# Upholding Community Values in the Food System: A Study of Values-Based Supply Chains in the Squamish to Lillooet Region

by

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in the School of Resource and Environmental Management Faculty of Environment

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# Abstract

The values-based food movement seeks to uphold shared community values in the food system, through the creation of trusting relationships and transparent information sharing, where the well-being of all supply chain actors is maintained. This study involved focus groups (n=21) and key informant interviews (n=22) with stakeholders in the Squamish to Lillooet food system. Data from the focus groups and interviews highlight the existing motivation to strengthen the food system, yet how this is inhibited by a lack of infrastructure and the economic landscape of the region. Furthermore, the data presented several solutions to scale local and values-based food, and what barriers exist in achieving this. Drawing from the findings, recommendations are provided to enable food system actors to embed values into their work. This study emphasizes the importance of transitioning away from a neoliberal food system approach towards a food system that is holistic in the values that it upholds.

**Keywords**: values-based supply chains; local food system; short food supply chains; food systems planning; food policy

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# Chapter 1. Introduction

The dominant food system has been corporatized through neoliberal capitalism, creating a food system based on industrialized food production and globalized trade networks upheld by private interests and government actors (Laforge et al., 2017). These practices focus on increasing agricultural yield, technological advancements, and labour reductions through privatization (Laforge et al., 2017). Food is not only corporatized but also commodified through the dominant food system, within which food is over-produced and sold for profit (Vivero Pol, 2013). This corporatization and commodification of food has continued to perpetuate food system inequities through a lack of food security and food access. Globally, contrary to what is often believed, world hunger continues to increase (FAO et al., 2023). In 2022, it was estimated that 9.2 percent of the world's population was undernourished, an increase from 7.9 percent in 2019 (FAO et al., 2023). In the Canadian provinces, in 2022 6.902 million people experienced food insecurity, a substantial increase from four years prior (Statistics Canada, 2023), following the same global trend.

The food system acts in relationship with the environment, as driver of environmental degradation and climate change, while also being threatened by these factors. Globally, 21-37% of greenhouse gas (GHG) emissions are from the food system, with 14-28% of GHG emissions attributed to crop, livestock, and land use for food and 5-10% attributed to supply chain actions (Mbow et al., 2019). Climate change is already impacting food production across the globe due to warmer temperatures, changing precipitation patterns (Jagermeyr et al., 2021), and extreme climate events, creating a significant risk to food security and the income of food growers (Vogel et al., 2019). These multi-faceted food system impacts have recently been valued, with hidden costs of the dominant food system estimated to be 10% of the global gross domestic product purchasing power parity (GPD PPP), totalling \$12.7 trillion PPP (FAO, 2023). These hidden costs include ecological impacts such as greenhouse gas and nitrogen emissions, water usage, and land use, and social effects such as a lack of a healthy diet, poor nourishment, and poverty (FAO, 2023).

Food system actors have been championing many food movements ranging from grassroots initiatives to advocating for government policies and programs. The citizen-

driven local food movement began as a response to counteract the industrial and globalized nature of the food system (Rosane, 2022), and its popularity has increased in recent decades (Martinez et al., 2010). Before making its way to the West, the Japanese movement of teikei emerged in the early 1970s, aiming to reject the commodification of food, instead leveraging relationships as building blocks (Kondo, 2021). However, these movements are not new. Local food markets were a significant food purchasing source in the Global North until the 1950s. With the rise of urbanization and improved roadways, they were replaced by larger grocers and food retail spaces (Sanderson et al., 2005) creating the very food system known today. Though the local food movement has expanded, only 12.7% of farms in Canada sell their food directly to consumers, relying on intermediaries for distribution and retailing (Enthoven & Van Den Broeck, 2021).

Governments are beginning to recognize the need for global, national, and local changes in the food system. In 2019, the Government of Canada launched the Local Food Infrastructure Fund to strengthen the local food system and combat food insecurity by investing in non-profit and community-based organizations' infrastructure (Ministry of Agriculture and Agri-Food, 2023). Even though this is the beginning of more funding for local food, significantly more funding is needed to create a large-scale food systems change (Solmes, 2023). In British Columbia (B.C.), three initiatives, Grow B.C., Feed B.C., and Buy B.C., target expanding the provincial food system by providing land access to younger farmers, ensuring government institution procurement is focused on local food, and by marketing provincially produced and processed food to consumers (Ministry of Agriculture and Food, n.d.-c).

Though these local food movements and government policies are recognizing the importance of local food, it is necessary to look beyond the local food movement to solve food system challenges (DeLind, 2011). Alternative food systems, the umbrella under which local food is found, have begun to pique the interest of scholars as they attempt to separate the food system from the industrialized and commodified structure within which it currently operates (Wittman et al., 2012). These alternative food systems endeavour to re-socialize and re-spatialize the food system (Marsden et al., 2000). Short food supply chains (SFSC) are one approach to alternative food systems. They are a mechanism by which the intermediary between producers and consumers is eliminated (Todorovic et al., 2018), allowing for relationship-building between actors in the supply chain (Renting et al., 2003). However, SFSCs may not successfully achieve the desired

economic and environmental food system goals (Bayir et al., 2022). Instead, valuesbased supply chains (VBSCs) have been introduced as a mechanism by which community values across all levels of the supply chain are upheld (Stevenson & Pirog, 2008).

This study is located in the Squamish to Lillooet region, a 16,500 km<sup>2</sup> area in B.C., in the Pacific Range of the Coast Mountains (Squamish-Lillooet Regional District Regional Growth Strategy Bylaw 1062, 2008). It has various communities, ranging from rural agricultural areas to an internationally renowned resort municipality (Squamish-Lillooet Regional District Regional Growth Strategy Bylaw 1062, 2008). VBSCs have been upheld in the Squamish to Lillooet region through the Good Food Program (Squamish Food Policy Council, 2022). This project is run by the Squamish Food Policy Council (SFPC) to ensure safe, sustainable, nutritious, and culturally appropriate food is available for those who live in the Squamish area (Squamish Food Policy Council, 2022). The SFPC falls under the Squamish Climate Action Network, a non-profit organization that aims to mitigate climate change using sustainable initiatives in the municipality of Squamish (Squamish Food Policy Council, 2022). The Good Food Program is a project that is working towards shifting the purchasing decisions of businesses and institutions to uphold five values: local economies, sustainability, nutrition, animal welfare, and valued workforce (Squamish Food Policy Council, 2022). In doing so, the Good Food Program enables the Squamish to Lillooet region to have a more robust local food system adding resiliency in instances of disturbance, such as climate change, by increasing self-reliance, and by creating a more equitable workforce through fair wages (Squamish Food Policy Council, 2022).

This study is a partnership with the Squamish Food Policy Council. It seeks to understand the food system in the Squamish to Lillooet region and the feasibility of scaling local and values-based food initiatives in the area. This is done by drawing upon focus groups (n=21) through the application of a Strength Weakness Opportunities and Threat (SWOT) analysis and key informant interviews (n=22) to answer the following research questions:

1. What are the current strengths and challenges of the food system in the Squamish to Lillooet region?

- 2. How might local and values-based food in the Squamish to Lillooet region be expanded?
- 3. What barriers exist in developing local and values-based food in the Squamish to Lillooet region?

The following chapter (Chapter 2: Literature Review) will draw on academic literature to discuss local food and short food supply chains, values-based supply chains, and how food systems planning can impact these three alternative food systems. Chapter 3 (Methods) considers the spatial and policy context around VBSCs and describes the methodology used in this study. Chapter 4 (Findings) and Chapter 5 (Discussion and Recommendations) explore the findings and their implications in relation to the study research questions. Chapter 6 (Conclusion) summarizes this work and its importance.

# Chapter 2. Literature Review

### 2.1. Local Food Systems and Short Food Supply Chains

The conventional food system has been dominated by neoliberal and capitalist ideologies, with food being industrialized and commodified in a globalized market (Beingessner & Fletcher, 2020). Initially emerging in the 21<sup>st</sup> century, the local food movement arose as a mechanism to resist and reject the dominant food system (Beingessner & Fletcher, 2020) and has provided consumers with a means to exercise greater control and sovereignty over their food choices (Charlebois et al., 2022). The inclusion of more local food into the food system can be a mechanism by which to transition away from a trans-national and conventional food system towards one that is more place-based (Marsden & Franklin, 2013).

Defining local food has yielded no agreement, and definitions vary among scholars, policymakers, and other key contributors within the field (Martinez et al., 2010; Pearson et al., 2011). Though no consistent definition has been agreed upon, the definition most commonly found in literature utilizes the distance from producer to consumer (Blake et al., 2010). This definition has been expanded by Eriksen (2013) to include not only geographical proximity but also relational and values proximity. In a Canadian context, local food has been defined by the federal government as "food produced in the province or territory in which it is sold, or food sold across provincial borders within 50 km of the originating province or territory" (Canadian Food Inspection Agency, 2022, "Local" claims section). With the inconsistency of local food definitions, looking towards alternative approaches to the conventional food system may lend more success in promoting local food.

One such method of re-localizing and re-spatializing (Marsden et al., 2000) food systems are short food supply chains (SFSC) which aim to create a more transparent distribution of food (Bayir et al., 2022) by eliminating the intermediary between consumer and producer (Todorovic et al., 2018). Marsden et al. (2000) have defined SFSCs as a way to "short-circuit' the long, complex and rationally organized industrial chains" (Marsden et al., 2000, p. 425). This definition has become well-accepted within academic literature by most researchers (Bayir et al., 2022; Kneafsey, 2013). Renting et al. (2003) have leveraged this definition to build upon previous work on SFSCs (Michel-

Villarreal et al., 2021). SFSCs focus not only on the relationships between actors within the food chain, such as producers, processors, and consumers but also on creating transparency through information sharing (Renting et al., 2003).

SFSCs can be split into three types based on their geographical and social parameters (Marsden et al., 2000). Direct marketing SFSCs occur when producers and consumers have a "face-to-face" interaction (Todorovic et al., 2018, p. 5). Proximate SFSCs are defined as having a few intermediaries where locally produced food is often sold to consumers through local sellers. Finally, spatially extended SFSCs occur when food is sold to local and export consumers. (Chiffoleau & Dourian, 2020; Marsden et al., 2000; Todorovic et al., 2018)

SFSCs are one method food system actors, specifically farmers, resist the neoliberal market-based conventional food system (Todorovic et al., 2018). SFSCs provide an opportunity to develop relationships between producers and consumers and benefit local economies (Michel-Villarreal et al., 2021) by providing producers with a direct cash flow from the consumer (Todorovic et al., 2018). This direct connection can potentially increase profits and provide more autonomy (Dupré et al., 2017; Tundys & Wiśniewski, 2020) for producers operating within SFSCs. These alternative food supply chains have been gaining more research momentum in recent years (Michel-Villarreal et al., 2021). However, there has been a gap in exploration within a British Columbia (B.C.) context, with minimal academic research completed.

Local and SFSC movements have many supporting actors that operate external to the chain, such as local and provincial levels of government, community advocacy groups, and food policy councils. In B.C., Feed B.C. is an initiative to connect farmers and purchasers to increase the quantity of local food purchased across the province (Government of British Columbia, n.d.-a). Farmers' markets reduce the intermediaries between producers and consumers while providing access to local food (Wittman et al., 2012). In B.C., there are currently 137 farmers' markets (The BC Farmers' Market Trail, 2023), which has increased from 103 in 2012 (Wittman et al., 2012). There are limits to the scale of these markets, such as proximity and accessibility to consumers (Wittman et al., 2012), demonstrating a need for a greater breadth of initiatives.

