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LINKING COMMUNITY-LEVEL FOOD SOVEREIGNTY TO SUBJECTIVE

WELLBEING: FRAMING PERSPECTIVES ON FOOD SYSTEMS IN THE UPPER YAKIMA RIVER BASIN

by

Alexander W. Theophilus

A thesis submitted in partial fulfillment of the requirements for the degree

of

MASTER OF SCIENCE

in

Sociology

Approved:	
Jessica Ulrich-Schad, Ph.D. Major Professor	Courtney Flint, Ph.D. Committee Member
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UTAH STATE UNIVERSITY Logan, Utah

2024

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ABSTRACT

Linking Community-Level Food Sovereignty to Subjective Wellbeing: Framing

Community Perspectives on Food Systems in the Upper Yakima River Basin

by

Alexander W. Theophilus

Utah State University, 2024

Major Professor: Jessica Ulrich-Schad, Ph.D.

Department: Sociology & Anthropology

Food sovereignty is a framework focused on achieving systemic change in food systems that yield more equitable outcomes for consumers, workers, farmers, and future generations. Food sovereignty is also believed to be an important driver of community wellbeing. However, there is limited research linking perceptions of community-level food sovereignty to subjective wellbeing. Additionally, the complex and multifaceted antecedents of food sovereignty are not fully understood. Through two papers linking community-level food sovereignty and subjective wellbeing, I discuss the impact of food

In the first paper, I draw upon 17 interviews conducted with 'food system key informants' who work in a variety of roles in agriculture, food banks, or other food-related industries. These interviewees provide tremendous insight and expertise on how changes over time in food systems have affected their communities. Food access was found to vary between and within communities. I also find that social, political, and

sovereignty and food systems on wellbeing in Washington's upper Yakima River Basin.

economic changes in agriculture are impacting community wellbeing. In the second paper, I draw upon 121 interviews for a broader discussion of the perceived role of food systems in driving subjective wellbeing. These interviews represent key informants and general community members from six different communities in two counties in the upper Yakima River Basin. Findings in this paper reinforce that food access is unequally distributed within and between communities. Additionally, I find that interviewees without a direct relationship to agriculture believe agrarian livelihoods to be vital to wellbeing in several communities of focus, and many are concerned about changes in agriculture over time. When taken together, the two papers in this thesis contribute to an understanding of the relationship between food systems, community wellbeing, and the importance of community-level food sovereignty for achieving future food justice.

(106 pages)

PUBLIC ABSTRACT

Linking Community-Level Food Sovereignty to Subjective Wellbeing: Framing

Community Perspectives on Food Systems in the Upper Yakima River Basin

Alexander W. Theophilus

Food sovereignty is a framework focused on achieving a wide range of changes in food systems that yield more equitable outcomes for consumers, workers, farmers, and future generations. Food sovereignty is also believed to be an important driver of community wellbeing. However, there is limited research linking perceptions of community-level food sovereignty to subjective wellbeing. Additionally, the complex determinants of food sovereignty are not fully understood. Through two papers linking community-level food sovereignty and subjective wellbeing, I discuss the factors that influence food sovereignty and the impact of food systems on wellbeing in Washington's upper Yakima River Basin.

In the first paper, I draw upon 17 interviews conducted with local leaders and other individuals who work in a variety of roles in agriculture, food banks, or other food-related industries. These interviews provide deep insights and expertise on how changes over time in food systems have impacted their communities. I find that levels of food access are different between and within communities. I also find that historical and ongoing changes in agriculture are impacting community wellbeing. In my second paper, I draw upon 121 interviews for a broader discussion of the role of food systems in driving perceptions of wellbeing. These interviews come from local leaders and general community members from six different communities in two counties in the upper Yakima

River Basin. Findings in this paper reinforce that food access is not distributed equally within or between communities. Additionally, I find that even interviewees without a direct relationship to farming believe agriculture to be important to wellbeing in several communities of focus, and many are concerned about changes in agriculture over time. When taken together, the two papers in this thesis help build an understanding of the impact of food systems on community wellbeing and the importance of community-level food sovereignty for achieving future food justice.

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Alexander W. Theophilus

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CHAPTER I

INTRODUCTION

Scholars have taken a variety of approaches to understanding the social dimensions of food systems in the past several decades. Food security gained significant momentum as a policy goal in the mid-20th century, and the world's geopolitical powers built narratives around ending world hunger (Carolan 2022). The United States Food and Agriculture Organization even declared adequate access to food a basic human right in the 1940s (Carolan 2022). However, the goal of ending inequitable food access has still not been achieved, and many argue that the policies which arose from this food security push resulted in a globalized food system that prevents just outcomes (La Via Campesina 1996, 2009; Otero 2013; Lawrence 2017; Carolan 2022). Issues such as workers' rights, protection of environmental resources, and access to desirable or culturally relevant foods are frequent points of critique for food justice activists (Alkon & Norgaard 2009; Gottleib & Joshi 2010; Alkon & Agyeman 2011; Cadieux & Slocum 2015; Sbicca & Myers 2017; Sbicca 2018).

New approaches to reforming food systems have emerged more recently as critical scholarship has continued to grow in this area. Many promote food justice and/or food sovereignty as frameworks for change, prioritizing greater distributive justice and community autonomy in food systems (La Via Campesina 1996, 2009; Alkon & Norgaard 2009; Gottleib & Joshi 2010; Alkon & Agyeman 2011; Cadieux & Slocum 2015; Sbicca & Myers 2017; Sbicca 2018). While research on both food justice and food sovereignty has grown considerably in recent years, there is still a limited body of

knowledge on how various social dimensions of food systems impact individual and community wellbeing.

