (years)	
	Response Count
	19
answered question	19
skipped question	1

7. Do you OWN your land?		
	Response Percent	Response Count
Yes	84.2%	16
No	15.8%	3
	answered question	19
	skipped question	1

8. Do you RENT your land?		
	Response Percent	Response Count
Yes	17.6%	3
No	82.4%	14
	answered question	17
	skipped question	3

9. Is your farm in Agricultural Lan	d Reserve (ALR)?		
		Respons	e Response t Count
Yes		73.7	% 14
No		26.3	% 5
		If so, what percentage of your farm is in the ALR	? 15
		answered question	n 19
		skipped questio	n 1

10. Do you reside on land you farm or garden?	
	Response Count
	19
answered question	19
skipped question	1

11. Do you:		
	Response Percent	Response Count
Farm commercially (i.e. sell any of your product)?	78.9%	15
As a "hobby" (your farm activities are not relied on for an income stream)?	47.4%	9
Or for "subsistence" (you are producing a significant portion of your own food needs)?	78.9%	15
	answered question	19
	skipped question	1

12. Do you sense pressure to convert farm land in your neighborhood to non-agricultural uses?		
	Response Percent	Response Count
Yes	64.7%	11
No	35.3%	6
	If yes, then how so?	9
	answered question	17
	skipped question	3

13. Have you experienced any cor dust, trespass, vandalism, etc)?	nflict with neighbours related to your farm activities (i.e. complaints c	of noise,
	Response Percent	Response Count
Yes	27.8%	5
Νο	72.2%	13
	If yes, please describe:	4
	answered question	18
	skipped question	2

14. How do you access water for your farm activities (i.e. community water system, on-site well)?		
	Response Count	
	19	
answered question	19	
skipped question	1	
15. How do you deal with agricultural waste (for example, agricultural plastics or manure)?		
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	Response Count	
	19	
answered question	19	
skipped question	1	

16. What percentage of organic waste do you compost/ manage on site?	
	Response Count
	19
answered question	19
skipped question	1

17. What crops do you grow?	
	Response Count
	19
answered question	19
skipped question	1

18. What is the total area in annua	al crops?	
	Response Percent	Response Count
Acres or	93.3%	14
Hectares or	6.7%	1
N/A	0.0%	0
	answered question	15
	skipped question	5

19. What is the total area in pastu	re or perennial ground crops?	
	Response Percent	Response Count
Acres or	93.8%	15
Hectares or	6.3%	1
N/A	0.0%	0
	answered question	16
	skipped question	4

20. What is the total area in tree o	or bush fruit?	
	Response Percent	Response Count
Acres or	83.3%	15
Hectares or	5.6%	1
N/A	11.1%	2
	answered question	18
	skipped question	2

21. Are your products sold (please select all that apply):			
	Yes	No	Response Count
Locally	83.3% (15)	16.7% (3)	18
Sent out of the region	10.0% (1)	90.0% (9)	10
Used on the farm	89.5% (17)	10.5% (2)	19
		Other comments?	4
		answered question	19
		skipped question	1

22. What animals do you raise?	
	Response Count
	18
answered question	18
skipped question	2

23. What is the total area given ov	er to livestock?	
	Response Percent	Response Count
Acres or	93.8%	15
Hectares	6.3%	1
	answered question	16
	skipped question	4

24. Please list items you produce from your animals:	
	Response Count
	17
answered question	17
skipped question	3

25. Are your products sold:			
	Yes	Νο	Response Count
Locally	66.7% (10)	33.3% (5)	15
Sent out of the RDCK	12.5% (1)	87.5% (7)	8
		Other comments?	7
		answered question	15
		skipped question	5

26. Does your farm currently have	farm' status for income tax purposes?	
	Response Percent	Response Count
Yes	58.8%	10
No	41.2%	7
	answered question	17
	skipped question	3

27. How do you sell your product	s (by percentage):		
		Response Percent	Response Count
Retail %		13.3%	2
Wholesale %		26.7%	4
Farmers' Markets %		26.7%	4
Home delivery %		6.7%	1
Farm Gate %		73.3%	11
CSA %		26.7%	4
Other		20.0%	3
		answered question	15
		skipped question	5

28. What percentage of your gros	s income was derived from which market outlets?	
	Response Percent	Response Count
Retail	26.7%	4
Wholesale	13.3%	2
Farmers' Markets	26.7%	4
Home delivery	6.7%	1
Farm Gate	66.7%	10
CSA	20.0%	3
Other	26.7%	4
	answered question	15
	skipped question	5