Local food has increasingly been suggested as solution to create a more sustainable and socially and economically beneficial approach to the food system (Tregear, 2011). However, it is essential to note that local does not always promote these characteristics (Born & Purcell, 2006). Born and Purcell (2006) call the assumption that local food is inherently beneficial the "local trap", which is the assumption that food produced within a smaller geography can counteract the inequities from within the conventional food system. DuPuis & Goodman (2005) challenge local food systems through the idea of "unreflexive localism" (DuPuis & Goodman, 2005, p. 360), which can ignore local politics and social injustices that can also occur in the local food system.

It has been agreed that SFSCs provide social benefits, yet environmental and economic benefits are yet to be clearly defined across the literature (Bayir et al., 2022). From an environmental perspective, greenhouse gas emissions from food distribution are not necessarily lower for SFSCs (Chiffoleau & Dourian, 2020), even if the food is distributed locally. Majewski et al. (2020) have performed several life cycle analysis studies and determined that shortening food supply chains does not automatically create a more sustainable food chain. Economically, information on local food chains is inconsistent. Consumers often consider the price of local food to be higher than food imported from other regions or countries (Charlebois et al., 2022), yet this perception is only sometimes based in fact. Recent studies have shown that local food cost is usually comparable to similar products but varies depending on the specific item (Charlebois et al., 2022, 2023). The economic impacts for producers are not always positive, as distribution is inefficient and costly, often hinging on producers to pay for the distribution themselves (Bayir et al., 2022; Yacamán Ochoa et al., 2019). The processing and distribution infrastructure is often minimal, and it may be left to producers to fill this gap to sell their products (Bazzani & Canavari, 2013).

To capture social, environmental, and economic benefits more effectively, values-based food systems have been suggested as an alternative to uphold shared values along the supply chain (Ostrom et al., 2017). These supply chains are place-based and focus on the ethics and relationships within the food system (Peterson et al., 2022). Because of this, values-based food systems have the potential to be more successful than the local food movement and SFSCs in counteracting the conventional food system.

### 2.2. Values-Based Supply Chains

While local food and short food supply chains provide a mechanism for better access to healthier food, they focus on a single community value: local. Values-based supply chains (VBSC) have been introduced in an attempt to restore the loss of agriculture of the middle (Stevenson & Pirog, 2008), medium-sized farms that are too small to compete in the commodity-based market and too large to rely on direct marketing (Hardesty et al., 2014). In Canada, the number of mid-size farms has declined by 59% from 1976 to 2021, while the number small and large farms remained stable over the same period (Weersink, 2022). The conventional food system does not uphold community values; instead, it contributes to environmental degradation, poor worker and animal welfare, and economic inequities across the supply chain (Feenstra, 2019). VBSCs commit to the well-being of all actors across the supply chain and the development of strategic partnerships while ensuring values are upheld (Stevenson & Pirog, 2008).

Foundational to VBSCs are trusting relationships across all levels of the supply chain, from producer to consumer (Ostrom et al., 2017) and transparent information sharing (Feenstra & Hardesty, 2016). Shared non-monetary values and ethics of supply chain participants are formative to VBSCs, where shared values often encompass "quality, sustainability, health, welfare, and fairness" (Peterson et al., 2022, p. 387) and can include "[food] locally produced, grown by small or mid-scale farms, or production practices that enhance environment and/or worker welfare" (Feenstra & Hardesty, 2016, p. 2). These values are not exhaustive and VBSCs may incorporate other values as determined by the community. Unlike local and short food supply chains, VBSCs are not defined by their spatiality but instead focus on how they uphold relationality and ethical ideals along the supply chain (Peterson et al., 2022). Values are created within VBSCs through the co-production of all supply chain actors, with the enhancement of local and community development (Berti & Mulligan, 2016; Bloom & Hinrichs, 2010; Stevenson & Pirog, 2008). VBSCs are not defined by the length of their supply chain but rather by equitable sharing of rewards (such as economic benefit), with farmers viewed as nonexpendable supply chain partners (Fleury et al., 2016).

The use of VBSCs has been increasing in both academic and non-academic work in recent years. John Hopkins University, in Baltimore, U.S., signed onto the

national Real Food Challenge that aimed to increase the university's food procurement to achieve four values: "local and community based, fair, ecologically sound, or humane" food (Berger et al., 2022, p. 167). Though the university was slightly short of its 35% values-based food procurement goal, it successfully leveraged VBSCs to improve the social and environmental aspects of the food consumed on campus (Berger et al., 2022). In B.C., work is being done by non-profits such as the Good Food Network in the Capital Region on Vancouver Island, which aims to create a local food system that is socially and ecologically sound (Good Food Network, 2016).

Though VBSCs provide many benefits, effective implementation still has several challenges. The question of scalability is ever present in VBSC theory. To reach a wider audience and create systems change, scaling is a necessary component of this, and can be done by scaling out, scaling up, and scaling deep (Riddell & Moore, 2015). Scaling out is the process of disseminating information and the spreading of programs to more people or communities, scaling up is the process of changing policies and laws, and scaling deep is the process of shifting norms through cultural change (Riddell & Moore, 2015). Within the context of food systems, scaling can mean "more or larger consumers and producers" (Pitt & Jones, 2016, p. 3), such as transitioning production and supply to larger businesses, expanding institutional capacity, or innovating policy interventions that come from actors who have encouraged and influence governmental organizations to create a change (Pitt & Jones, 2016).

Scaling out is needed to meet the growing consumer demand for values-based food and scaling up is necessary to overcome systemic challenges within the conventional food system and integrate VBSCs principles (Mount, 2012). There is a risk that increased scale will create a loss of values within VBSCs, with it being more challenging to achieve desired social and environmental goals, especially in a system where economic profitability is the priority (Cleveland et al., 2014). Economies of scale, in the context of VBSCs, do not fit within the regularity of conventional markets, where capital investments towards increasing on-farm land, infrastructure, and technology are used to boost food production and combined with large supply chains (Berti & Mulligan, 2016). Within VBSCs, these economies of scale should instead be based on producers' collective action and food aggregation, providing an opportunity for scale but incorporating anti-conventional approaches (Berti & Mulligan, 2016). To avoid producers bearing the sole responsibility of scaling operations, aggregators and distributors should

look to how they can scale their infrastructure to support mid-sized farms as an intermediary connection between producers and purchasers, ensuring values are not lost when scaling up occurs (Stahlbrand, 2017).

The development of infrastructure is intertwined with the scalability of VBSCs, as food system infrastructure is designed for conventional food systems that operate at a larger scale and are entrenched in values that promote inequities (Feenstra, 2019). This infrastructure gap can be both physical and logistical (Clark & Inwood, 2016). Food hubs have been suggested as a method to meet these gaps, with variations in the models and approaches, and no agreement on a specific one (Berti & Mulligan, 2016; Feenstra, 2019). Food hubs, in relation to VBSCs, can be defined as "businesses or organizations that manages source-identified food products" (Feenstra, 2019, p. 64) and direct the "aggregation, distribution and marketing ... to strengthen their [producers] ability to satisfy wholesale, retail and institutional demand" (Barham et al., 2012, p. 4).

Berti and Mulligan (2016) have classified food hubs into two categories. "Valuesbased agri-food supply chain" are food hubs that are focused on identifying efficiencies within the supply chain and help connect the demand of buyers and producers (Berti & Mulligan, 2016, p. 8). On the other hand, "sustainable food community development" food hubs are non-profit organizations that focus on social and sustainable community food (Berti & Mulligan, 2016, p. 9). In B.C., food hubs are defined as "shared-use food and beverage processing facilities" (Government of British Columbia, n.d.-b, p. 1) that have variations in magnitude based on the region within which they are located (Government of British Columbia, n.d.-b).

Peterson et al. (2022) surveyed farmers' perceptions of the challenges in VBSCs, where respondents stated that on their own, VBSCs are unable to support sufficient volume and that there are challenges surrounding the logistics of transportation and distribution. This study demonstrates the current limitations around scale and infrastructure within these chains. This is complemented by work done by Hardesty et al. (2014) that determined VBSC growth is impacted by the ability to obtain funding, policies, and regulations such as food safety, and a lack of business training and infrastructure at a suitable scale.

The lack of food hub infrastructure inhibits VBSCs (Clark & Inwood, 2016). Some have suggested leveraging conventional food distribution channels instead, creating a hybrid model (Bloom & Hinrichs, 2010; Clark & Inwood, 2016). In the interim, this hybrid model would leverage conventional supply chain infrastructure because VBSC infrastructure, such as food hubs, is still in the infancy stages (Clark & Inwood, 2016). This approach would be transitional, allowing for infrastructure development while attempting to pivot away from the conventional food system focused on economic gain (Bloom & Hinrichs, 2010). Though this is an efficient approach to developing infrastructure, power dynamics are at play, as conventional buyers often have greater negotiating power than small to medium-sized farms (Clark & Inwood, 2016). Conventional buyers tend to be price-focused (Bloom & Hinrichs, 2010), ignoring the importance of non-monetary values across the food chain.

To achieve the promise of VBSCs, local governments must collaborate with food system actors to help remove limitations and barriers through food policies and regulations (Matacena, 2016). Planners have a significant role in growing VBSCs, as planning is well positioned to facilitate interactions between local government and community members, to develop VBSC visions through long-term planning, and to regulate land uses for VBSC needs (Matacena, 2016).

### 2.3. Food Systems Planning

The food system has historically been absent in planning research and practice (Pothukuchi & Kaufman, 2000). While food systems planning is still an emerging field (Robert & Mullinix, 2018), there has been a growing awareness of the importance of incorporating food into local plans (Soma & Wakefield, 2011). Planning is defined as the "scientific, aesthetic and orderly disposition of land, resources, facilities and services with a view to securing the physical, economic and social efficiency, health and well-being of urban and rural communities" (PIBC, 2023). Establishing healthy communities is entwined with the creation of a healthy food system (Soma & Wakefield, 2011). The field of planning is well positioned to support this endeavour, as planning aims to serve communities' interests better and embrace the interconnectedness across its social, environmental, and economic dimensions (Pothukuchi, 2004).

Local actors, such as non-profits and community groups, have been advancing the local food movement. In contrast, food systems planning has historically been a small part of municipal and regional planning activities (Robert & Mullinix, 2018). This is because food is often perceived as a rural issue related to agriculture, ignoring that food is vital to the experiences of local communities (Pothukuchi & Kaufman, 1999). Impacts on a community food system are often profoundly felt at the local level, demonstrating the importance of local food systems planning (MacRae & Donahue, 2013). The goals of food systems planning are intertwined with a community's economic, ecological, and social goals, as food systems planning aims to create a just and sustainable food system (Pothukuchi, 2009).