The concept of wellbeing is neither new nor radical in and of itself. Aristotle and the Ancient Greeks are credited with prioritizing wellbeing as a key metric of human happiness and success, and more recently wellbeing is conceptualized as anything "that constitutes a good life" (Bache & Reardon 2016, p. 5). Qualitative perceptions of wellbeing provide an interesting lens for understanding the impacts of food systems on both individuals and communities. This type of research allows for a multiscalar analysis in which individual's characterizations of food systems and their subjective wellbeing can be discussed in the context of broader food systems research.

In two papers in this thesis, I explore the connections between community-level food sovereignty and perceptions of wellbeing. I utilize a framework for food sovereignty put forth by La Via Campesina (1996), an international peasant organization made up of farmers, farmworkers, and consumers who advocate for global food system reform. La Via Campesina's (1996, 2009) food sovereignty framework places several policy goals forward as the ideal goals for food system change, including but not limited to food as a basic human right, democratic control of food systems, agrarian reform for food sovereignty, reorganizing the food trade, and protecting natural resources for future generations. This framework, in conversation with Bache and Reardon's (2016) broad operationalization of wellbeing, provides a platform for dissecting the extent to which food systems elevate or hinder quality of life in communities.

This research draws upon data from 121 interviews in six different communities in Washington's upper Yakima River Basin (YRB). These communities are in two

counties with distinct demographic profiles and land use patterns. However, both are reliant on agriculture, although different types and to varying degrees (Figure 1.1).

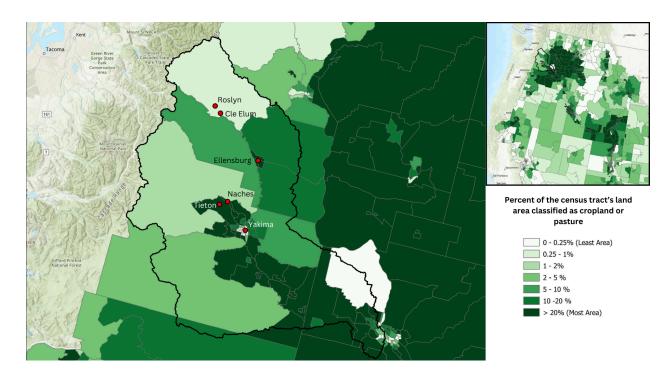


Figure 1.1. Upper YRB Percent of Census Tract Land Classified as Cropland or Pasture. Source: Flint et al. 2023.

In my first paper, I draw upon interviews with 17 'food system key informants' who are deeply engaged in local food systems and hold formal positions within areas such as agriculture, food banks, food assistance programs, or agriculture-related advocacy groups. This classification allows me to draw upon a subset of participants with expertise in food and agriculture, and illuminates important food system issues on the micro, meso, and macro levels. In the second paper, I utilize data from all 121 interviews to draw broader conclusions about the role that food systems are perceived to play in

community life. In this introductory chapter, I provide an overview of relevant literature on food sovereignty and critical food systems research, then I discuss my research methodology and community dynamics of the upper YRB, and lastly, I provide brief descriptions of each of my two papers.

LITERATURE REVIEW

Each paper contains a discussion of literature that is directly related to the research questions posed and the conclusions drawn in the empirical findings. However, in this section I briefly discuss important points regarding food sovereignty, food justice, and food security frameworks relevant to both.

La Via Campesina's (1996; 2009) food sovereignty approach to food system reformation is focused on returning control to community and individual stakeholders within food systems. Their argument for this approach is based largely upon the shortcomings of industrialized food systems, and the hazards that come with relying on corporately controlled global supply chains for the delivery of food as a human right. Additionally, La Via Campesina (2009) argue that farmworkers and smaller-scale farmers are made vulnerable in these modern capitalist food systems. Issues such as pesticide exposure, consolidation of ownership in agriculture, and increased reliance on genetically modified seeds can threaten the health and wellbeing of agricultural stakeholders in varying ways.

On its most basic level, food sovereignty as operationalized by La Via Campesina can be understood in seven distinct policy areas for food system reform. These seven policy areas are as follows: food as a basic human right, "agrarian reform for food

sovereignty", protection of natural resources, "reorganizing the food trade", "ending the globalization of hunger", social peace, and democratic control (La Via Campesina 1996:1). In addition to the food sovereignty framework, I also frequently use the term food system throughout this thesis. The most comprehensive definition of the food system was provided by Ericksen (2008), in which food systems are described as interactions between natural and social environments, the activities from production to consumption that make up these interactions (i.e. farming, purchasing food, eating), as well as the outcomes and interactions that these activities produce. Essentially, the food system as I operationalize it from a sociological perspective is not only the production, distribution, and consumption of food, but also the environmental, social, and political conditions in which food is embedded, and the individual or community-level interactions that regularly take place in agriculture or other food-related activities.

For the last several decades, the approach most often used for confronting issues in food systems is a line of research and policy-making focused almost exclusively on food security. Food security discourse has a narrow focus that does not provide sufficient systemic solutions to the ails that create food insecurity, in addition to ignoring the needs of many farmers, farmworkers, and communities impacted by agriculture (La Via Campesina 1996). A food security lens can frame limited caloric supplies and hunger as issues that must be solved through increasing farm efficiency and food production (Carolan 2022). When utilizing a more holistic approach to issues within the food system, it is apparent that the focus should expand beyond the amount of consumable food in the marketplace. Global food waste calculations demonstrate that almost every country has significant levels of waste and inefficiency, illustrating that the amount of available food

is not the primary issue to be solved (UN Statistics Division 2019). Additionally, considering future generations is an important aspect of food sovereignty framing (La Via Campesina 2009) that is often ignored within highly industrialized, capitalist food systems (Leguizamón 2020).