29. Do you engage in any 'proces	sing' or value added products?	
	Response Percent	Response Count
Yes	26.7%	4
No	73.3%	11
	If yes, please indicate the products you produce.	5
	answered question	15
	skipped question	5

30. Are these products sold:			
	Yes	Νο	Response Count
Locally	66.7% (4)	33.3% (2)	6
Outside the RDCK	33.3% (1)	66.7% (2)	3
		answered question	6
		skipped question	14

31. Do you raise any certified crops / livestock (eg, organic or Kootenay Mountain Grown)?			
	Response Percent	Response Count	
Yes	55.6%	10	
No	44.4%	8	
	answered question	18	
	skipped question	2	

32. If yes, please indicate which crops/livestock: If not, is this something you are considering?		
	Response Count	
	16	
answered question	16	
skipped question	4	

33. Could you expand your farm o	operations on your current site?	
	Response Percent	Response Count
Yes	73.7%	14
No	26.3%	5
	answered question	19
	skipped question	1

34. What do you feel are the major constraints or restrictions to expanding your farm operation?	
	Response Count
	19
answered question	19
skipped question	1

35. What do you consider to be ye	our primary obstacles and challenges?		
	Resp Per	oonse cent	Response Count
To the stability of your operation?		76.5%	13
To being able to continue in business?		58.8%	10
To being able to increase your sales?		70.6%	12
To having a stable income?		47.1%	8
Other		23.5%	4
	answered que	estion	17
	skipped que	stion	3

36. What opportunities do you see for your operation going forward?	
	Response Count
	13
answered question	13
skipped question	7

37. Do you feel supported by our different levels of government (Y/N or feel free to comment)?			
	Yes	Νο	Response Count
Federal	11.8% (2)	88.2% (15)	17
Provincial	11.8% (2)	88.2% (15)	17
Local	25.0% (4)	75.0% (12)	16
		Comments?	18
		answered question	17
		skipped question	3

38. Do you see the need for a properly funded agricultural extension agent in the Kootenays?			
		Response Percent	Response Count
Yes		82.4%	14
No		17.6%	3
		answered question	17
		skipped question	3

39. What agencies or specific help could improve your operation or make things easier on the farm?	
	Response Count
	16
answered question	16
skipped question	4

40. There are a few Agricultural Sc	ocieties in the region:	
	Response Percent	Response Count
Are you a member of any of the societies?	88.2%	15
If yes, please name it / them:	88.2%	15
Do the societies meet your needs as growers, farmers, or ranchers?	58.8%	10
If not, please explain why:	47.1%	8
	answered question	17
	skipped question	3

41. Are you participating in or interested in taking part in regional agri-tourism/ economic developme environmental initiatives? Please explain:	nt or
	Response Count
	19
answered question	19
skipped question	1

42. What outcomes would you like to see from an RDCK Agricultural Plan (please elaborate)?	
	Response Count
	12
answered question	12
skipped question	8

43. What protections for farmland do you think should or can be implemented by local communities & governments?	local
	Response Count
	14
answered question	14
skipped question	6

44. What protections for food production do you think should or can be implemented by local commu local governments?	nities &
	Response Count
	15
answered question	15
skipped question	5

45. The RDCK, in calling for a regional agricultural plan, raised the issue of ensuring a secure food supp the region. What are your thoughts on 'food security' for the Regional District of Central Kootenay?	
	Response Count
	15
answered question	15
skipped question	5

46. Please provide any other comments or concerns you may have.	
	Response Count
	6
answered question	6
skipped question	14

47. Do you wish to be more involved in this Agricultural Area Plan process? If yes, please provide a means contacting you.	
	Response Count
	11
answered question	11
skipped question	9

8. If goods are purchased outside of the local area, what can be done to increase your volume of local/regiona	I
purchases?	

