

APPLIED INNOVATION RESEARCH CENTRE

SUPPORTING LEARNERS, COMMUNITY AND INDUSTRY THROUGH INNOVATION

Advancing the Regional Food System in Rural BC

Canadian Rural Revitalization Foundation Conference

Fall 2016





Dr. Terri MacDonald BC Regional Innovation Chair in Rural Economic Development

The Columbia Basin Rural Development Institute

Promote evidence-based decisions that lead to enhanced regional well-being through research and information provision





The Regional Food Systems

Project



Identify opportunities to increase regional food production in ways that promote economic, social, environmental and cultural well-being.

Innovative Solutions to Regional Challenges

Innovation in the Beef Supply Chain

Regional Agricultural Planning Themes



Inventory of Regional Resources Extent and Value of Agricultural Lands

Agricultural Climate Trends cbrdi.ca/food

Common Themes in the Three Agriculture Plans of the Columbia Basin-Boundary Region

RE m H 5 In the fall of 2014, the Regional District of East Kootenay (RDEK) completed an Agriculture Plan, Increasing Demand, Decreasing Supply joining the Regional District of Kootenay Boundary (RDKB) and the Regional District of Central Land Supply Kootenay (RDCK), which both published Agriculture Plans in 2011. Together, these three plans cover the entire Kootenay region, and were all created for a similar reason: to help promote a viable agriculture industry. While there are some unique characteristics of each plan, due to different agricultural practices and variable cultural and physical settings, they have a great deal in common with recurring themes. related issues, and similar recommendations. The Columbia Shuswap Regional District (CSRD) also published an Agriculture Plan in 2014, however it does not include the two electoral areas that fall within the Columbia Basin-Boundary Region. Area A (rural Golden) and Area B (rural Revelstoke) were excluded because they were not deemed as agriculturally important. Based on the 2011 Census Policy Supposition of Agriculture data from Statistics Canada, the agricultural system around Golden appears similar in both size and characteristics to RDEK electoral areas F and G, just to the south; therefore, it is reasonable to assume that they face similar challenges and

Selkirk College

1.888.953.1133 www.cbrdi.ca

Increasing Demand vs. Decreasing Supply

Regional Agricultural Planning Themes

Land Supply Challenges

Changing
Demographics
of Farmers and
Labour

Information Needs:

- Advisory Services
- New Farmer Training
- Land Use
- Markets
- Land Access
- Climate Change
- Irrigation
- Invasive Weeds

Financial Viability



Basin-Boundary Agricultural Planning: The Regional Perspective

https://www.youtube.com/watch?v=wn dzl22qlY&feature=youtu.be

Increasing Demand vs. Decreasing Supply

Residents prefer to buy local food

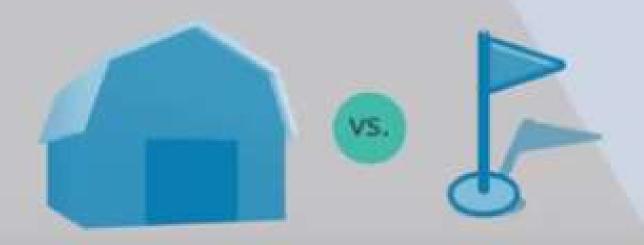


Farmed area decreased almost 20% between 2001 and 2011



Land Supply Challenges

- Approximately half of available farmland is not actively farmed in some areas
- Alternative land uses increase pressure on agricultural land values



Farmers and Labour

Current farm operators are aging



New generation needs support to succeed in a changing industry



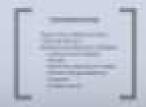
Financial Viability

Primary reason why increased demand and adequate land/labour = increased supply



average annual per-farm profit in region

Recommendations to address this issue relate to Information Needs, Policy Needs and Investment Needs