Another issue with relying too heavily on food security framing is the over reliance on food banks and food assistance as long-term solutions to food access issues. Food banks are often reliant on donations, either food or monetary support, to provide enough goods to their clients (Bazerghi et al. 2016). This means that food banks rely on the goodwill of wealthier people or organizations to function, an unsustainable model that essentially emulates a trickle-down ideology. Additionally, the nutritional quality of food aid is not always adequate, leaving those dependent on food banks struggling with nutritional insecurity (Rochester et al. 2011; Campbell et al. 2013). As the food system currently exists, food banks are essential in many communities for protecting people from hunger and starvation, but they do not solve the systemic issues that create food insecurity in the first place. Employing a food sovereignty approach that empowers people and communities to make decisions for themselves in their communities is a much better long-term solution that promotes better wellbeing outcomes.

Currently, there is not a clear cohesion in terminology among scholars who study food movements and people's access to food. Despite the widely recognized shortcomings in food security frameworks, many researchers still utilize food security as their primary terminology, even if their purpose is to problematize its use (e.g., Guthman et al. 2006; Mooney & Hunt 2010; Otero et al. 2013; Lawrence 2017). Food justice has gained significant momentum in recent years as a pathway for food system reform

(Alkon & Norgaard 2009; Gottleib & Joshi 2010; Alkon & Agyeman 2011; Cadieux & Slocum 2015; Sbicca & Myers 2017; Sbicca 2018; Carolan 2022). Agreeing upon a consensus frame for situating and debating food systems within both the U.S. as well as the rest of the world is an important building block in guiding future research. Although food justice is an effective framework in many ways, I argue throughout this thesis that food sovereignty-based policy change is best positioned to prioritize community autonomy moving forward.

While there are growing bodies of research on community-level food sovereignty (Alkon and Mares 2012; Taylor 2018) and theoretical commentary on food sovereignty in sociology (Sbicca 2018; Carolan 2020; Soper 2020), there is still limited research tying community food sovereignty to community wellbeing. Critiques of food sovereignty frameworks include arguments that the theory oversimplifies "peasant" livelihoods (Soper 2020) and that food sovereignty initiatives become too easily co-opted by the neoliberal food systems they aim to confront (Alkon and Mares 2012).

The first critique is based upon a misunderstanding of La Via Campesina's terminology (1996, 2009). While the group is a self-defined international peasant organization, appropriating peasant livelihoods is not a necessary part of utilizing La Via Campesina's food sovereignty framework and policy guidelines. As for the second primary critique, some food sovereignty initiatives have indeed fallen victim to issues such as pricing out marginalized groups (Alkon and Mares 2012), but there are also examples of successful food sovereignty movements (White 2010, 2011). Additionally,

wellbeing (Flint et al. 2023).

¹ Community wellbeing is often thought of as the result of cumulative individual, social, and ecological wellbeing (Larsen et al. 2015; Flint et al. 2023). It can be correlated with things such as community involvement and collective material wellbeing. Community wellbeing assessments must be contrived through individual viewpoints, as researchers cannot directly consult with a "community" on its level of

whether food system reform is framed within food justice or food sovereignty, there are examples of unsuccessful movements that fail to achieve the equitable change identified as its primary goal (Holt-Gimenez 2011; Alkon and Mares 2012). Moving forward with a food sovereignty framework is optimal for clear research directives and outlining policy goals, which is why I have chosen this framework for guiding and discussing my research here.

RESEARCH OVERVIEW

This research emerges from the NSF-funded Intermountain West (IMW)

Transformation Network (TN), an interdisciplinary, collaborative effort aimed at achieving just and resilient transitions across the Mountain West. The YRB is one of four "exemplar regions" situated throughout the IMW. The other three regions are the Poudre River Basin in Colorado, the Sante Fe Watershed in New Mexico, and the Four Corners Three Rivers Region of Utah, Colorado, New Mexico, and Arizona. The research team I am a part of selected the YRB as our research site for a multitude of reasons. The first of which is the willingness of researchers at Washington State University, a partner of ours in the TN, to collaborate with us as we moved forward with community outreach and relationship building. The YRB's varied land use also provides excellent opportunities for research that spans the interest areas of our research team, including agriculture, population and demographic change in high-amenity communities, rural-urban connectivity, and environmental or climatic changes.

The explicit goal of our project team is to provide qualitative, community-level context for wellbeing in the IMW.² To achieve this goal, we began reaching out to communities in the YRB in March of 2023 to begin initial conversations about our research. Given the interdisciplinary nature of the TN, and the importance of hydrologic issues to our collaborators at Washington State as well as many stakeholders in the YRB, we structured the geographic scope of our work around the Yakima River Watershed. Thus, we selected the upper YRB, which includes parts of Kittitas and Yakima counties, as our area of focus. Within these two counties, six communities are included for both their importance to regional life and community leaders' willingness to collaborate with the research team. These communities are Cle Elum, Roslyn, and Ellensburg in Kittitas County, and Yakima, Naches, and Tieton in Yakima County (Table 1.1).

	Kittitas County	Yakima County	Cle Elum	Roslyn	Ellens- burg	Yakima	Naches	Tieton
Total Population ¹	44,337	256,728	2,157	950	18,666	96,968	1,084	1,389
Median Household Income ²	\$64,134	\$58,380	\$52,586	\$63,947	\$47,407	\$50,673	\$69,861	\$51,742
% Food Insecure ³	12%	12%	X	X	X	X	X	X
% Hispanic ¹	10.4%	50.7%	6.7%	7.7%	13.9%	48.5%	31.3%	72.3%
% Non- Hispanic White ¹	79.7%	40.3%	84.6%	84.6%	73.4%	43.5%	62.1%	24.0%

² Researchers in the TN had previously built secondary datasets which spatially analyzed wellbeing across the IMW. Qualitative assessments are not only useful in and of themselves, but also provide a future point of comparison to alternative data sources.