	Response Count
	3
answered question	3
skipped question	0

9. Are there any products, supplies or services you wish to find suppliers for locally/regionally? (If yes, pro details of requirements and the items you are interested in)	
	Response Count
	2
answered question	2
skipped question	1

10. What does food security or 'the 100 mile diet' mean to you?	
	Response Count
	3
answered question	3
skipped question	0

11. Do you have any any other ideas/concerns that you would like to share?	
	Response Count
	2
answered question	2
skipped question	1

12. Do you wish to be more involved in this Agricultural Area Plan process? If yes, please provide yo and a phone number or email address.	ur name
	Response Count
	2
answered questio	n 2
skipped questio	n 1

Appendix D: Census Canada analysis by George Penfold

Table 1: ALR Designated Area (in Hectares)										
					Excl	usions				ALR at
	Total	ALR Area at	Tatal	By Applic	ation	By Appea	I	Tatal	Net	Year
	Area	(1974)	Inclusions	Gov't	Private	Comm.	Minister	Exclusions	Change	(2003)
Central										
Kootenay	2,213,072	71,539								
1974 -										
2003			799	6,650	973	3	0	7,626	-6,827	64,712
2004			0	8.7	40.4			49.1	-49.1	
2005			0	656.2	10.1			666.3	-666.3	
2006			0	0	17.9			17.9	-17.9	
2007			0	0	29.6			29.6	-29.6	
			799	7,314.9	1,071	3	0	8,388.9	-7,589.9	57,122
Kootenay										
Boundary	809,563	55,061								
1974 –										
2003			287	1,121	528	160	0	1,809	-1,528	53,539
2004			0	0	41.2			41.2	-41.2	
2005			0	0	76			76	-76	
2006			1.4	2.5	7			9.5	-8.1	
2007			0	0	37			37	-37	
Total			288.4	1,123.5	689.2	160	0	1,972.7	-1,690.3	51,849

Agriculture in Central Kootenay and Kootenay Boundary Regional Districts

Comment on Table 1: Area in the ALR has declined by 7,590 ha (net) in Central Kootenay RD and 1,690 ha (net) in Kootenay Boundary RD since 1974. Most of this decline has been as a result of Government exclusions. Generally government exclusions are to remove lands that were inappropriately designated. A total of 1,071 ha in Central Kootenay RD and 849 ha in Kootenay Boundary RD have been removed by private applications since 1974.

Table 2: Number and Area of Farms								
Area of Farms		2006			2001			
Central Kootenay	farms reporting	farms reporting acres hectares			acres	hectares		
Total	562	67,554	27,338	609	67,474	27,306		
Owned	545	44,929	18,182	557	43,738	17,770		
Leased (Gov't)	15	12,192	4,934	18	8,018	3,245		
Leased (others)	114	11,164	4,518	127	13,375	5,413		
Share Crop	23	2,633	1,066	31	2,343	948		
Kootenay Boundary								
Total	392	131,609	53,260	353	140,645	56,917		
Owned	385	66,533	26,925	345	67,859	27,462		
Leased (Gov't)	48	49,054	19,851	32	50,979	20,630		
Leased (others)	66	17,279	6,993	56	20,498	8,295		
Share Crop	8	555	225	17	1,309	530		

Comment on Table 2: The number of Census farms declined in Central Kootenay and Kootenay (-47) but increased in Kootenay Boundary RD (+39) between 2001 and 2006. The area farmed increased in Central Kootenay RD (+32ha) and declined in Kootenay Boundary RD (-3,657 ha). The area farmed in 2006 represents 48% of the ALR land in Central Kootenay RD and 103% in Kootenay Boundary. Note that 38% of the land farmed in Kootenay Boundary is leased from government. That generally represents range land leased for grazing cattle, most of which is not in the ALR.

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

Table 3: Total gross farm receipts (excluding forest products sold)							
	2	2005		2000			
	No. farms	Amount	No. farms	Amount			
Central Kootenay	562	\$30,004,374	609	\$26,218,599			
Average Sales/Farm		\$53,388		\$43,052			
Average Operating Expenses/Farm	562	\$47,966	609	\$40,416			
Weeks of Paid Work	187	12,675	206	10,587			
Kootenay Boundary	392	\$23,442,296	353	\$17,945,009			
Average Sales/Farm		\$59,801		\$50,836			
Average Operating Expenses/Farm	392	\$58,121	353	\$50,007			
Weeks of Paid Work	102	12,428	101	8,884			

Comment on Table 3: Average farm sales in 2006 were less than \$60,000 in both regions. The difference between average farm sales and average operating expenses (average net return) was very low - \$5,422 in Central Kootenay RD and \$1,680 in Kootenay Boundary RD in 2006.