Planners can leverage a wealth of approaches and tools to create a more robust food system, from broad plan-making to more targeted techniques that vary across spatial and temporal scales within the community. Buchan et al. (2015) categorized these food system planning tools into four themes: providing resources, undertaking projects and programs, advocating and facilitating, and creating and implementing policies. Planners can provide resources to support the food system by funding and supporting food policy councils (Fridman & Lenters, 2013) and food hubs (Buchan et al., 2015). Local planning departments can undertake projects and programs such as developing a food assessment, mapping foodshed assets (Soma et al., 2022; Soma & Wakefield, 2011) and supporting food waste recovery programs (Buchan et al., 2015). Food systems planners can advocate for local food system initiatives such as rooftop gardens (Kaufman, 2009) or school gardens (Buchan et al., 2015).

The most substantial role a planner can have on the food system is through policy creation and regulation, where both strategic and statutory planning can be leveraged to formalize a local government's food system planning vision and implementation guidelines. Under strategic planning, Official Community Plans (OCPs) create a long-term community vision for planning the food system (Robert & Mullinix, 2018). Food strategies are similar to OCPs but focus on policy development, and provide a mechanism for planners to create a long-term plan to ameliorate the food system (Buchan et al., 2015). To implement the strategic plan, statutory planning tools such as bylaws (e.g. business regulation bylaws that promote local food system initiatives) and zoning (e.g. zoning for urban agriculture) are used (Buchan et al., 2015). In B.C., agricultural land is governed by the provincial Agricultural Land Reserve (ALR),

a zoning ordinance that regulates agricultural land use (Robert & Mullinix, 2018). However, local governments have some influence within this regulation as implementers and enforcers of the ALR land use regulation, such as through municipal non-farm use zoning (Robert & Mullinix, 2018).

Though planning is well-positioned to solve food system challenges, several studies have also investigated the current shortcomings of food systems planning. It is essential to think about the role of a food systems planner and how power and justice play a significant role in food decisions (Schreiber et al., 2023). Schreiber et al. (2023) determined that upon analysis of many municipal food strategies in North America, often largely absent or excluded in these strategies were discussions around who has access to land, Black, Indigenous, and People of Colour (BIPOC) perspectives, and the integration of other equity considerations such as housing and equitable pay. This power is also entwined with how different groups view the food system. Soma et al. (2022; 2022) determined that food asset mapping, a tool used in food systems planning, often neglects to consider food assets that are important to and representative of BIPOC communities and cautions that when creating these maps, it is necessary create inclusive spaces and question whose voices are or are not being included. Food systems planning is often limited to the jurisdiction of the local government, though there are opportunities to develop partnerships with surrounding jurisdictions to create linkages between urban and rural food areas (Robert & Mullinix, 2018; Schreiber et al., 2023).

The work performed by food systems planners can integrate VBSC approaches into planning frameworks. This integration will create a more robust food system that upholds community values through top-down policy and bottom-up initiatives.

# Chapter 3. Methods

### 3.1. Spatial and Policy Context

The geographical location of this study is the Squamish to Lillooet region in B.C. This area is located within the territory of the Skwxwú7mesh, St'át'imc, and Líl'wat Nations. It also has some areas that are located within Stó:Iō, Tsleil-Waututh, Nlaka'pamux, Tsilhqot'in, and Secwepemc Nation territories (Squamish-Lillooet Regional District, n.d.-a). This area is home to just over 50,000 residents (Squamish-Lillooet Regional District, n.d.-e) and experiences high levels of tourism due to the proximity of the region to outdoor recreation activities (Squamish-Lillooet Regional District, n.d.-d). The region is not only experiencing growth through tourism but is expected to increase its population to 56,864 by 2036 (Urbanics Consultants Ltd., 2017). The region is comprised of five municipalities, the District of Squamish, the Resort Municipality of Whistler, the Village of Pemberton, the District of Lillooet, and the Squamish-Lillooet Regional District (SLRD) (Squamish-Lillooet Regional District, n.d.-a).

The five municipalities have all committed to a policy direction regarding local food systems. The SLRD aims to promote local agriculture by protecting agricultural land and supporting initiatives within the local economy (Squamish-Lillooet Regional District, n.d.-c). The District of Squamish listed the craft food, beverage, and agriculture sectors as critical aspects of the green economy in the area (District of Squamish, 2021). These commitments demonstrate the importance of developing a more robust food system from governing bodies in the region and are further discussed in key policies and plans. The following policies and programs showcase a favourable policy climate for this timely research:

- District of Squamish Official Community Plan (OCP) 2017 The OCP encourages a sustainable, healthy, and just food system in the community through the preservation of agricultural land and by supporting policy that enables agriculture, food production, and food processing (Official Community Plan Bylaw 2500, 2017).
- Resort Municipality of Whistler Official Community Plan (OCP) 2018 The OCP commits to protecting and developing the local and regional food systems while ensuring access to nutritious, culturally appropriate, and affordable food (Official Community Plan Bylaw No. 2199, 2018).

- Village of Pemberton Official Community Plan (OCP) 2011 The OCP encourages agriculture retention, protection, and expansion by protecting farmland, promoting local food, and supporting various agricultural practices (Official Community Plan Designation Bylaw No. 654, 2011).
- District of Lillooet Official Community Plan (OCP) 2009 The OCP commits to supporting local agriculture and community food growing programs and promoting food security, sustainability, and local economies (Official Community Plan Bylaw No. 320, 2009).
- Squamish-Lillooet Regional District Regional Growth Strategy (RGS) 2008 The SLRD RGS Goal 10 pledges to protect the community food system through the development of agriculture in the region and by the preservation of farmland (Squamish-Lillooet Regional District Regional Growth Strategy Bylaw 1062, 2008).
- Squamish-Lillooet Regional District Agricultural Plans The SLRD has adopted three agricultural plans for the communities of the Squamish Valley, Pemberton and Area C, and Lillooet, St'at'imc, and Area B (Squamish-Lillooet Regional District, n.d.-c). These plans aim to address current challenges by developing policies and implementing solutions to improve the agricultural activities of the area (Squamish-Lillooet Regional District, n.d.-b).

In the region, 1.5% of the total land falls under the Agricultural Land Reserve (Squamish-Lillooet Regional District et al., 2022). The Agricultural Land Reserve (ALR) is a provincial zone that protects agricultural land in the province of B.C. (Agricultural Land Commission, 2022a) and regulates the permitted uses of the land designated with the ALR, prioritizing farming as the primary land use (Squamish-Lillooet Regional District et al., 2022). In 1973, the Land Commission Act was passed to achieve these goals (Agricultural Land Commission, 2022b). Because a large portion of the region's agricultural land falls under the province's jurisdiction, any policies or plans developed by municipal and regional governments must be in accordance with ALR regulations (Agricultural Land Commission, 2022a).

## 3.2. Research Methods

The Simon Fraser University Ethics Board approved this study on October 27<sup>th</sup>, 2022, and May 5<sup>th</sup>, 2023. This study seeks to understand the strengths and challenges of the food system and the barriers to local and values-based food. Additionally, this study aims to understand what techniques could be applied in the region to expand local and values-based food. It focused on critical regional stakeholders who are experts in the food system. They were food system actors such as producers, distributors,

restaurants, and policymakers for municipal and regional governments. This study used two qualitative techniques: focus groups and key informant semi-structured interviews. The focus groups were applied to determine the Squamish to Lillooet region food system's strengths, weaknesses, challenges, and opportunities. The interviews were designed to further understand the strengths and challenges of the food system, along with solutions and barriers to local and values-based food expansion.

#### **3.2.1. Focus Groups**

The focus groups took place on November 23, 2022. The focus groups were one portion of a full-day Good Food Gathering event run as a partnership between The Food Systems Lab (SFU) and the Squamish Food Policy Council. Participants were selected by the two organizations based on their role in the local food system and their expertise on this topic. Participants were identified based on the sector within which they work and comprised of policymakers, farmers, businesses, non-profits, institutions, and experts; the breakdown of which can be found in Figure 1.



Figure 1 Sector group of focus group participants (n=21)

The focus groups aimed to understand the strengths, weaknesses, challenges, and opportunities of the food system in the Squamish to Lillooet region by performing a SWOT analysis. The SWOT analysis method was initially used in business management but has been applied in policy and planning contexts to understand the elements and barriers of one or several strategies to promote better decision-making (Berte & Panagopoulos, 2014). The participants (n=21) were split into five groups, ranging from 3 to 6 participants per group. Groups included multiple stakeholder identities to create groups with mixed knowledge and thoughts. Each group was given a poster board split into four quadrants for the SWOT analysis. Group members used sticky notes to fill the board based on their lived experience. The specific questions under each SWOT category can be found in Appendix A.

#### 3.2.2. Interviews

Semi-structured key informant interviews (n=22) were conducted between May and July 2023. Interviews are a method by which participants' lived experiences, perceptions, and worldviews are expressed (Mann, 2016). Using semi-structured interviews provides some flexibility by following a prepared set of questions while simultaneously allowing for the exploration of other applicable questions (Mann, 2016). Participants were selected because of their knowledge and their role within the food system in the Squamish to Lillooet region. Target interview participants were policymakers, businesses, institutions, First Nations, non-profit organizations, and food system experts, all spatially located within the region; the breakdown of which can be found in Figure 2. Participants were determined using three separate methods. First, an online search of businesses, experts, and policymakers in the area was performed, targeting businesses that had publicly available information on their interest in local food or businesses that had purchased food due to specific values. Next, participant lists were compiled based on Squamish Food Policy Council recommendations. Finally, the snowball method was used during the interviews to capture participants who were not visible through online searches and were not found on the list recommended by the Squamish Food Policy Council. The snowball method, a common qualitative sampling approach, is a technique where the researcher asks study participants to recommend potential participants who are knowledgeable in the research topic, incorporating

additional participants who may be inaccessible or require high trust to participate in the study (Parker et al., 2020).



#### Figure 2 Sector group of interview participants (n=22)

The interviews aimed to understand the current strengths and challenges of the region's food system, how local and values-based food can be upheld, and the barriers to scaling values-based food. Participants had the option of choosing between a Zoom or phone interview. All but one participant chose Zoom. Participants were offered a \$25 gift card for their time. Interviews lasted between 30 and 60 minutes, most occurring within 30 minutes to respect the participants' time. Participants were asked a scripted set of 15 open-ended semi-structured questions that can be found in Appendix B. The interviews were recorded for the duration of the interview.

#### 3.2.3. Data Analysis

Upon completion of the focus groups and interviews, all data was anonymized. Posterboard information was compiled into a single Microsoft Word document. Interviews were transcribed using Microsoft Office transcription software and manually reviewed for transcription errors. The study used NVivo14 software to code focus group and interview data. The interviews were coded based on key themes to answer the three

research questions (e.g. strengths and weaknesses, barriers to local food, etc.), and then sub-themes were created within each research question based on their connection. This analysis can be found in Chapter 4.

#### 3.2.4. Limitations

There are several limitations to this study. The SWOT analysis method, though efficient in its application, can often result in an oversimplification of data. This was the case in this study, where the SWOT analysis responses lacked depth and specificity, and instead focused on overarching food system themes in the region. This resulted in some of the data being challenging to interpret or limited in the extent of its application. It is recommended that the SWOT analysis be repeated in the future with additional time that allows participants to clarify and deepen their responses to the SWOT questions. The SWOT method is most effective when used in conjunction with other qualitative methods (Helms & Nixon, 2010), as was applied in this study, and it is recommended that this be followed in future studies. Finally, the sample size of the SWOT (n=21) was only representative of a small number of food system actors in the region and was focused on experts, policymakers, and businesses. It is recommended that future work extend more widely to participants across all levels of the supply chain.