%	7.2%4	27.8%4	2.4%5	9.9%5	3.6%5	11.1%5	17.3%5	18.2%5
Employed								
in								
Agriculture								

Table 1.1: County and place demographic profiles.

Note: "X" indicates that data at that level is unavailable.

Cle Elum and Roslyn are situated on the eastern slope of the Cascade Mountain range, just over an hour's drive from the Seattle-Tacoma metropolitan area. These towns and the surrounding area of northern Kittitas County are frequently referred to as "Upper County," and have seen considerable population growth and tourism development in recent years. Ellensburg is the home of Central Washington University, the only major four-year university in the study area, and is situated in a part of Kittitas County that is world renowned for its timothy hay production. Yakima is the largest urban area in this research, although Yakima County's production of fruit and hops make the city of Yakima's economy and identity heavily dependent on agriculture. Tieton is a small agricultural town in Yakima County, historically occupied by many Latine farmworkers and their families. Naches is also a small town near Yakima, but has recently transitioned from identifying as a predominantly agricultural community to a bedroom community for Yakima. The diverse population included in this study region required flexible research methods on a community-by-community basis.

Ultimately, we conducted 121 interviews across the upper YRB. Four scoping interviews were initially conducted with critical local leaders in an initial visit by two

¹Source: Social Explorer Tables (SE), Census 2020 – Preliminary Data (2020).

²Source: Social Explorer; U.S. Census Bureau (2021).

³Source: Gundersen et al. 2021.

⁴Source: Washington State Employment Security Department. 2023.

⁵Source: Social Explorer Tables (SE) ACS 2022 (5-year Estimates), U.S. Census Bureau. Note: Includes forestry, fishing and hunting, and mining, which accounts for Roslyn's high percentage.

project researchers in March 2023, including myself. These scoping interviews were unstructured and intended to begin building the research teams' understanding of key issues in the community, as well as allow for community input in our research methodology. Sixty-five of these interviews were with key informants³, defined as local leaders who work in either government, non-governmental civic organizations, the business sector, or some combination of these spheres of community life (Table 1.2). These key informants were identified through criterion sampling, snowball sampling, and internet searches to insure coverage across interest groups. Scoping interviewees and key informants were all asked if there were others in their community they would recommend the research team reach out to. Oftentimes, the research team would request recommendations from a specific sphere or interest group (i.e. city government official, local farmer, etc...). Once saturation had been reached for certain communities and interest groups, the research team targeted participants with viewpoints that were underrepresented in our data. This came through outreach to past key informants for specific recommendation requests, as well as online searches for members of undersampled interest groups or demographics.

Interviews with key informants were typically 45-60 minutes in length, and most were conducted over Zoom or the phone. Key informant interviews covered topics such as general wellbeing and community life, food access and agriculture, population and demographic changes, local environmental conditions and rural-urban connections. Key informants were often asked to go into additional depth on their particular area of

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³ "Key informants" are individuals believed to be particularly knowledgeable about their community because of their involvement in important sectors of community life (Krannich and Humphrey 1986). These individuals are often involved in local leadership positions or are otherwise recognized as carrying influence in their community.

expertise via probing questions. An example key informant interview protocol can be found in Appendix I.

Comm.	Upper County ¹	Ellens-bu rg	Yakima	Naches		Kittitas County ²	Yakima County ²	Total
Gov.	3	3	3	1	3	6	4	23
Bus.	5	2	5	1	1	1	2	17
NG Civ.	9	7	8	3	1	3	2	33
Total (place)	17	12	16	5	5	10	8	

Table 1.2: Key informant interview breakdown³

Fifty-two of the 121 interviews were with general community members, who volunteered to participate after hearing about the research via recruitment flyers, word of mouth, or public intercept. Community member interviews had greater variability between communities, but typically lasted 15-30 minutes and covered the same general topic areas as key informant interviews. In Ellensburg, 17 total community interviews were conducted. Approximately half of these were in person and while the rest were conducted via Zoom. In Yakima, nine community members were interviewed via Zoom or phone calls, while two community members in Naches participated remotely. In Upper County, 24 in-person interviews were conducted via a public intercept methodology at community events in late Summer of 2023. Due to the public intercept format, these interviews were typically shorter, lasting around 10-15 minutes. Despite extensive recruitment efforts in Tieton, the research team was not successful in garnering

¹ Cle Elum and Roslyn are grouped together under their regional moniker, Upper County.

² These interviews were conducted with individuals who expressed a unique county-level perspective.

³ Total adds to greater than 65 key informants because some interviewees are classified in multiple spheres because of their multiple roles in the community.

community member participation. In Ellensburg, Naches, Yakima, and Tieton, participants were offered \$10 gift cards as tokens of appreciation, while Upper County participants were offered \$5 gift cards due to the shorter time duration.

Recruitment for community interviews was often in the form of physical flyer postings in key locations around town, virtual flyer postings on social media, virtual flyer distribution through city email listservs, and flyer placement in food bank distribution boxes. Flyers were distributed in English and Spanish in all communities. Interviews in both languages were offered to all participants, and several elected to participate in Spanish. Examples of recruitment flyers can be found in Appendix II.

All interviews were recorded with participant consent and transcribed by members of the research team. English interviews were recorded and transcribed with the help of Otter.ai, while Spanish interviews were transcribed with the help of HappyScribe.