Table 4: Farms classified by total gross farm receipts (Number)							
	Total number of farms Under \$10,000						
	2006	2001	2006 2001				
Central Kootenay	562	609	323	378			
Kootenay Boundary 392 353 221 202							

Comment on Table 4: There were a proportionally large number of small farms (less than \$10,000) in gross sales in both Central Kootenay RD (57%) and Kootenay Boundary RD (56%) in 2006.

Table 5: Farm Investment								
	2001							
Central Kootenay	market value in current farms reporting dollars fa		farms reporting	market value in				
Total Farm Capital	562	\$383,640,115	609	\$261,876,101				
Land and Buildings	562	\$329,422,469	609	\$209,009,536				
Land and Buildings Owned	549	\$265,589,869	580	\$165,548,361				
Farm machinery	562	\$45,041,320	609	\$37,303,486				
Livestock and Poultry	363	\$9,176,326	417	\$15,563,079				
Average Total Capital	562	\$682,633	609	\$430,010				
Kootenay Boundary								
Total Farm Capital	392	\$362,735,548	353	\$233,903,271				
Land and Buildings	392	\$323,733,111	353	\$189,818,900				
Land and Buildings Owned	386	\$243,744,101	345	\$139,284,400				
Farm machinery	392	\$29,405,557	353	\$26,097,956				
Livestock and Poultry	302	\$9,596,880	276	\$17,986,415				
Average Total Capital	392	\$925,345	353	\$662,615				

Comment on Table 5: The average capital value of farms was \$682,663 in Central Kootenay RD and \$925,345 in Kootenay Boundary RD in 2006. Land and buildings represented 86% of the total capital value in Central Kootenay and 89% in Kootenay Boundary RD.

Table 6: Total area of farms								
		2006						
	No. farms	acres	hectares	No. farms	acres	hectares		
Central Kootenay	562	67,554	27,338	609	67,474	27,306		
Central Kootenay A (Creston)	22	3,764	1,523					
Central Kootenay B (Creston)	215	15,732	6,367					
Central Kootenay C (Creston)	64	18,881	7,641					
Central Kootenay D (Upper Kootenay)	22	1,308	529					
Central Kootenay E (Nelson)	43	1,845	747					
Central Kootenay G (Salmo Valley)	32	7,117	2,880					
Central Kootenay H (Slocan)	57	5,866	2,374					
Central Kootenay J (Arrow Lakes)	44	3,982	1,611					
Kootenay Boundary	392	131,609	53,260	353	140,645	56,917		
Kootenay Boundary B (Rossland)	60	6,021	2,437					
Kootenay Boundary D (Grand Forks)	169	22,708	9,190					
Kootenay Boundary E (Kettle Creek)	163	102,880	41,634					

Comment on Table 6: The greatest concentration of farms is in Electoral Area B, Central Kootenay RD and in Electoral Areas D and E, Kootenay Boundary RD.

Table 7: Farms classified by total area							
	Central	Kootenay	Kootenay	Boundary			
	2006	2001	2006	2001			
Total number of farms	562	609	392	353			
Less than 10 acres	134	146	95	65			
10 to 69 acres	268	289	127	117			
70 to 129 acres	53	66	34	33			
130 to 179 acres	34	33	32	31			
180 to 239 acres	13	11	11	13			
240 to 399 acres	9	15	2	0			
400 to 559 acres	8	12	1	0			
560 to 759 acres	9	10	12	15			
760 to 1,119 acres	6	5	10	5			
1,120 to 2,239 acres	5	4	17	19			
2,240 to 3,519 acres	4	1	10	9			
3,520 acres and over	1	2	7	7			
	48.6 ha.	44.8 ha.	135.9 ha.	161.2 ha.			
	(120.2 acres)	(110.8 acres)	(335.7 acres)	(398.4 acres)			

Comments on Table 7: Most farms are small in area, with 72% of all farms less than 70 acres (28 ha) in Central Kootenay RD and 57% less than 70 acres (28ha) in Kootenay Boundary RD.