Information Needs

- Restore farm advisory services
- · Train new farmers
- Research and education related to:
- Land use and capability
- Markets
 - Alternative land access models
- Climate change adaptation
 - Irrigation
 - Invasive weeds

Policy Needs

- Adjust taxes and permitting fees for agricultural properties/businesses
- Tighten bylaws/zoning to avoid loss of agricultural land
- Loosen bylaws/zoning to remove restrictions currently preventing agricultural expansion

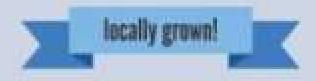


Investment Needs

Infrastructure for processing and packaging

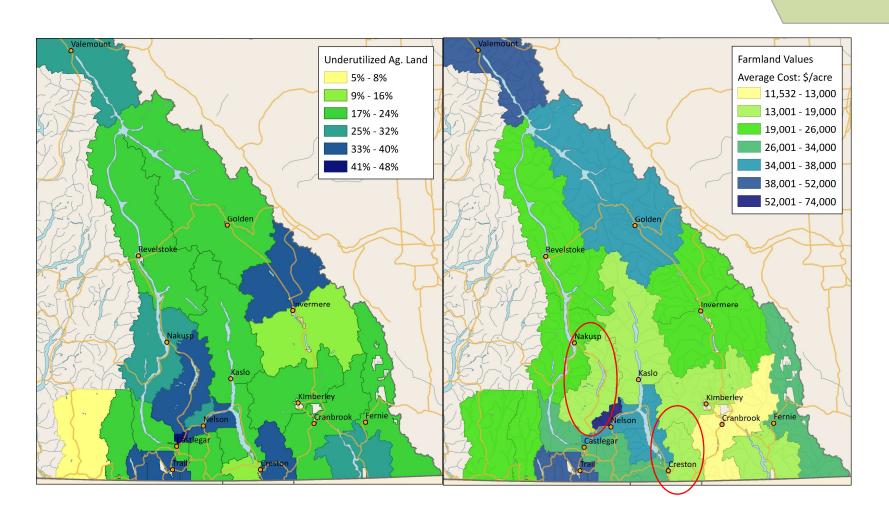


Regional marketing strategy

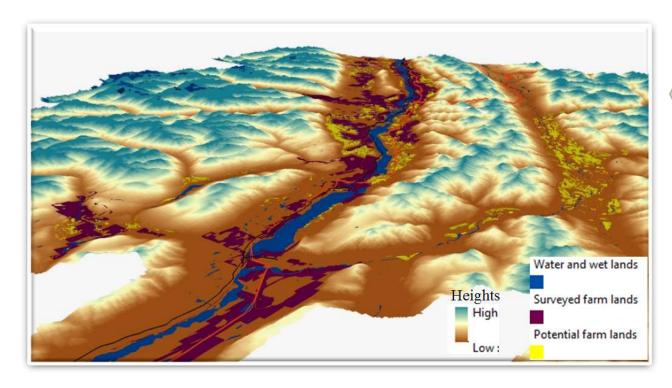


Property Data Analysis

Extent and Value of Agricultural Lands



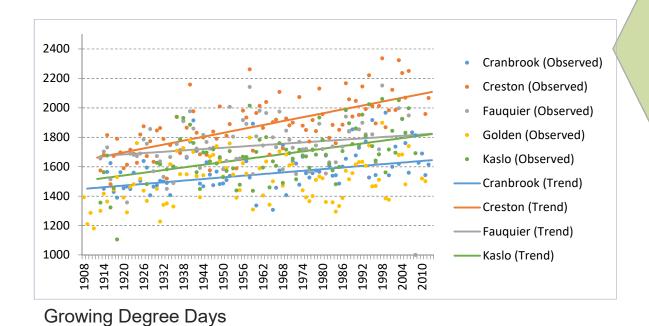
Remote Sensing Analysis



Extent and Value of Agricultural Lands

Pilot indicates remote sensing is a promising methodology to identify potential farm lands