I discuss different parts of my specific data analysis process in the first and second paper of this thesis respectively and only comment broadly on my process here. Following the completion of data collection in November of 2023, a first pass of general coding was conducted for broad themes. An additional coder was included for 10 transcripts, and a Krippendorff's Alpha of .762 was achieved for general topic codes. This Alpha score is deemed satisfactory under the assumption that analysis should always strive for a score of 1.000, while .667 is acceptable and .800 suggests significant reliability in the coding process (Krippendorff 2019). Subsequently, further coding was conducted for specific themes related to food and agriculture, which I discuss in each paper at greater depth.

Paper 1: Community-Level Food Sovereignty and Wellbeing in the Upper Yakima River Basin: Framing Lived Experiences within Multiscalar Food Systems Discourse.

Draws upon 17 interviews with food system key informants to illuminate how food systems have disparate impacts on community life. The expertise of the key informants included in this sub-sample allows for deep analysis of how food access varies between and within communities, as well as how changes in agriculture over time are impacting the region. Insights shared by these food system representatives allow for community points-of-analysis for the social, economic, and political institutions that drive food systems.

In this paper, I utilize several of La Via Campesina's principles of food sovereignty to analyze interviews. The principles central to my analysis are food as a human right, democratic control of food systems, agrarian reform and reorganizing the food trade for food sovereignty, and protection of natural resources (La Via Campesina 1996, 2009). This framework allows for a more complete understanding of food systems in their full complexity, and illuminates potential pathways for improved community-level food sovereignty moving forward. The target journal for this paper is *Sociological Inquiry*.⁴

Paper 2: Understanding the Role of Food Systems in Perceptions of Subjective Wellbeing: A Case Study in Washington's Upper Yakima River Basin. Broadening my scope to all 121 interviews conducted in the upper YRB, this paper illuminates perceptions of food systems' impacts on wellbeing for a wider range of stakeholders. Insights from all participants demonstrate that food access is neither distributed equally

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⁴ The requirements of Sociological Inquiry are that original articles should be less than 10,000 words and focused on an exploration or examination of social phenomena through scientific methodology.

between nor within communities. This finding suggests local implications stemming from structural inequalities in food systems. Additionally, I find that agriculture is seen as extraordinarily important to both local economies and community culture, even as institutional changes in agriculture threaten to change the agrarian dynamics communities have become accustomed to.

La Via Campesina's (1996, 2009) food sovereignty framework is also vital to analyzing the data used in this paper. The perspective contributes to an understanding of how unequal and/or low levels of community food sovereignty may impact wellbeing. Findings illuminate potential pathways for increasing equity within food systems. Linkages between subjective wellbeing and perceptions of food systems reinforce the notion that justice within food systems is vital to high quality of life moving forward. This paper is formatted for the *Journal of Hunger & Environmental Nutrition*, although I may seek another outlet.⁵

CONCLUSION

Taken together, these two papers provide an exploration of the connections between food sovereignty, wellbeing, and the systemic issues in food systems that are of greatest concern to community members. The rich qualitative data drawn upon for both papers illuminates the importance of understanding how food systems are tied into discussions of subjective individual and community wellbeing. The variation in stakeholders represented in this research demonstrates important differences in food

appendices (as appropriate); table(s) with caption(s) (on individual pages); figures; figure captions (as a list).

⁵ According to this journal, research articles should no more than 25 double-spaced pages and written with the following elements in the following order: title page; abstract; keywords; main text introduction, materials and methods, results, discussion; acknowledgments; declaration of interest statement; references;

systems impact on community life. Findings suggest that food systems can be racialized, impact urban and rural communities differently, afford varying degrees of access to different socioeconomic groups, and that food systems may be sliding even further away from community control. While each of these findings resonates with my expectations at the outset of this research, I was surprised by the degree to which some well-off individuals were aware of poor food access within their community. I conclude with a discussion of how these findings illuminate potential policy changes that can promote greater equity and community-level food sovereignty moving forward.

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CHAPTER II

COMMUNITY-LEVEL FOOD SOVEREIGNTY AND WELLBEING IN THE UPPER YAKIMA RIVER BASIN: FRAMING LIVED EXPERIENCES WITHIN MULTISCALAR FOOD SYSTEMS DISCOURSE⁶

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ABSTRACT

Food sovereignty, a framework focused on systemic change in the food system that accounts for food access, food justice, and food security, is an important driver of community wellbeing. However, the complex determinants of food sovereignty are not fully understood. Interdisciplinary assessments of food systems are needed to establish the impact of socioeconomic status, race, gender, and other social identities on food access. Furthermore, urban, peri-urban, and rural places often vary in their food systems and have complex interdependencies. Understanding the goals and lived experiences of diverse communities and community members is critically important to advancing research on the sociology of food and agriculture. Through key informant interviews in six different communities in Washington's Upper Yakima River Basin, a qualitative assessment of perspectives on local and regional food systems illuminates perceived connections between food sovereignty and wellbeing. We discuss methods and results from a research project conducted by an interdisciplinary research team. Findings suggest that food access and dependence on local agriculture varies across and within

⁶ This paper is written to the requirements of Sociological Inquiry, the target journal for publication. Original articles should be less than 10,000 words and focused on an exploration or examination of social phenomena through scientific methodology.

communities. Additionally, we find that agriculture is undergoing social, economic, and political transitions that may have immense community impacts moving forward. An intersectional discussion of community roles within complex food networks is necessary to gauge varying degrees of food sovereignty. Given the diverse array of both agricultural and recreational economies in the study site, qualitative data informs our understanding of stakeholder perceptions at multiple parts of the food system. The implications of these findings lead to a forward-looking discussion of linkages between food dimensions and other variables that impact local and regional wellbeing.