The sample size of the interviews (n=22) only encompasses a small number of the food system actors in the Squamish to Lillooet region. Though minimal, there were some participants who engaged in both the focus group and interviews. The results of the study were not heavily impacted as the interview gave focus group participants an opportunity to elaborate on their SWOT responses and posed more targeted questions related to values-based food systems. Furthermore, this research aimed to capture participants across all levels of the supply chain, from producer to consumer, yet many interview participants perform work at the last level of the supply chain, providing food to the consumer. Only one grower was interviewed, yet growers are fundamental players in providing food to the community. It is recommended that further research be conducted working directly with farmers and growers to understand their barriers to scaling up local and values-based food. Many participants (77.3%) were geographically located in the southern portion of the region, even though interview recruitment occurred across the entire region. Therefore, those who were interviewed only represent a portion of the area. Finally, the snowball method is limited in its randomization capabilities and may

result in selection bias (Parker et al., 2020). In this study, snowball sampling could have contributed to the geographic and demographic characteristics of participants in this study.

This study only spoke to one of the many Indigenous Nations on whose territories this work is located. As well, specific work on Indigenous food systems and practices was outside the research scope. The one Indigenous participant interviewed does not represent each Indigenous community and their traditional food practices, as Indigenous peoples are not homogenous. The land upon which the agriculture practices in the region take place is unceded and stolen land, and most of it applies practices used to dispossess and displace those communities. Therefore, further research should occur by and/or with each Nation in the region to support communities in expanding their culturally appropriate and traditional foods.

# Chapter 4. Findings

# 4.1. Strengths, Weaknesses, Opportunities and Threats of the Squamish to Lillooet Food System

This section discusses findings from the focus groups and is further supported by the key informant interviews related to the strengths, weaknesses, opportunities, and threats of the Squamish to Lillooet food system. The focus group participants (n=21) included policymakers, farmers, non-profits, institutions, and experts. A summary of the SWOT analysis can be found in Table 1. The interviewees (n=22) included participants categorized as policymakers, businesses, institutions, First Nations, non-profit organizations, and food system experts. The findings in this section help to answer the first research question: "What are the current strengths and challenges of the food system in the Squamish to Lillooet region?".

Strengths	Weaknesses	
<ul> <li>Regional relationships, partnerships, and community ties</li> <li>Diversity of growers &amp; producers with high quality food</li> <li>Soil capability</li> <li>Motivated and passionate local community</li> <li>Purchasing power in the region</li> <li>Established planning and policy processes with respect to food</li> <li>Reconciliation and partnerships with First Nations</li> <li>First Nations traditional knowledge, history</li> <li>First Nations farms/gardens</li> <li>Non-profits supporting regional food system</li> <li>Existing programs and initiatives such as farm to school program and school gardens</li> <li>Decentralized purchasing</li> <li>ALR land</li> <li>Regional dietician</li> <li>Political will</li> </ul>	<ul> <li>Labour</li> <li>Infrastructure (processing, storage, abattoir)</li> <li>Distribution/transportation (single highway, supply chain complexities)</li> <li>Lack of integration – working in silos</li> <li>Funding</li> <li>Food as a human right and food security</li> <li>Capacity</li> <li>Emergency planning</li> <li>Affordability &amp; socioeconomic insecurities</li> <li>Loss of food education in schools</li> <li>Unused, underutilized, or expensive farmland</li> <li>Accessibility of local food</li> <li>Network of food system actors</li> <li>Lack of tools, resources, and education</li> </ul>	
Opportunities	Threats	
<ul> <li>Access to large markets by increasing producing capacity</li> <li>Partnerships with universities and schools</li> <li>Scaling communications across the region</li> <li>Publishing regional procurement targets</li> <li>Developing relationships with Indigenous-led farms/organizations</li> <li>Government programs and funding</li> <li>Non-profit grocery store</li> <li>Funding for living wage</li> <li>Structure purchasing contracts to favour Good Food Program values</li> <li>Leverage tourism as a local food destination</li> <li>Infrastructure operations</li> <li>Asset sharing</li> <li>Education on seasonality</li> <li>Government alignment</li> <li>Develop connections between producers and purchasers</li> </ul>	<ul> <li>Provincial regulations and policies</li> <li>Climate change, extreme weather, and climate emergencies</li> <li>Political will</li> <li>Food champions not operationalized</li> <li>Food literacy</li> <li>Human capital</li> <li>Competition with large multinational businesses</li> <li>Food for profit</li> <li>Inflation and cost of living</li> <li>Cost for farming</li> <li>Convenience of food purchasing</li> <li>Free trade agreements</li> <li>Certification to sell in grocery store</li> <li>Changing food system guidelines</li> </ul>	

# Table 1 Summary of SWOT Analysis Data

#### 4.1.1. Strengths of the Food System

This subsection presents the findings related to the focus group (SWOT) and interview participants' views on the food system's strengths. For focus group participants, key strengths of the food system in the region centered around five themes. Participants highlighted the importance of many existing organizations, programs, and partnerships. The presence of non-profits, such as Squamish Climate Action Network, the Squamish Food Policy Council, and food security organizations, was a significant asset to the region's food system, especially given the programming and projects these non-profits provide. Some examples that participants discussed were the farm-to-school program, community and school gardens, and food asset mapping. Furthermore, participants mentioned the strength of the regional relationships, aided by non-profits, and the community ties that are already in existence. Participants discussed the community and political commitment to local food, with there being both top-down and bottom-up action and shared The District of Squamish Good Food Pledge as an example of the political will that exists in the region. Focus group participants also stated how the region's capability to produce high quality food is a strength, and further emphasizes the diversity of producers and the numerous farms located between Pemberton and Lillooet. The significant regional purchasing power due to the area being a major tourist destination was viewed by participants as a strength, as it allows for reinvestment in the local economy. Finally, participants mentioned the food growing practices of several First Nations in the region, such as the Líl'wat Nation farm, and the reconciliation and partnerships that exist with First Nations in the region. These focus group themes paralleled the findings from the interviews, which are explored in more detail in the three following subsections.

#### Commitment to a Stronger Local Food System

Participants in the SWOT analysis mentioned the importance of existing organizations as champions of the local food system and in promoting strong community and political will in the region. This was elaborated upon by interview participants who discussed how, within the region, there are certain organizations and governments that champion food systems change and are committed to creating a more robust food system. Several participants mentioned how having groups such as food policy councils and non-profits dedicated to food system initiatives ensures the current momentum is

carried forward. One participant felt that the contribution of these organizations is central to bolstering local food in the area:

"...a lot of this work is really happening from the ground up, we've got really engaged food organizations within the community. We've got the [Squamish] Food Policy Council and the work that Squamish Climate Action Network is doing as a non-governmental organization is really helping to catalyze a lot of on the groundwork." (Policymaker 5)

Furthermore, participants felt that the community had a strong affinity for supporting the food grown in the region and that community members were also motivated to continue to expand the local food system. This demonstrates that simultaneously, bottom-up and top-down importance is placed on developing a stronger food system. There is pride across all levels of the supply chain, from a strong culture of tradition and connection to agriculture to the willingness of consumers to purchase local food:

"...the culture in this community around food and local food is quite strong and is constantly being supported and built up. ... there's such a strong farming presence ... that people have a natural affiliation to that [agriculture]." (Policymaker 2)

#### Presence of Local Growers and Businesses

Not only does the will of the community, municipalities, and regional district manifest as a strength in the food system, but interview participants also commented on the strength of growers in the region, ranging from larger farms to community gardens. Furthermore, interview participants shared that there is a good selection of producers to purchase food from, showcasing the connection between local food availability and purchasing interest. This was agreed upon by focus group participants, who discussed the region's food production capability, and the high purchasing power of the businesses that procure food in the region.

Growing conditions in areas of the region are also favourable, with one participant further elaborating on the conditions in the region:

"We have amazing organic farmland, its nutrient dense farmland, it's some of the best quality soil in all of Canada, that's really great. I think we often have to consider access to water when we're looking at food systems and we have great access to water in our region. We're in a flood plain for Pemberton. (...) Moving down to Squamish, again, really good water systems." (Business 6)

The region has numerous businesses, such as restaurants, grocery stores, and farmers markets, many of them present because of the high level of tourism in the area. Many of these businesses procure food that is grown and produced locally, reinforcing that support for the local food system occurs not only from the public but also from the private sector. One interviewee identified how not only are local products available, but this information is communicated by the businesses to the consumers:

"There is some amount of clear connection to local procurement which you do see in the grocery stores here. You can go to the grocery store in town and buy produce ... that's clearly been harvested from a nearby farm, and it's labeled as such." (Policymaker 2)

#### Product Availability & Supply

Participants from the focus groups mentioned the diversity and quality of food available within the region. Interviewees elaborated on this further when discussing food grown regionally. Interview participants appreciated the variety of products, especially those grown by small-sized farms. Certain producers are moving away from the traditional crops grown in the area and are attempting to incorporate community values into their business. One participant discussed this in further detail:

"We're able to showcase the incredible diversity of agriculture across the region, not just produce but our fishing industry, ethically sourced meats and a lot of the beautiful produce that comes out of the Pemberton and the Squamish Valley." (Business 7)

#### 4.1.2. Weaknesses of the Food System

This subsection presents the findings related to the focus group (SWOT) and interview participants' views on the food system weaknesses. For focus group participants, critical challenges of the food system in the region centered around four themes. Focus group participants were concerned about the current complexity of the regional supply chain. Participants mentioned the geographic variation of supply and demand across the region, especially given the area's variability in population density. Additionally, participants felt that the distribution and transportation of food was a weakness. Finally, focus group participants mentioned a lack of infrastructure for food processing, storage, and shared kitchen facilities. Focus group participants discussed several economic concerns related to the food system, including food affordability and security, a lack of food system funding, and labour and staff housing costs. Land was another weakness of the food system, with participants concerned about the high price of agricultural land and farmland availability and underutilization. The final weakness focus group participants discussed was centered around building knowledge and connection. Focus group participants mentioned the need for research into food systems topics such as emergency planning and food security and how there exists a lack of tools and resources to engage in the food system. Furthermore, participants felt an integrated network between sectors was lacking. These focus group themes paralleled the findings from the interviews, which are explored in more detail in the three following subsections.