Table 8: Livestock/Poultry							
	20	06		2001			
Central Kootenay	No. farms	No. animals	No. farms	No. animals			
Cattle and Calves	194	10,871	225	11,520			
Pigs	30	189	42	349			
Sheep and Lambs	36	826	39	685			
Hens and Chickens	156	11,545	215	22,580			
Beef Cows	148	3,240	154	2,782			
Dairy Cows	20	1,582	29	1,735			
Horses, Ponies	144	799	148	854			
Kootenay Boundary	No. farms	No. animals	No. farms	No. animals			
Cattle and Calves	160	13,640	167	15,151			
Pigs	6	44					
Sheep and Lambs	37	913	32	1,259			
Hens and Chickens	94	7,568	110	9,667			
Beef Cows	124	х	131	6,307			
Dairy Cows	9	х	12	357			
Horses	169	983	151	960			

Comment on Table 8: Both the number of farms reporting livestock and poultry and the numbers of animals declined for all types between 2001 and 2006, with the exception of the number of farms reporting sheep and lambs in Kootenay Boundary RD.

Table 9: Crops on Farms								
	2006			2001				
Central Kootenay	No. farms	acres	hectares	No. farms	acres	hectares		
Total land in crops	441	28,253	11,434	463	28,582	11,567		
Hay and Field Crops	11	х	х	15	2,064	835		
Mixed Grains	1	х	х	4	х	х		
Total Vegetables	86	331	134	78	273	110		
Fruits, Berries, Nuts	138	855	346	159	812	329		
Greenhouse	40	191,836 ft ²	17,822 m ²	44	502,003 ft ²	46,638 m ²		
Mushrooms	0	0	0	2	х	Х		
Nursery Products	25	301	122	34	206	83		
Kootenay Boundary								
Total land in crops	285	16,291	6,593	284	20,763	8,402		
Total Hay and Field Crops	2	х	х	3	х	х		
Mixed Grains	5	465	188	9	324	131		
Total Vegetables	29	62	25	37	81	33		
Fruits, Berries, Nuts	39	85	34	31	85	34		
Greenhouse	19	97,554 ft ²	9,063 m ²	16	128,194 ft ²	11,910 m ²		
Mushrooms	1	x	Х	1	x	Х		
Nursery Products	7	473	191	16	364	147		

Comment on Table 9: The area in crops represents 42% of the area in Census farms and 20% of the ALR area in Central Kootenay RD and 13% of the area in farms and 13% of the ALR area in Kootenay Boundary RD in 2006.

Table 10: Number of farm operators by paid non-farm work in the calendar year prior to the census										
	Total number of No paid non-Less than 20 hours More than 20 hours									
	oper	ators	farm	farm work		per week		per week		
	2006 2001 2006 2006 2006 2001						2006	2001		
Central Kootenay	855	895	420	100	115	115	230	390		
Kootenay Boundary 590 535 260 85 50 50 250 22										

Comment on Table 10: In 2006, 49% of farm operators in Central Kootenay and 44% of farm operators in Kootenay Boundary had no off farm income. *Note: "Farm operator" has been defined as those persons responsible for the day-to-day management decisions made in the operation of a census farm or agricultural operation. Up to three farm operators could be reported per farm.*

Table 11: Total weeks of paid work									
2005 2000									
	farms reporting number of weeks farms reporting number of weeks								
Central Kootenay	187	12,675	206	10,587					
Kootenay Boundary	102	12,428	101	8,884					

Comment on Table 11: In 2005, 33% of all farms in Central Kootenay RD and 26% of all farms in Kootenay Boundary RD reported 1 or more weeks of paid on farm work.

Table 12: Average age of farm operators									
	Of all farr	n operators	On farms with opera	On farms with two or more operators					
	2006	2001	2006	2001	2006	2001			
Central Kootenay	54.3	51.5	56.0	52.9	53.4	50.7			
Kootenay Boundary	y Boundary 54.4 52.1 56.1 53.3 53.6 51								

Comment on Table 12: The average age of farmers in both regions was just over 54 years in 2006. On farms with only 1 operator, the average age was 56 years.

Table 13: Farms reporting farm related injuries - 2006										
	total reportingto operatorsto other familyto otherinjuriesmemberspersons									
Central Kootenay	26	22	4	3						
Kootenay Boundary	15	14	3	0						

Comment on Table 13: Farm related injury was reported on 4.6% of farms in Central Kootenay RD and 3.8% of farms in Kootenay Boundary RD in 2006.

Region	Table 14: Farms producing certified organic products						
	2006	2001					
Central Kootenay	24	23					
Kootenay Boundary	14	9					

Comment on Table 14: Only 4.3% of all farms in Central Kootenay RD and 3.6% of all farms in Kootenay Boundary report production of certified organic products.