INTRODUCTION

The accessibility of a nutritious diet is widely recognized as a basic human right, and a critical causal variable in achieving a high quality of life. Ceasing hunger slowly started becoming a political priority in the United States (U.S.) in the 1940s when the US Food and Agriculture Organization stated that it is a basic human right to have "freedom from want in relation to food and agriculture" (Carolan 2020, p. 192). The term food security came into prominence in the 1970s when increased attention started shifting to issues of global hunger (Carolan 2020).

However, typical notions of food security often rely heavily on global trade systems that can prioritize the interests of the wealthy over working-class people (Otero et al. 2013). Furthermore, food security can allude to many different priorities or policy positions ranging from solving hunger to protecting food resources from potential agroterrorism (Mooney & Hunt 2010). Food justice activists have put increased pressure on food security movements to place a greater emphasis on cultural awareness,

environmental justice, and workers' rights, in addition to meeting people's nutritional requirements (Alkon & Norgaard 2009).

Efforts to address food access issues may be better spent focusing on an improved, more inclusive form of food justice – food sovereignty. Food sovereignty, as coined by the international peasant movement La Via Campesina in 1996, is a framework designed to organize concerns over hunger in a symbiotic relationship with the concerns of food producers, while also protecting the cultural significance associated with eating and food systems. Food sovereignty primarily differs from food justice in its approach to democratic control and reformation of food systems (Holt-Gimenez 2011). Food sovereignty movements are focused on returning power from corporate food regimes to farmers, eaters, and communities, arguing for a systemic change in how food trade is structured (ibid). La Via Campesina (1996) organizes food sovereignty action into distinct policy areas that can help guide towards regime change.

Sociological research on food issues has begun to incorporate food sovereignty as a foundational framework for distributive and reformative justice (Alkon and Mares 2012; Carolan 2022; Sbicca 2018; Taylor 2018), yet research tying place-based lived experiences of food sovereignty to wellbeing outcomes is lacking. Wellbeing is broadly defined as everything "that constitutes a good life" (Bache & Reardon 2016, p. 5). Wellbeing is most often conceptualized on either the community or individual level, and the factors that impact wellbeing can vary greatly on a case-by-case basis. The degree to which community-level food sovereignty impacts perceptions of wellbeing may vary, and

these variances may provide key insights into how our food system⁷ is structured and might be transformed.

Through semi-structured, in-depth interviews with key informants⁸ and general community members in six diverse towns and cities in Washington's upper Yakima River Basin (YRB; see Figure 2.1), a qualitative assessment of food systems and the perceived impact of food sovereignty on wellbeing provides insight into the workings of regional food systems and how they might be improved. The study area includes a mix of rural, peri-urban, and urban spaces that rely on agricultural economies to varying degrees. The upper YRB is nationally recognized for fruit, hop, and hay production, with agriculture and agritourism contributing large numbers of jobs to the area⁹. The upper YRB is also geographically, socioeconomically, and racially heterogeneous, providing an excellent case study for the dispersal of "goods and bads" in food systems as they are impacted by micro-, meso-, and macro-level institutions. In this paper, we will discuss findings from 17 "food system key informants" in this region who work in food or agriculture. These key informants represent interest groups such as university extension agents, farmers, food bank managers, or agricultural agency representatives. We frame participants' insights on food systems and agriculture within their perceptions of community

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⁷ In this paper, we will use the term "food system" extensively. The most comprehensive definition of the food system was provided by Ericksen (2008), in which food systems are described as interactions between natural and social environments, the activities from production to consumption that make up these interactions (i.e. farming, purchasing food, eating), as well as the outcomes and interactions that these activities produce. Essentially, the food system as we operationalize it is not only the production, distribution, and consumption of food, but also the environmental, social, and political conditions in which food is embedded, and the individual or community-level interactions that regularly take place in agriculture or other food-related activities.

⁸ "Key informants" are individuals believed to be particularly knowledgeable about their community because of their involvement in important sectors of community life (Krannich and Humphrey 1986). These individuals are often involved in local leadership positions or are otherwise recognized as carrying influence in their community.

⁹ Agriculture provides 28% of Yakima County employment and 8% of Kittitas County employment (Washington State Employment Security Department 2023).

wellbeing. This scope allows for connections to be drawn between current food systems, community food sovereignty, and the broader scope of issues that impact local quality of life.

The analysis of these interviews informs the following research questions: 1) How does food access (i.e., food security, nutritional security, access to culturally relevant food) vary in the upper Yakima River Basin? 2) What are the perceived connections between food access, local agriculture, and wellbeing? 3) What are the factors that enable or inhibit food sovereignty on the individual and community level? While food sovereignty is only the central principle in our third research question, analyzing the various factors impacting food access is a suitable proxy in the first two questions. Interview participants are unlikely to speak in terminology that directly aligns with the specific principles of food sovereignty laid out by La Via Campesina, but they are likely to discuss secure, autonomous, and/or sustainable access to food.

Approaching these research questions with semi-structured interviews allows for participants' experiences and narratives to drive our analysis (Seidman 2019).

Additionally, the diversity of agriculture in the Upper YRB provides a suitable natural location and context for an explanation of individuals' perceptions of their community's role in food systems.

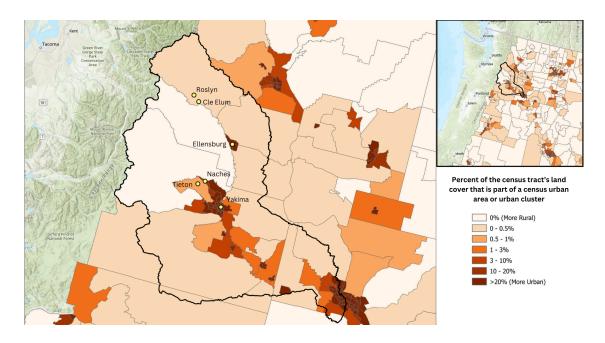


Figure 2.1. Percent of census tract classified as urban.