#### Supply Chain Inefficiencies

The SWOT analysis participants mentioned the regional supply chain's geographic and infrastructure challenges. This was elaborated upon by interview participants, who discussed one of the significant food system challenges centered on supply chain inefficiencies, specifically transportation and distribution, infrastructure, and food waste. There is motivation to add resiliency to the food system, and this was further confirmed by the risk of a singular highway to provide access to and from the region, with participants discussing the concern of food access in the event of a highway closure. Not only were there concerns about access in a disaster, but several participants mentioned the large distances producers must travel to access markets to sell local food and the need for a vehicle or transportation for those who live in remote communities for food access. One participant discussed the risk to food access in the case of a disaster:

"... I think our transportation system that we have one route ... the lens that I have on right now which is the emergency piece, ... the lack of redundancies in the system [is a challenge], especially the transportation aspect, if our road gets cut off, we're at risk that way." (Expert 1)

Furthermore, food systems infrastructure was a concern of several participants due to a lack of food processing and food storage infrastructure. This lack of infrastructure requires food to be processed and stored outside the region rather than kept nearby. Several storage challenges were discussed by participants in proximity to Whistler due to space limitations in the municipality. One participant discussed how this impacts producers: "In ... processing, for a lot of folks, they are having to leave the region to go process their turkeys or different livestock, we don't have any, there is one smaller scale abattoir that's opening up now. There are those gaps right now for producers" (Policymaker 5)

#### Current Economic Landscape

Focus group participants mentioned several economic weaknesses in the food system, which was further corroborated by interview participants who discussed economics as a key concern and a challenge in the food system. Interviewees mentioned the high cost of producing food locally and how this has downstream impacts, creating a barrier to purchasing local food for both businesses and consumers. One participant elaborated on the importance of a fair wage for food producers:

"We do get some feedback, it's often from tourists who are visiting ..., who might explain that the cost of some of the foods there are higher than they would see at a grocery store.... But that's what happens when you get a farm to table service, these are farmers, it's their livelihood, it's all their time and effort. It's having that conversation and educating the consumer on how these products are getting in their hands and how process is different from when they just go to ... [the major grocery chain] and redirecting the conversation to explaining how you are paying a little bit extra, but the cost really doesn't outweigh the benefits." (Business 5)

Furthermore, participants mentioned external factors that contribute to the high cost of food in the region, with inflation being a significant challenge to the food system. This has other impacts, such as increased housing costs, where a large portion of income is spent on housing, leaving minimal remaining for food purchasing. Finally, climate is another factor in cost variations. One farmer discussed the challenges of growing food in an unpredictable climate and how this impacts their selling price:

"...things are pushing the envelope of normal, as much as we have a really great market and we're weathering it quite well, it creates a lot of anxiety and challenge. It's very hard to put prices on this stuff, especially if it's not predictable, you don't know what the next cost is going to be, you don't know what the next challenge is going to be, you don't really know how you're going [to] come out." (Farmer 1)

These external factors have created an increasing risk of food security in the region, exacerbated by the COVID-19 pandemic. One non-profit elaborated on the state of food insecurity in the region:

"...in a tourism economy where people assume only rich people live here but there's a lot of local families who struggle with food security. (...) People are paying more than 50% of their income to their housing so people are becoming reliant. What was supposed to be a very temporary solution, food banks are becoming a big permanent solution at the moment, for many folks, unfortunately." (Non-Profit 2)

#### Access to Agricultural Land and Housing

The SWOT analysis showcased that agricultural land affordability and speculation are concerns within the food system. Interviews also yielded this finding, with interviewees discussing the lack of access to agricultural land as a food system weakness. The cost to purchase agricultural land in the area is high, creating a barrier to entry for new growers and an inability to expand their current agricultural land base for those already working in the industry. One participant elaborated on this further:

"... affordability of land, the price, as you know, has skyrocketed to a point and the price of farmland, for sure, as well has skyrocketed to a point where it's questionable as to whether any of these new prices can really afford a new farmer to buy." (Farmer 1)

Not only is the available land expensive, but participants were concerned that farmland is being commercialized, for applications such as for events or other non-farm uses. One participant mentioned how the farmland designated under ALR falls outside of their municipal jurisdiction:

"There is a general commercialization of farmland and at the local government level, we have very little control over it, because it's been authorized by the Legislative Assembly." (Policymaker 8)

### 4.1.3. Opportunities and Threats of the Food System

This subsection presents the findings related to focus group (SWOT) participant views on the food system's opportunities and threats. Unlike strengths and weaknesses which focus on internal factors, opportunities and threats instead focus on external factors (Helms & Nixon, 2010).

For focus group participants, critical opportunities of the food system in the region centered around four themes. Participants discussed the opportunity to create new policies, programs, and funding opportunities, such as through multi-jurisdictional government policies, school food programs that provide food, education on agricultural
practices, and additional funding mechanisms. Focus group participants also discussed the opportunity to develop knowledge of food systems, improve communication, and create relationships between actors. Given the purchasing power that exists within the region, participants suggested how this could be harnessed to re-invest in the local food system. Finally, participants mentioned agricultural production capacity and more infrastructure as food system opportunities.

For focus group participants, key threats to the food system in the region centered around five themes. First, participants mentioned the corporatized food system as a threat and how the prices offered by large businesses are challenging to compete against. Participants were also concerned about the impact of climate change on the regional food system, especially with respect to extreme weather events and transportation cut-offs. Several political barriers were mentioned, such as the CanadaGAP certification or policies that offer little flexibility. Participants felt there was a lack of knowledge and clarity on transitioning to a better food system. Finally, participants felt that inflation was a threat and were concerned about its impact on the already high cost of farming.

### 4.2. Solutions for Scaling Local and Values-Based Food

Interview participants were asked to provide recommendations on how local and values-based food can be upheld and expanded across the region. Unlike the previous section (4.1.3 Opportunities and Threats of the Food System), this section and the one following focus specifically on local and values-based food. The findings in this section help answer the second research question: "How might local and values-based food in the Squamish to Lillooet region be expanded?".

#### 4.2.1. Policy and Planning

Participants discussed the importance of policies and planning to scale local and values-based food in the region. These policies are not solely at the local government level but require collaboration across municipal, regional, and provincial jurisdictions for greater success.

Interviewees discussed the importance of sharing the business risk, from farmers to food businesses in the region. Participants mentioned land-sharing and land-leasing, such as the programs managed by the Young Agrarians. One participant suggested that there is an opportunity to share the risk for businesses when leasing space:

"That's a policy that needs to be changed at the municipal level so that you could even have 4 to 6 businesses on one lease for a commercial kitchen space, so that it's not one person taking all the risk. Everybody's on the lease." (Business 6)

Furthermore, policies to protect farmland are necessary to preserve agricultural land and encourage the production of local food within the region:

"Farmland is speculated on like residential land, and it shouldn't be. There should be some sort of caps put in place. We do need to look at all the rules and regulations at higher levels that pertain to farmland, because we can only do so much at a local level. It needs to be systemic in how we protect plans for food in this province and so far, that's not happening." (Policymaker 6)

Planners can impact local and values-based food in several ways. Policymakers

discussed the importance of incorporating local and values-based food into Official

Community Plans (OCP), which serve as a guideline for long-term policy direction:

"We are really pushing to have some language around local food systems and the importance of local food production within that OCP. (...) I think in the future that will be really important and we'll definitely want to elaborate on local food systems within our OCP's. (...) I think policy is a really important way to do that. Like I said at the local government level, I think the Official Community Plan is the place to advocate for that, but I think it does go beyond that. It needs to be at the provincial level as well." (Policymaker 4)

To scale local and values-based food systems, policies are needed that ensure community food assets, such as grocery stores, commissary kitchens, and community gardens, are incorporated into planning processes and development permits:

"I think continuing to value and implement food assets within our neighborhood plans in our community is something that we look to that's already fairly well embedded. I think there's opportunity ... to be encouraging food assets as our community continues to grow and be developed. (...) Food assets, I think as far as the work that local government can do around that, is encouraging policy and minimum requirements around having food assets included potentially within developments or within neighborhood plans as those roll out." (Policymaker 8)

Finally, policymakers can lead by example through the adoption of procurement policies that set targets for the quantity of local food purchased by governments, incentivizing other levels of government or organizations to follow suit:

"Where I think there is opportunity for us as an organization would be on our own internal procurement policies and bringing in that lens. We don't procure a lot, we are still pretty small organization, but it's also just that leadership perspective that we could and should be updating our own procurement policies (...). And then the opportunity to scale that out or share that out, I see that as being an opportunity space." (Policymaker 3)

#### 4.2.2. Education and Knowledge Development

Interviewees felt that there is an opportunity for education and knowledge development in the community around local and values-based food, not only for schoolage children but for those of all ages, to create a stronger understanding of the importance of upholding and scaling the local and values-based food system. This, in turn, can move people towards eating healthier and more nutritious food.

Several participants discussed how a lack of knowledge about the food system has created a disconnection between the food grown on the farm and the food on tables. Educating community members about how their food is grown can create a space for (re)connection and a willingness to support local and values-based food. One farmer mentioned how powerful this has been on their farm:

"One thing that I think can be really helpful is actually ... physically connecting people with the farm and getting a feel and their hands on are real food in the flesh and getting a visual of this land that they're supposed to be protecting, or just getting a feel for how their food is grown. (...) We've been able to see a little bit of a change and seeing all these people come by and get a feel for what it is to be on the farm and get to know the people that are working on the farm. It's tough for people to fight particularly hard for something they're not at all connected to, so even just getting people to be able to walk around and get a feel for it and appreciate it, or maybe be able to share in the sense of it just being a really nice place to be. ... I think that makes it less of a story and actually a bit more of a reality." (Farmer 1)

Not only is establishing a connection to the food impactful, but land-based learning is another approach by which food systems education can occur. Institutions mentioned their work in the region to educate students through land-based learning programs. Food education is not a one-size-fits-all approach, and it is crucial for education and knowledge building to uphold different knowledge systems and be culturally appropriate for those learning. Several participants mentioned First Nations and the importance of upholding traditional food practices in First Nations communities. One First Nation member mentioned the (re)introduction of traditional practices into food programs in the community:

"We got into the ... medicine piece where we didn't plant any medicinal medicines but we learned how to go out into the woods and pick medicinal medicines for the community, especially our elders. (...) There are Indigenous communities across Canada that are doing the same. They're trying to reintroduce the traditional foods. And so that sparked me into looking at traditional foods as well. I built a smokehouse ..., and we did smoked salmon, we smoked salmon. We had about eight teens on a Friday night and then once they found out that we had to smoke it for three or four days, they dwindled away. My workshop facilitator ended up looking after the smoked salmon and then the kids came back and tried a little bit of it. Now, our community is looking at going out into the land. Through the years in the last say, five to seven years when I started this, we have people actually going out into our traditional land and picking medicines." (First Nation 1)

Participants suggested that there is an opportunity for developing a collection of resources and guidelines to support a lack of capacity and develop knowledge on how to scale local and values-based food. One participant discussed this further:

"On the implementation side ... creating a resource kit and walking people through these are the next steps that you can take and leading the way and helping us work through some of those steps. I think within a smaller community too, there's an opportunity to do that across different sectors and organizations and I think the more we can do that together, the better. ... we can support ... setting some targets around local food purchase[s] and making it easier and not a heavy lift for individuals to take those steps. (...) The hard part, again, it comes back to the capacity and to set these new systems up takes time and resources, so any support or resources and toolkits that can help make that an easier, more accessible path are helpful." (Policymaker 5)

#### 4.2.3. Relationship Building

Participants mentioned the importance of building relationships across sectors and organizations to enable food systems knowledge development. This can also allow producers and purchasers to connect to enabling the upholding local and values-based food within the region. One business mentioned how their relationships have been successful in growing local food through their business:

"A lot of them [local producers] I knew long before I opened up the business. ... [One farm] I know the owners for almost 35 years. ... [Another farm] I've known them for 30 years. ... I lived in the farming community for a long time, so I had the relationship long before I had the ... [business]. ... They're all long-term relationships prior to having ... [the business]." (Business 4)

Furthermore, participants discussed how there is an opportunity to develop relationships to work together, share information, and connect producers directly to markets. One participant shared how an event they attended enabled them to connect directly to a producer for their own needs:

"... Squamish Climate Action Network hosted a farmers and restaurants or food purchasers get-together last year. There were a lot of farmers in the room, and we met [a farm] ..., and they grow potatoes and carrots, and they're said none of the ... grocery stores want to buy these second-grade carrots. They're perfectly fine but they don't look great, so grocery stores won't buy it. We're feeding it to horses. I buy carrots every other day and they said let us know what the price point is, and we'll deliver it to you. That was one of the most wonderful connections we made." (Non-Profit 2)

Participants mentioned a lack of understanding of the capabilities of producers and how creating a connection could serve as an opportunity to discuss expectations.