Value of farmland ranges from approx. \$11K to \$73K per acre, averaging over \$22,000



Agricultural
Climate
Trends

- Longer Frost Free Period (long term only)
- More Growing Degree Days (long and medium)
- Lower climatic moisture deficit (long term only)
- Considerable moisture limitations remain

Inventory of Regional Resources

- Plans and Strategies
- Feasibility Studies
- Primary Research
- Best Practices
- Background Reports
- Event and Initiative **Summaries**
- Food Guides





This inventory was produced as part of the Columbia Basin Rural Development Institute's Regional Food Systems project. The Columbia Basin-Boundary region benefits from a number of organizations that have done extensive work with the goal of improving the viability of our regional food system. Our objective was to inventory notable outcomes from this work in order to help decision-makers, researchers, and participants in new initiatives understand the recent history of the Basin-Boundary local food movement. The inventory is limited to resources with a publication date of 2010 or later, and is grouped into seven categories:

- Plans and Strategies,
- Feasibility Studies,
- Primary Research (data collection),
- Best Practices,
- Background Reports.
- Event and Initiative Summaries, and
- Food Guides.

Note that technical agricultural information has been excluded from the inventory in

favour of work that is focused on the governance and mechanics of the food system itself; that is—the stakeholders and relationships that determine how food is produced, processed, marketed, distributed and disposed of.

Plans and Strategies

77the: Revels to be Food Charter Organization: North Columbia Environmental Society, City of Revelstoke Publication Year: 2014 Description: The Revelstoke Food Charter set the stage for adoption of the Revelstoke Food Security Strategy. It discusses the context for food security efforts in the Revelstoke area, establishes a vision for a food secure city, and lists broad focus areas that can guide future







Innovative Solutions to Basin-Boundary Food System Challenges

This Brief summarines research conducted as part of the Columbia Basin Rural Development Institute's Regional Food Systems project. For other research products associated with this project, visit chedica/food.

In the Columbia Basin-Boundary region the challenges farmers face and the unmet demand for locally produced food suggests that there is room for improvement in the region's food system. Agriculture in the Columbia Basin-Boundary region (the Basin-Boundary) is typically small scale and the majority of the food consumed in the region is imported, a reflection of a food system that is designed to work with large-scale producers and national, continental, and/or global supply chains'. However, there is a renewed and growing interest in agriculture and food security in the Basin-Boundary*. This necessitates changes to the existing food system to better work with local producers and other intermediaries to produce and supply food to the people of the Columbia Basin-Boundary region.

Innovative solutions are emerging that transform how our food is grown, processed, distributed, marketed, and sold. These solutions increasingly focus on ensuring economic, environmental,

social, and cultural sustainability. It is important to understand that innovative actions may not require a completely new system or huge investments, but rather the re-purposing or re-organizing of what exists, building on existing infrastructure and assets. Below we provide an overview of several innovative solutions which could be adapted across the Columbia Basin-Boundary Region. We highlight models that have already been implemented on a smaller scale within the region that could be duplicated or expanded, as well as examples from outside the region. Innovative solutions are broken into three categories: supply, processing, and ownership and land access.

SUPPLY SOLUTIONS: SHORTENED SUPPLY CHAIN

The local food movement is essentially a movement. to shorten the supply chain. While perceptions and definitions of local food differ, what is consistent is that for food to be considered local means the distance between production and consumption is shortened³. As such, the local food movement may best be characterized by what it is not - a long, globalized food supply chain with considerable geographic separation between producers and consumers. The global food system is characterized

Innovative Solutions to Regional Challenges

 Shortened and value-based supply chains

Processing solutions

 Ownership and land access solutions



KNOWLED



Supply Solutions

- Shortened supply chains
 - CSAs
 - Farmers Markets
- Value-based supply chains
 - Food Hub

Innovative Solutions to Regional Challenges



Innovation in the Basin-Boundary Beef Supply Chain

INTRODUCTION

In 2014, the RDI began a research project focused on Identifying Opportunities to Increase Food Production and Improve Food Security in the Columbia Basin-Boundary region. Elements of thisline of research have included: common themes in the region's agricultural plans, availability and costs of farmlands, soils and climate information, and innovative practices within the food system, This report aims to explore the nature and extent of innovation within the beef production and distribution supply chain.