Source: Flint et al. 2023.

MAINSTREAMING FOOD SOVEREIGNTY AND MULTISCALAR ANALYSIS OF FOOD SYSTEMS

As asserted by La Via Campesina (1996) in their formative call to action for food sovereignty, globalized hunger and food injustice are inherent in the current food system and global political economy. The rise of neoliberalism on an international scale brought about industrialized food systems and agribusiness's dominance over traditional food systems, destabilizing methods of trade and production that exist outside of capitalism (Lawrence 2017). Capitalism and neoliberalism posit food as a for-profit commodity that pushes farmers to produce greater quantities at a greater efficiency, increasing reliance on genetically modified seeds and other expensive agribusiness technologies (Lawrence 2017). Both larger and small farms are reliant on government assistance to maintain profitability, and logistical burdens on smaller scale farmers can make it difficult to

reliably access the same public funding as larger operations (Guthman et al. 2006). Thus, capitalist institutions and neoliberal governments maintain their hold on the food system as farmers' markets, community-supported agriculture, and other local food networks often remain too expensive to become widespread solutions to food insecurity in our current political economy.

Food security discourse can inadequately employ long-term solutions through its poor incorporation of food producers and farm workers that exist outside of dominant capitalist and Global North hegemony (Via Campesina 1996). A food security lens can frame limited caloric supplies and hunger as issues that must be solved through increasing farm efficiency and food production (Carolan 2022). This conclusion fails to consider food waste and inefficiencies throughout the food system that are difficult to fully quantify, yet conservative estimates still show staggering levels of food waste per capita in nearly every country (UN Statistics Division 2019).

Additionally, treating food security as the highest goal of food systems places the burden of providing food access disproportionately on food banks or other food assistance programs. Food banks are often reliant on donations, either food or monetary support, to provide enough goods to their clients (Bazerghi et al. 2016). Furthermore, the nutritional quality of food aid is not always adequate, leaving those dependent on food banks struggling with nutritional insecurity (Rochester et al. 2011; Campbell et al. 2013). Food banks are vital to helping prevent hunger and starvation in a community, but they do not solve the systemic issues that create food insecurity in the first place. This is one of many reasons why only focusing on food security is incompatible with real food system reform.

Currently, there is not a clear cohesion in terminology among scholars who study food movements and people's access to food. Even when some sociologists are critiquing food security, they still use it as their primary frame (e.g., Guthman et al. 2006; Mooney & Hunt 2010; Otero et al. 2013; Lawrence 2017). Additionally, some of the most critical sociologists studying food issues have recently used food justice as their central frame (Alkon & Norgaard 2009; Gottleib & Joshi 2010; Alkon & Agyeman 2011; Cadieux & Slocum 2015; Sbicca & Myers 2017; Sbicca 2018; Norgaard 2019; Carolan 2020). Dorceta Taylor is perhaps the leading sociologist on food sovereignty, although other sociologists are also incorporating the concept into their work. Joshua Sbicca (2018) and Michael Carolan (2020) both focused extensively on food sovereignty in recent books, signifying the growing sociological recognition of food sovereignty as an important framework. However, community-level food sovereignty is not their central framework for analysis. We argue that conversations for food system reform should focus on a consensus framing and set of policy goals, namely that of La Via Campesina (1996, 2009) and food sovereignty. Food justice frameworks are often less clear in their recommendations than La Via Campesina's food sovereignty framing, meaning a unification of terminology may help better delineate policy goals. Perspectives rooted in food justice show promise, but as argued throughout this paper, we believe that food sovereignty goes further to protect community autonomy and decision-making power.

Ending hunger and malnutrition should be an obvious socio-political priority, however many scholars argue that neoliberal markets have failed in meeting that goal (Otero et al. 2013; Lawrence 2017; Norgaard et al. 2012; Norgaard 2019; Sbicca 2018; Carolan 2020). Unfortunately, the current political economy in the U.S. often opts for

neoliberal solutions as the default, and contemporary issues of food security are no different. La Via Campesina (1996) lays out seven policy areas that combat these injustices and provide a useful framework for food systems research. These seven policy areas are as follows: food as a basic human right, "agrarian reform for food sovereignty", protection of natural resources, "reorganizing the food trade", "ending the globalization of hunger", social peace, and democratic control. Formulating specific goals and areas of focus helps operationalize food sovereignty movements in a way that can help communities and activists work towards specific change.

Applying a multiscalar approach, we can observe that there are more stakeholders in the food system than the consumer and the owner of the means of production. The so-called middlemen, or the farm workers, food packaging workers, and transportation workers that the food system relies upon are equally as important as any other stakeholder. A critical food justice lens and food sovereignty framing includes overlooked and marginalized voices in its scope. Furthermore, longitudinal multiscalar perspectives include future generations that are not always considered in capitalistic agrarian societies (Leguizamón 2020). Farm workers and their families can face harsh outcomes from industrial agriculture, particularly when hazardous chemicals are used as herbicides or pesticides (Leguizamón 2020).

Additionally, assessing the history of racial capitalism in the U.S. is crucial to understanding the positionality of racial groups within the current political economy.