#### 4.2.4. Infrastructure

Infrastructure was identified as a key weakness in the region and in developing a local and values-based food system. Several participants suggested food hubs as an opportunity for growth in the region:

"We're looking at a model where we're calling them farm and food nodes, where there's several nodes across the region which are addressing more place-based specific needs in order to create a strength and network across the region. What these nodes or mini hubs could look like are things from cold storage, commissary kitchen space to distribution to potentially even retail space, community space, community programming, business programming. As well as other soft infrastructure options like business development help, co-labeling." (Policymaker 8)

#### 4.2.5. Funding Opportunities

Funding opportunities were important to several participants, especially in relation to farming and food growing. This could be in the form of farming subsidies, grant initiatives and funding to support farmer protection against climate change. Funding is not limited to federal or provincial programs but can also come from local governments, such as municipalities, to support scaling local and values-based food projects and programs. One participant mentioned the importance of ongoing funding rather than one-time initiatives:

"I think the key for us right now is ... ongoing sustainable funding towards food. There's some conversation around the financing and funding of agriculture work and supporting implementation. (...) That's limited and so we need to scale and increase our focus around food, I think we're going to need to draw on more sustainable funding. (...) Some parts in the north of us in the region, they're looking at some different financial tools to support sustainable funding over time, basically through local service area taxation and things like that, we're not there quite yet. (...) Right now, it's great because it does seem like there's quite a bit of grant funding out there, but that's not necessarily something that will be sustained over time. Thinking bigger picture and longer term, how do we make sure that that we're budgeting for and financing work on food and to support the food system." (Policymaker 5)

## 4.3. Barriers to Integrating and Scaling Local and Values-Based Food

This section discusses findings from the interviews related to the barriers to scaling local and values-based food in the region. Interview participants were asked to consider barriers to integrating and scaling local and values-based food in the region. Unlike the previous section (4.1.2 Challenges of the Food System), this section focuses on local and values-based food rather than on the food system more generally. The findings in this section help answer the third research question: "What barriers exist in developing local and values-based food in the Squamish to Lillooet region?".

#### 4.3.1. Defining Values-Based Food

During the interviews, it was not clear to participants whose values mattered. When asked interview questions, participants needed clarification on what values-based food was and often requested the interviewer to define what was meant by the term. Alternatively, participants came up with their definition based on their knowledge, their values, or the values of their community. Not only were participants unsure about what was meant by values-based food, but their definitions varied on an individual level. This demonstrates an opportunity to define values-based food across the region and clarify what this terminology means. One participant aimed to define this themselves:

"You know what, I don't even know where to start. I would assume that it would be a procurement system for food that is not solely based around say price or quality necessarily, but it factors in other elements of other decision making. Essentially, I'm not quite sure, but probably around community or community support or local economy, those kinds of dynamics." (Policymaker 2)

This contrasts with the clarity participants felt when asked questions regarding local food, where participants did not request a definition for the term "local", nor did they define it but accepted the term to mean within the region. Responses also tended to focus more on local food than values-based food, given the lack of comfortability with the values-based terminology. One participant discussed their process on how they would determine what the community values regarding food:

"I don't know if I can answer that. I think I'd go back to the OCP again and try to identify things We use words like sustainable, secure, and local nutritious, affordable, culturally appropriate. I think those are really the communities and the municipality statements about what we value in terms of food systems. (...) I would encourage you to go through the OCP and pull out those types of statements. Because that would be the municipalities perspective on food and food security." (Policymaker 1)

Furthermore, the conventional food system does not often allow for the expression of First Nations values. One participant mentioned both a lack of access to culturally appropriate food and the barriers to being able to express those values:

"(...) one of the things that we do is we hunt in ... [the grocery store]. We don't go out into the land anymore because it's just too much and we need a ticket now to go out and hunt an elk. They're just advertising tickets for our members to be able to go out and hunt an elk. Our (...) fishing's depleted (...) because basically whatever's happening to our world, we're losing our salmon. When we do get salmon, it's every four years, usually around four years. Last year we got, I think 10 salmon per household. We process that and some people don't eat fish anymore, so it's been a bit of a challenge." (First Nation 1)

#### 4.3.2. Capacity and Decision-Making Authority

Participants across sectors discussed their capacity constraints and how they create a barrier to local and values-based food. Though interested in upholding local and values-based food in their purchasing decisions, several businesses, non-profits, and institutions stated they would struggle to find the capacity to support initiatives. This was further discussed by policymakers, several of whom are experiencing capacity constraints:

"I think that one barrier is it comes down to capacity within ... local government as an institution, ... we have limited resources and [a] really high need across so many different areas of service that we provide. I think capacity both for people, resources and then just financing this important work. We have a lot of critically important areas that we're responsible for. It's that balancing act, how can we continue to help fund and resource work on local food when at the same time we've got flood protection and core critical infrastructure that we're trying to deal with as well. I would say overall, one of the big challenges is just having adequate capacity to turn to this type of work. I feel like in in larger centers, I look at some of the work that Vancouver is doing, and they have food policy planners, they've got actual staff, they just have a lot more ... [people], and resources that they're working with. In a smaller community, we really rely on collaborating with non-profit and other partners in the region." (Policymaker 3)

Policymakers mentioned how they are confined to work within their jurisdiction, while food systems operate outside jurisdictional limitations. Similar sentiments were felt by those working locally in the community who were motivated to purchase local and values-based food but lacked the decision-making authority to do so, as is often the case in larger businesses. When asked about what would motivate them to purchase more local and values-based food, one participant responded:

"I don't know if I have good answer for you there. It's really something that's not at my level. Any local suppliers that connect with me, I would then pass their information on to the chef. And then, it would go from there." (Business 1)

#### 4.3.3. Volume and Growing Season

Many businesses and non-profits that purchase food in the region were concerned regarding the ability of local producers to keep up with their volume requirements due to limited production in the region. This impacted the business' ability to keep its menu standardized year-round. One participant elaborated on this:

"... some of the more local suppliers wouldn't have the volume that we need necessarily. Which is why using them in the smaller fine dining locations works. But to use them to supply the entire restaurant, such as the main restaurants, it wouldn't actually be viable because it's such a large operation. (...) I think it's just with the standardization of what they [the restaurants] want to do, the volumes that a smaller supplier would be able to produce, that would be one of the biggest things, unfortunately." (Business 1)

An interviewee mentioned how the smaller local producers would struggle with the volume that they require:

"we used to own another eatery in which we got all of our carrots and potatoes from a farmer in [the region]. When we joked and said we'd like to take them into Business 7, they just laughed and said you would be our entire crop." (Business 7)

One participant mentioned the increased food variation, even when out of

season, over the last several decades and how those used to the convenience of having

consistent access to out-of-season food creates a challenge for upholding local and

values-based food:

"...we have become so adept and so used to being able to get whatever we want. We can get tomatoes in January. I remember when I was a kid, you didn't see tomatoes in the grocery store in January, you saw oranges and potatoes. Because of the global supply chain, we're able to get stuff that would be out of season here. I don't think people are willing to give up that convenience, even if it tastes like cardboard." (Business 4)

#### 4.3.4. Cost of Local and Values-Based Food

One of the significant barriers to local and values-based food in the region is the cost of growing and, therefore, purchasing local food. Those costs are not driven by the farmers but are often driven by the economy as a whole:

"The costing is beyond reach, for the little guy, the farmer or me. We're the ones that pay the price, we're not that ones that drive the price, there's not much we can do about any of it as far as I'm concerned." (Business 4)

Furthermore, participants mentioned how wholesale retailers that purchase food grown outside of the region sell at a lower price point, one which local growers cannot compete with:

"... you bump up against these big food wholesalers that just make it so easy. They make it so easy because you can get whatever you want when you want in the quantity you want at a lower price. How do farmers, little farmers, compete against that? They don't. They sell into those wholesalers. So the food grows here and goes down to the Lower Mainland and then comes back up." (Expert 1)

## Chapter 5. Discussion and Recommendations

This study's findings highlight the dedication to fostering a local and valuesbased food system in the Squamish to Lillooet region and the complexities of scaling it. Participants felt that there were several strengths in the regional food system. First, there is a sincere commitment to developing a more robust food system, as demonstrated by the community and political will. This was further supported by the presence of local growers and businesses who grow and purchase diverse, high-quality food, exemplifying the region's farming culture. However, the food system has weaknesses. Participants felt there were inefficiencies in the regional supply chain, which lacked resilient transportation networks and sufficient food system infrastructure. The findings of this study proposed solutions to scaling local and values-based in the Squamish to Lillooet region. Support from all levels of government to expand local and values-based food is required, which can be achieved through the successful implementation of policies, plans, and funding programs. There is an opportunity to educate actors further and develop local and values-based food systems knowledge while also providing the chance to create new relationships. Finally, infrastructure is essential to bolster a valuesbased food system that operates at a greater scale. While these solutions offer a starting point for scaling local and values-based initiatives, several barriers must be addressed. The findings of this study showed that defining values-based food is subjective and that clarity is needed to determine which and whose values matter. Food system actors are capacity-constrained and may require more decision-making authority to scale local and values-based food. Lastly, the region's growing season and agricultural capability are limitations to providing consistent local and values-based food year-round, creating a risk of increased food prices in VBSCs. The following subsections are separated into four themes. They analyze the findings and provide recommendations that food system actors can apply to create a food system aligned with shared values.

## 5.1. Build Values-Based Food Knowledge Across the Region

The results of this study indicate the commitment of food system actors in the region towards the creation of a better food system overall. These results support the idea that a motivated community can catalyze food systems change. This finding broadly

supports the work of Cleveland et al. (2014) who found that motivation is a critical component of successful alternative food systems. However, despite this promise, more than motivation is needed to scale VBSCs. Food system actors must know which values operate within the VBSC, the benefits of those values, and potential avenues to scale VBSCs. This study stresses the importance of providing opportunities for (re)connection to the food system by developing values-based food system knowledge across the region. This can, in turn, result in the scaling of VBSCs, where a more significant number of producers and consumers commit to participating in a values-based food system (Pitt & Jones, 2016).

This study confirms the association between a successful VBSC and the communication of values to purchasers. This parallels studies by Hardesty et al. (2014) and Feenstra & Hardesty (2016) which highlight the importance of ensuring values are well-communicated, as participants in the VBSC may struggle to understand the principles of other food system actors. Though values communication is necessary, this should be done intentionally, as there is a risk of losing values with increasing numbers of supply chain actors, diminishing the potential success of the value chain (Hardesty et al., 2014). In the case of this study, VBSCs operated as both having no intermediaries, such as producer-consumer and as having several, such as producer-restaurantconsumer. Producers and purchasers must consistently communicate their products' values to uphold the VBSC and these should, in turn, by communicated by the subsequent actor in the chain. Examples of this include information sharing on online websites, identification of producers on menus and displays, organizing events that allow consumers to meet with producers (on-farm or in-store), and conducting informational sessions on essential values such as promoting sustainable meat consumption and avoiding food waste (Feenstra & Hardesty, 2016).