The nature of innovation has been studied extensively in many different contexts . Innovation has been identified as the chief source of productivity improvements and hence higher profitability and competitiveness**. Researchers have codified elements of innovation and created a framework for studying, quantifying and analyzing innovation".

This report is the product of a series of interviews with farmers, processors, and distributors of beef raised in the region. These stakeholders were asked questions about their innovations and the impacts on their businesses. This information has been analyzed to inform other stakeholders in the sector about best practices and the advantages of innovating.

RESEARCH METHODS

This paper is largely the result of interviews" that were held with three types of stakeholders in the beef supply chain; cattle ranchers, abattoir managers/proponents, and retail distribution business-people. Members of the Kootersay Livestock Association, the Windermere District Farmer's Institute, the Creston Valley Beef Grower's Association, the Grand Forks Stock Breeders, and the Kettle River Stockmen's Association were approached for recruitment recommendations in their respective regions.

With the assistance of two locally based researchers (locals to Grand Forks and Invermere), a selection of eight stakeholders was reached. These stakeholders represented each of the three target respondent. groups, and major farming centres in both the East Kootenays and the Kootenay Boundary.

Interviews were held at a location of the stakeholders' choosing. Information was recorded both by audio recording and the transcription of detailed notes. Questions probed the nature of innovation in the respondent's operation, and their relationships within their local food network and the larger regional/national landscape.





1.888.953.1133 www.cbrdi.ca

Processing Solutions

Innovative
Solutions to
Regional
Challenges

- Community abattoirs
- Accessible commercial kitchens





Ownership & Land Access Solutions

Kootenay & Boundary Food Producers' Co-op Innovative
Solutions to
Regional
Challenges

MEMBER INFORMATION
CLICK TO DOWNLOAD MEMBER INFORMATION
DOCUMENTS... KBFPC MEMBER ELIGIBILITY FINAL SEPC
MEMBER R & R FINAL KBFPC MEMBERSHIP APPLICATION
FINAL MAY 2015 MEMO OF ASSOCIATION

KBFPC

Our Purpose.... The purpose of the Kootenay and Boundary Food Producers' Co-operative is to increase agricultural production and consumer access to healthy local food in Southeastern British Columbia. This will be accomplished by: a. Developing services and infrastructure to streamline transactions between food producers and customers b. Building agricultural capacity and infrastructure c. Developing educational and marketing opportunities to increase farm viability in the region, and d. Such other activities as are necessary and desirable for these purposes. A volunteer group has been working for over 2 years through the background pieces of doing the research, a feasibility study, talking to potential members, running a pilot, and now business planning for the first full year...

WHAT'S NEW

- · Interest in Locally Grown Food is Growing!
- We're Hiring 2016 Coordinator
- Kootenay & Boundary Food Producers Co-op Thank you!
- · Our Indiegogo Campaign is rolling
- We Need Your Help Help us reach our target!

CONTRIBUTE HERE

We need your help to make our vision a reality. Please consider making a

Ownership & Land Access Solutions

Innovative
Solutions to
Regional
Challenges

- Cooperative and community farms
- Incubator farms
- Farmland access agreements
- Public farmland
- Farmland trusts









Innovative
Solutions to
Regional
Challenges







APPLIED INNOVATION RESEARCH CENTRE

SUPPORTING LEARNERS, COMMUNITY AND INDUSTRY THROUGH INNOVATION

Advancing the Regional Food System in Rural BC

Canadian Rural Revitalization Foundation Conference Fall 2016