Data Sources: http://www.alc.gov.bc.ca/alr/stats/Statistics_TOC.htm http://www.statcan.gc.ca/ca-ra2006/index-eng.htm

Area Map: Central Kootenay Regional District





Area Map: Kootenay Boundary Regional District

Other Related Information

Table 15: Regional Population								
	2006	2006 2001						
British Columbia +	4,113,487	3,907,738	5.3%					
RD Central Kootenay	55,883	57,019	-2.0%					
Central Kootenay A	2,041	2,125	-4.0%					
Central Kootenay B	4,575	<u>4,742 A</u>	-3.5%					
Central Kootenay C	1,284	<u>1,287 A</u>	-0.2%					
Central Kootenay D	1,525	1,500	1.7%					
Central Kootenay E	3,716	<u>3,521 A</u>	5.5%					
Central Kootenay F	3,730	3,907	-4.5%					
Central Kootenay G	1,605	1,354	18.5%					
Central Kootenay H	4,319	<u>4,472 A</u>	-3.4%					
Central Kootenay I	2,415	2,436	-0.9%					
Central Kootenay J	2,792	<u>2,930 A</u>	-4.7%					
Central Kootenay K	1,800	1,979	-9.0%					
Castlegar	7,259	<u>7,585 A</u>	-4.3%					
Creston	4,826	4,795	0.6%					
Kaslo	1,072	1,032	3.9%					
Nakusp	1,524	1,698	-10.2%					
Nelson	9,258	<u>9,318 A</u>	-0.6%					
New Denver	512	538	-4.8%					
Salmo	1,007	1,120	-10.1%					
Silverton	185	222	-16.7%					
Slocan	314	336	-6.5%					
RD Kootenay Boundary	30,742	31,843	-3.6%					
Kootenay Boundary A	1,984	1,989	0.3					
Kootenay Boundary B	1,583	1,418	-10.4					
Kootenay Boundary C	1,456	1,435	-1.4					
Kootenay Boundary D	3,241	3,176	-2					
Kootenay Boundary E	2,169	2,234	3					
Montrose	1,067	1,012	-5.2					
Fruitvale	2,025	1,952	-3.6					
Rossland	3,646	3,278	-10.1					
Trail	7,575	7,237	-4.5					
Warfield	1,739	1,729	-0.6					
Grand Forks	4,054	4,036	-0.4					
Greenwood	666	625	-6.2					
Midway	638	621	-2.7					

Comment on Table 15: Between 2001 and 2006, Census Canada reports a population decline in both Central Kootenay and Kootenay Boundary Regional Districts. *Note: These initial population estimated have not yet been adjusted for Census undercount.*

A – Population total affected by boundary adjustment

Table 16: Rural Development - Resid	ential B	uilding P	ermits (Total nu	mber of	units)					
		-				-					Total 1998
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	to 2007
Central Kootenay RD	356	331	228	203	161	151	175	349	297	352	2,603
Central Kootenay RD Rural	267	268	98	88	103	115	114	146	155	174	1,528
Castlegar, C	23	16	22	90	16	8	26	17	30	23	271
Creston, T	26	11	14	9	28	4	17	109	23	48	289
Kaslo, VL	9	2	3	1	1	5	2	35		6	64
Nakusp, VL	2	4	7	2	4	1	2	6	15	19	62
Nelson, C	27	30	84	12	8	18	14	33	66	78	370
Salmo, VL	2			1	1			3	8	4	19
Dew Denver							1	3	3	7	14
Silverton					1					6	7
Slocan City							1		1	2	4
Kootenay Boundary RD	185	233	189	182	151	352	290	257	293	231	2,363
Kootenay Boundary RD Rural	123	146	141	162	128	314	222	182	147	116	1,681
Fruitvale, VL	4	_		1		2	2		8	6	23
Montrose, VL		1	2	1			1	2	1	10	18
Rossland, C	7	6	5	6	14	20	44	42	83	40	267
Trail, C	21	19	9	8	6	6	9	10	20	15	123
Warfield, VL	5		4	-				6	4	9	28

Comment on Table 16: Over the last 10 years, building permits for over 2,300 new residences have been issued in both Central Kootenay and Kootenay Boundary Regional Districts. In Central Kootenay Regional District, 58.7% of these have been in the rural (Electoral Areas) area and in Kootenay Boundary, 71.1% have been in the rural area.

Prepared by: George Penfold M.Sc., MCIP Selkirk College, Regional Innovation Chair in Rural Economic Development

RDCK Agriculture Plan Background Report

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June 2011