This study found that the current economic landscape is a weakness in the region's food system. This came up once again as a barrier to local and values-based food, with price being a concern of participants. The literature cites price as a barrier to scaling local and values-based food (Charlebois et al., 2022, 2023; Peterson et al., 2022). A study by Ostrom et al. (2017) emphasized the importance of non-monetary values in VBSCs. Yet, in this study, participants focused more heavily on monetary values when discussing barriers to VBSCs, ignoring how non-monetary values occur through social and relational processes rather than in the market. The results of this

study are consistent with work by Fleury et al. (2016), who determined that in VBSCs there are trade-offs between consumer prices, farmer wages, and other values. Recognizing the presence of these trade-offs underscores the importance of consumer education regarding values within the supply chain and the significance of fair prices for producers and consumers (Feenstra & Hardesty, 2016). This contradicts the conventional food system that focuses more heavily on efficiency and lower prices (Feenstra & Hardesty, 2016). However, these results should be interpreted cautiously as local and values-based food prices are only sometimes more costly than the alternative. Charlebois et al. (2023) determined that local food costs were equal to or less than non-local food in Quebec at least half the time. A price analysis within the Squamish to Lillooet region can provide clarity on whether values-based food is, in fact, more costly.

This study found that values-based food definitions varied between participants and were based on their lived experiences rather than a singular agreed-upon definition. These findings suggest a need for more knowledge and consistency across the region regarding VBSCs. Given that VBSCs are based upon shared values (Peterson et al., 2022), there is a risk that a lack of knowledge will inhibit the strength of the value chain. In this study, policymakers were more likely to understand values-based food than businesses and non-profits. Not only were participants unsure about what was meant by values-based food, but their definitions varied on an individual level. Some participants focused on sustainability and the environment, others discussed local food as a value, one participant mentioned the importance of food security, and another mentioned First Nations values being incorporated into the food system. These definitions are inconsistent with the five Good Food values that the Good Food Program has defined: local economies, sustainability, nutrition, animal welfare, and valued workforce (Squamish Food Policy Council, 2022). It is widely held that the values that are central VBSCs are not neutral, as demonstrated by this study.

In comparison, participants did not require definitions of local food, which, unlike values-based food, has no generally agreed-upon definition in literature and is context-specific (Martinez et al., 2010). That local food was more readily accepted than values-based food runs the risk of falling into the "local trap" and operating under the assumption that local food is inherently more equitable, which is not always the case (Born & Purcell, 2006). Public dialogue can develop food systems literacy and empower

more educated food choices (Booth & Coveney, 2015), creating active citizens who participate in food systems change (Verfuerth et al., 2023).

However, variations in participants' values in a values-based food system raise the question of how to manage conflicting values when determining which values should be upheld. Not all food system actors share the same values, and, in some instances, this pluralism of individual values might lead to conflict between actors. Planners' work often engages with conflicting values and aims to balance non-uniform community values in planning processes, with planning being well poised to address this (Bush & Doyon, 2019). Kühn (2021) describes how collaborative and agnostic planning theories deal with conflict. Collaborative planning views conflict as an opportunity for deliberation through which consensus is negotiated with the support of a moderator, often a planner, in public arenas and participation processes (Kühn, 2021). On the other hand, agnostic planning accepts conflict and views it as productive, often taking place in extended participation processes (Kühn, 2021). Warner et al. (2021) suggest the importance of acknowledging variations in community values and continuously developing approaches by which to represent conflicting values in policy processes. Food systems planners and policymakers could use these differing approaches to manage multiple conflicting values in a values-based food system.

The findings of this study lacked both the perspective and centring of Indigenous voices. Though results from the SWOT analysis pointed to the food systems work of First Nations in the region as a key strength, it was apparent through the interviews that Indigenous values were often missing in participants' definitions of values-based food. Researchers, policymakers, and businesses must reflect on whose values have a voice and whose are being upheld. This reflexivity can help initiate the process of creating a more equitable food system. Though some participants mentioned existing partnerships and programs led by First Nations in the region, the findings of this study show there is an opportunity for more collaboration with Indigenous peoples to support Indigenous food sovereignty. Most participants mentioned Indigenous food systems concerning culture sharing with and knowledge building of non-Indigenous peoples in the community rather than upholding Indigenous voices across the food system. Often, Indigenous values are missing in Official Community Plans within the province, and Western values are centred (Soma et al., 2023). The representation of Indigenous voices within food

systems planning can enable the identification of barriers to food access and cultural food practices in Indigenous communities (Soma et al., 2023).

#### 5.2. Foster Connections Between Food System Actors

This study found a strong presence of local growers and businesses in the region that supply and purchase diverse food products. Furthermore, participants discussed the favourable growing conditions in the region. These results suggest that a culture around local food exists in the area. However, there is an opportunity to develop connections between food system actors further. This could facilitate the expansion of VBSCs across the region, fostering partnerships that uphold values across the supply chain. Prior studies have noted the importance of building trusting relationships across the VBSCs to uphold shared food system values (Clark & Inwood, 2016; Feenstra & Hardesty, 2016). The results of this study corroborate previous work, as participants discussed the importance of connections and new and ongoing relationships along the supply chain. The motivation to purchase locally grown food exists in the region, yet purchasers need support to develop relationships with local growers who uphold their values.

Fostering in-person connections is also a critical opportunity for scaling local and values-based food systems. Food systems operate across sectors, are multistakeholder, and are governed by the relations between actors (Janin, 2022). Given the place-based nature of local and values-based food systems, the development of social networks can occur in informal settings, such as through farmers' markets, community farms, food hubs, etc. These interactions can simultaneously (re)connect people to their food while also serving as a mechanism for connection between food system actors (Elton et al., 2021). It is essential to focus not only on mid-size growers but also to ensure capacity building for smaller growers and distributors, as they provide an opportunity for long-term volume growth in the region (Clark & Inwood, 2016). Similarly, the Squamish Food Policy Council has been bringing together regional food system actors annually since 2022 through their Good Food Gathering series, creating an opportunity to develop relationships and VBSC networks (Squamish Food Policy Council, n.d.-b)

The importance of scaling through connections brings forward the need to create social infrastructure to ensure transformative change in the food system. Connelly & Beckie (2016) describe how social infrastructure is vital for creating social and cultural

change within food systems, particularly when considering the scalability of VBSCs. Through their case studies, the authors determined that building relationships horizontally by collaborating with actors in a similar role and vertically by collaborating with actors external to their sphere enabled the maintenance of values and assisted in solving food system barriers related to scale and risk avoidance (Connelly & Beckie, 2016). However, capacity constraints may make the development of social infrastructure difficult. As such, food system actors may elect to ignore efforts at relationship building and instead focus on other aspects of their work. Social infrastructure growth will require sufficient resources and investment if they are to be successful.

Digital technologies have been suggested as a lower-cost approach to create resiliency in supply chains, as they can promote collaboration and connection with other food system actors (Michel-Villarreal et al., 2021). One example is the creation of publicly available centralized digital listings of businesses that connect growers, producers, and purchasers. The Government of B.C. has created a Feed B.C. Directory to connect growers and buyers in the province (Ministry of Agriculture and Food, n.d.-d). Yet, there are only 158 producers and processors (Ministry of Agriculture and Food, n.d.-a) and 14 buyers (Ministry of Agriculture and Food, n.d.-b) listed as of February 2024, demonstrating an information gap and an opportunity for a more regional approach to food system actor connection. The Central Kootenay Food Policy Council has created a Farm & Food Directory that lists growers and processors in the region and their products (Central Kootenay Food Policy Council, 2024). To enhance values-based food systems, this directory could incorporate tags that outline the values of producers, enabling purchases to make informed purchasing decisions.

## 5.3. Support and Develop Regional Food Systems Infrastructure to Shorten Supply Chains

The results of this study show that a critical weakness in the regional food system is supply chain inefficiencies, most of which were attributed to inadequate food system infrastructure. Given this is an overarching food system weakness, it is not surprising that the results showcase food system infrastructure as a solution to scaling local and values-based food in the region. Moreover, infrastructure is a means to address the barrier of insufficient volume of locally grown food, as identified in this study. However, these findings may overestimate the role infrastructure plays in decreasing external influences on food prices and increasing the region's production capacity, demonstrating that physical infrastructure alone is insufficient to scale local and valuesbased food and should be applied in combination with other tactics.

Several studies have demonstrated the relationship between VBSCs and scalability, highlighting that conventional food system infrastructure is predominant in the food system and may only occasionally be adaptable to VBSCs (Cleveland et al., 2014; Feenstra, 2019). Shared infrastructure can provide a mechanism by which small and medium-sized farms can sell to larger purchasers without compromising their values (Stahlbrand, 2017). This can be achieved by aggregating products to match the volume requirement of larger purchasers while retaining core values (Stahlbrand, 2017). Study participants suggested several infrastructure opportunities such as food hubs, storage and processing facilities, and transportation development. Currently, in the province, the Grow B.C., Feed B.C., and Buy B.C. program has, in recent years, evolved to include the B.C. Food Hub Network, which is comprised of fourteen food hubs across the province to establish shared commercial food spaces, including processing and food hubs (Ministry of Agriculture and Food, 2024). This demonstrates an ongoing policy window for food hubs in B.C. This study further substantiates work being done by the Squamish Food Policy Council to determine the feasibility of a food hub within the region and develop a plan to shorten supply chains and support food system actors with overcoming key barriers (Squamish Food Policy Council, n.d.-a).

Expanding food systems infrastructure can help reduce the higher price of producing and purchasing values-based food (Fleury et al., 2016). However, considering the importance of ensuring fair compensation for VBSC producers, this should be approached cautiously to secure the preservation of values. In September 2023, the Government of B.C. announced new funding of \$15M under the B.C. Food Storage, Distribution and Retail Program that will focus on improving storage and transportation infrastructure across the province (Ministry of Agriculture and Food, 2023). Given the high financial investment required for local food systems infrastructure such as food hubs (Berti & Mulligan, 2016), this is an opportunity for initial funding support. Often, there is a need for local food system infrastructure, especially food hubs, to be financially viable, risking a trade-off between financial viability and other food system values (Cleveland et al., 2014). Furthermore, given that producers have unique needs, food

system infrastructure will not be a one-size-fits-all approach, and considerations should be taken to incorporate this variation (Schreiber et al., 2023).

The findings of this study show the importance of physical food systems infrastructure. Yet, surprisingly, no participants mentioned digital technologies as an opportunity to scale local and values-based food systems. In the current age of the internet and given the limited funding available, digital food hubs provide a mechanism to create, co-produce, and distribute food (Berti & Mulligan, 2016). The use of digital technologies in aggregating and distributing local food allows for efficient connections between producers and purchasers (Berti & Mulligan, 2016). These digital technologies can also support communication and shorten the time between harvest and transportation, reducing the potential for food waste (Benyam et al., 2021). Digital food hubs can take several forms. Berti and Mulligan (2016) describe two main types: a virtual food hub and an online food hub network. The virtual food hub provides an online meeting place to connect producers and purchasers, with purchases occurring outside the digital platform (Berti & Mulligan, 2016). The online food hub network is more complex but allows for purchasing food online through order placement and coordination of deliveries (Berti & Mulligan, 2016). The South Island FarmHub, located in Victoria, B.C., operates as an online food hub network and provides access to locally grown and produced food from the island for households and businesses (South Island FarmHub, 2020). This creates a pathway for convenient access to local and values-based food through aggregating smaller producers to reach a broader consumer base than would have otherwise been feasible without such a platform.

# 5.4. Create and Implement Multi-Jurisdictional Plans and Policies

This study found that policies and planning can enable the scaling up of local and values-based food systems by innovating policy interventions (Riddell & Moore, 2015) and providing ongoing funding opportunities. There are similarities between attitudes expressed in this study and a study by Hardesty et al. (2014), who determined that access to capital and regulations are a challenge for the viability of producers in VBSCs. However, one of the issues that emerges is that food systems policy has historically been within provincial or federal jurisdictions. The results of this study indicate that

cross-jurisdictional collaboration is essential in local and values-based food systems, especially given that ALR farmland is provincially regulated.

This study found that a lack of local government and business capacity are barriers to local and values-based food. A study by Stahlbrand (2017) emphasized the importance of the leadership of non-governmental organizations (NGOs) in creating food systems change, as they can bridge between public policy and supply chain challenges. These councils can support food system initiatives rather than being championed by capacity-constrained governments. Several participants mentioned the importance of NGOs, such as the Squamish Climate Action Network and food policy councils within the region. Food policy councils have often operated at the local or regional level and commonly advise governments (Elsharkawy & Forge, 2017), as is the case in the Squamish to Lillooet region. However, local government support for food policy councils may vary with changes in government (MacRae & Donahue, 2013). Reconfiguring the structure of food policy councils to incorporate multiple stakeholders, including local government representation, is a way by which food policy councils can be effectively integrated into the decision-making processes of local governments. One example is a local food policy coalition in Victoria, Australia, with stakeholders from local government, agriculture, public health, and community businesses, demonstrating the potential for cross-sectoral collaboration in these spaces (McCartan & Palermo, 2017).

Given that the results of this study demonstrate the importance of multijurisdiction collaboration, there is also an opportunity to leverage food policy councils across government jurisdictions. The Nova Scotia Food Policy Council is a provincewide initiative that brings together local governments, citizens, and organizations to solve food systems challenges and works with the provincial government on food policy (Nova Scotia Food Policy Council, n.d.). This allows greater collaboration across jurisdictions and information sharing across the province rather than food policy councils operating on a municipal scale in isolation from each other.

The results of this study have shown the need for better policies that protect and uphold the local food system at the municipal level. Public institutions, such as schools and hospitals, can design and implement local and values-based food procurement policies, especially given their vital purchasing power (Buchan et al., 2015). Local governments can also set an example by designing and implementing internal local and

values-based food procurement policies. The City of Los Angeles and the Los Angeles Unified School District adopted the Good Food Purchasing Program in 2012 (Good Food Purchasing Program, 2024), a values-based procurement strategy that required all city departments to purchase from vendors with good food values (Good Food Purchasing Policy, 2012). Furthermore, this study affirms the importance of providing sustainable funding. Policymakers proposed leveraging local service area taxation as an alternative long-term funding source.

Volume and growing capacity were barriers to scaling local and values-based food for participants. Planning for the long-term protection of agricultural land is critical to ensure a food system transition in the region. Though the ALR is criticized for causing an increase in private property costs across the province (Katz, 2009), it has increased the total number of farms and total farm area from 1971 to 2006. In contrast, both have decreased across Canada (Eagle et al., 2015). However, even with this protection, participants in this study were concerned with increasing land speculation, especially given that the Squamish to Lillooet region has some of the most expensive farmland in Canada (Farm Credit Canada, 2023). Though agricultural land should be protected. policies that reduce farmland speculation must be implemented. Planners can include policies in Official Community Plans (OCPs) to support alternative mechanisms of land ownership, such as farmland trusts or providing tax credits to incentivize agricultural uses (Tatebe et al., 2021). Furthermore, land speculation could be regulated by allowing public or state agencies to acquire farmland and resell it to farmers or promote agricultural uses on it (Tatebe et al., 2021). Finally, local governments could purchase farmland and hire producers to grow food, which could be used to feed community members, such as through local school food programs (Tatebe et al., 2021).

Lastly, planners can incorporate values-based food practices in strategic and statutory planning. This can be done by including values-based food in municipal OCPs (Robert & Mullinix, 2018) and the Regional Growth Strategy to ensure a long-term vision that upholds VBSCs. OCPs can be implemented through statutory planning approaches such as bylaws that promote values-based businesses and zoning that permits food growing and infrastructure development in urban areas (Buchan et al., 2015). Planners can also support scaling local and values-based food through projects such as food assessments and food asset maps (Soma, Li, et al., 2022; Soma & Wakefield, 2011)

and act as advocates for local and values-based food initiatives in the region (Buchan et al., 2015).

# 5.5. Recommendations

The following recommendations are intended for food system actors in the Squamish to Lillooet region to develop, support, and scale local and values-based food systems.

Table 2	Recommendations to Food System Actors in the Squamish to
	Lillooet Region

Recommendations	Key Actors or Stakeholders		
Build Values-Based Knowledge			
Support the communication of values along the entire supply chain by providing opportunities for knowledge sharing and informational sessions.	All food system actors		
Create opportunities for education on Good Food Values to enable a consistent definition of values-based food across the region.	Squamish Food Policy Council (SFPC)		
Incorporate equity principles into values-based food initiatives with an emphasis on Indigenous voices. Continue process of reflexivity on whose values and voices are missing.	SFPC and other non-profits, policymakers, and planners		
Develop and execute additional food system knowledge-building projects including economic analysis of true values-based food costs, values-based food supply flow mapping, and a comprehensive regional food asset map.	SFPC and other non-profits, policymakers, and planners		
Foster Connections			
Create and foster food system actor collaboration through formal approaches (e.g. supporting and participating in networking events such as Good Food Gatherings) and informal approaches (e.g. advocating for gathering spaces, such as farmers markets and food hubs) to enable horizontal and vertical connections.	SFPC and other non-profits, policymakers, and planners		
Create and develop public digital directory of regional producers, processors, and purchasers and incorporate their products and values into listing descriptions	SFPC and other non-profits, Squamish-Lillooet Regional District		
Support and Develop Infrastructure			
Continue development of Farm and Food Hub Feasibility Plan to grow values-based food system infrastructure while simultaneously preserving Good Food Values	SFPC, Squamish, District of Squamish, Squamish-Lillooet Regional District, and additional municipalities		
Investigate applicability of digital food hub in the Squamish to Lillooet region to improve aggregation and distribution of values-based food products	SFPC and other non-profits		

Recommendations	Key Actors or Stakeholders	
Create Multi-Jurisdictional Policies and Plans		
Champion sustainable funding opportunities for values-based food system infrastructure development, alternative farmland ownership initiatives, and food policy councils.	Municipal, regional, and provincial policymakers and planners	
Embed values-based food system language and programs into strategic and statutory plans.	Municipal and regional planners	
Act as a stakeholder on food policy councils to bridge gaps between public policy and supply chain challenges.	Municipal, regional, and provincial policymakers	
Implement the Good Food Pledge into internal policies with minimum values-based food purchasing targets to uphold values-based procurement into public and private purchasing decisions.	Public institutions such as municipal, regional, provincial governments, hospitals, and schools and businesses	

# Chapter 6. Conclusion

The provincial government is pursuing initiatives to expand local food by implementing policies, programs, and funding. This shift aims away from a food system centered on food commodification towards one that encourages community values. Values-based food systems can re-socialize and re-spatialize the food system (Marsden et al., 2000), building supply chains based on trusting relationships between actors (Renting et al., 2003). By identifying strengths and challenges in the Squamish to Lillooet region's food system and solutions and barriers to expanding local and values-based food in the region, this study provided suggestions on further integrating local and values-based food in the region. This research study addressed the following questions:

- 1. What are the current strengths and challenges of the food system in the Squamish to Lillooet region?
- 2. How might local and values-based food in the Squamish to Lillooet region be expanded?
- 3. What barriers exist in developing local and values-based food in the Squamish to Lillooet region?

A SWOT analysis and key informant interviews with regional stakeholders were conducted. Participants discussed how the region is highly motivated to improve the food system and how they were proud of the diversity of producers and products. However, the food system is challenged by the current supply chain inefficiencies and high land and housing costs. Participants identified solutions to scale local and values-based food, including more robust policies and plans, education, and knowledge development, building food system actor relationships, and infrastructure development. Yet, this study also identified barriers to scaling local and values-based food in the region. These encompass supply chain gaps, a limited growing season, a constrained volume, a lack of capacity for businesses and policymakers, and the price of local and values-based food. This study did have several limitations: a small sample size, the geographical and sector make-up of the interview participants, and a lack of Indigenous voices, especially given that Indigenous values have historically been ignored in a planning context.

This study offered recommendations for the scaling of VBSCs. There is an opportunity to continue to build values-based knowledge across the region by defining

values-based food and ensuring values are communicated across each level of the supply chain. Connecting key stakeholders is imperative to values-based relationships across the food system. Infrastructure is necessary to scale up local and values-based food production in the region. Policymakers and planners must champion these initiatives across all levels of government to create a long-term vision for the community. Values-based food systems present an opportunity to shift away from a food system that prioritizes profit over welfare. This shift can catalyze the development of a more just, equitable, and healthy food system for all.

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# **Appendix A. Focus Group SWOT Analysis Questions**

- 1. **Strength**: What food system and farm assets does the Squamish to Lillooet region have?
- 2. **Weaknesses**: What resources are lacking in our communities to create a thriving food system? What disadvantages do we have? What processes need improving?
- 3. **Opportunities**: What changes in our region and communities can we tap into and how? What is missing that we need to be doing?
- 4. **Threats**: What obstacles do you face to purchasing or selling locally? What global and local changes are threatening your ability to operate successfully?
## **Appendix B. Interview Questions**

- 1. What role do you have within the food system in the Squamish-Lillooet region?
- 2. Do you think the food system in the Squamish-Lillooet region is working?
- 3. What do you think we do well in the current food system and what do we not do well?
- 4. Does your organization have a food and procurement policy? Can you provide some detail about it?
- 5. What are some of the procurement challenges you are experiencing today? Please list the top three.
- 6. Are values important considerations in the food system? If so, can you identify key values that should be considered in a local food system?
- 7. How would you define community values-based procurement?
- 8. How important is the issue of values-based procurement to you and your organization?
- 9. In your own experience, have you tried to include more local food into your procurement decisions?
- 10. In your opinion, do you think including values into procurement decisions can address some of the key issues you described in the current food system?
- 11. What are some of your ideas on how to incorporate values into the regions food system?
- 12. What would motivate you to incorporate more local and values-based food into your procurement policy?
- 13. What steps would you need to take to implement a new local food policy or procurement decisions that is values-based?
- 14. What do you think are the main challenges to implementing valuesbased food procurement in the region are?
- 15. Any other questions or comments that you would like to share pertaining to this issue?