Latinx, Black, and Indigenous people have been kept from the opportunities provided to whites to own land and control food production. Inequitable access to farmland and control of food production continues to exclude farmers of color, as white people make

up 93% of owner-operators on farms, 98% of non-operating farm owners, and 92% of tenant farmers (Horst & Marion 2019). When comparing W.E.B. Du Bois' century-old research on black farmers in Prince Edward County, Virginia (1898), Dorceta Taylor's (2018) research on the limitations facing Black accumulation of agriculture capital demonstrates how little headway has been made towards racial justice in agriculture and natural resource access. Du Bois (1898) wrote at length about the disadvantages imposed on black farmers by land tenancy rather than land ownership, and believed that the farmer's tenancy was a crucial reason for their lack of socioeconomic progress compared to white agrarian areas. Thus, industrialized agriculture has largely remained a tool to protect white wealth for centuries in the United States, establishing a land-owning bourgeoisie in agriculture and agrarian communities. Ownership and control of agricultural production continue to be sources of socioeconomic power, and the further consolidation of these resources is only exacerbating existing wealth gaps.

The findings in this paper contribute to our understanding of lived experiences of community-level food sovereignty. Through conversations with people who work in food systems, We will discuss how individual insights highlight the shortcomings of the current food system in providing equitable food access on the community-level.

Additionally, conversations with people who work in agriculture illuminate the social, economic, and environmental pressures that pose challenges for farmers and farmworkers in this region.

CASE STUDY AREA

Land Use

Within our region of focus in the upper YRB, research spans two counties and six municipalities. In Kittitas County, Roslyn, Cle Elum, and Ellensburg are the research sites. In Yakima County, the three research sites are Naches, Tieton, and the city of Yakima. To avoid confusion between similarly named geographic units, we will refer to the river basin as the upper Yakima River Basin or upper YRB, the county as Yakima County, and the city as just Yakima.

The upper YRB is a suitable study area for research on wellbeing and food systems for numerous reasons. The first of which is the area's agricultural traditions, perhaps its defining feature since the beginning of settler-colonialism, characterized largely by fruit and hop growing. Particularly in Yakima County, agriculture makes up a significant amount of land use (Figure 2.2) and is central to local culture. In Kittitas County in the northern part of the upper YRB, Ellensburg's economy relies heavily on agriculture, but the county's forests and wilderness areas also provide opportunities for a burgeoning recreation economy, especially in the northern part of the county.

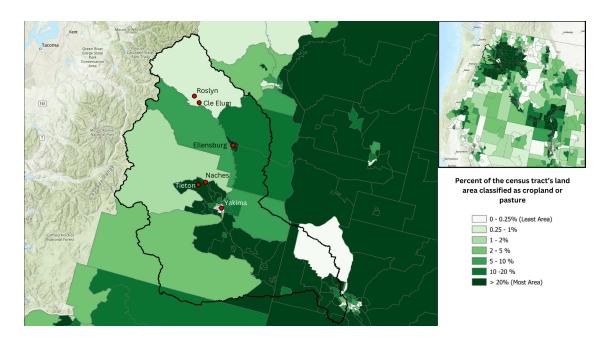


Figure 2.2. Percent of Census Tract land classified as cropland or pasture.

Source: Flint et al. 2023.

The combination of the upper YRB's agricultural economy with its recreational opportunities provides a case study in which both food producers and consumers are represented, as well as varying levels of economic dependence on agriculture.

Furthermore, as producer and consumer are not mutually exclusive or homogenous categorizations, the land use and demographic compositions of the area led to an organically diverse representation of community and participant positionality within food systems.

Demographic Composition

Between the two counties, Kittitas is the more rural of the two, although Yakima County relies more heavily on agriculture (Table 2.1). In upper Kittitas County, recreational opportunities and proximity to the Seattle-Tacoma-Bellevue metropolitan

area have driven new economies and migration around Roslyn, Cle Elum, and surrounding areas.

Ellensburg, Tieton, and Yakima are the towns with the greatest connection to agriculture, and all three present distinct demographic trends. The majority of Tieton residents and nearly half of Yakima residents are Hispanic. Ellensburg also has a much more diverse population than Kittitas County, although the proportion of the population that is non-Hispanic white is considerably greater than Yakima, Tieton, or Yakima County.

Ellensburg is also home to Central Washington University, the only major 4-year university in the research site. The university not only impacts Ellensburg's demographics, but also serves as a key employer and cultural cornerstone in the community.

	Kittitas County	Yakima County	Cle Elum	Roslyn	Ellens- burg	Yakima	Naches	Tieton
Total Population ¹	44,337	256,728	2,157	950	18,666	96,968	1,084	1,389
Median Household Income ²	\$64,134	\$58,380	\$52,586	\$63,947	\$47,407	\$50,673	\$69,861	\$51,742
% Food Insecure ³	12%	12%	X	X	X	X	X	X
% Hispanic ¹	10.4%	50.7%	6.7%	7.7%	13.9%	48.5%	31.3%	72.3%
% Non- Hispanic White ¹	79.7%	40.3%	84.6%	84.6%	73.4%	43.5%	62.1%	24.0%
% Employed	7.2%4	27.8%4	2.4%5	9.9%5	3.6%5	11.1%5	17.3%5	18.2%5

Table 2.1: County and place demographic profiles.

Note: "X" indicates that data at that level is unavailable.

¹Source: Social Explorer Tables (SE), Census 2020 – Preliminary Data (2020).

²Source: Social Explorer; U.S. Census Bureau (2021).

³Source: Gundersen et al. 2021.

⁴Source: Washington State Employment Security Department. 2023.

⁵Source: Social Explorer Tables (SE) ACS 2022 (5-year Estimates), U.S. Census Bureau. Note: Includes forestry, fishing and hunting, and mining, which accounts for Roslyn's high percentage.

METHODS

The 17 food system key informants¹⁰ we discuss in this paper emerged from a larger project based on understanding community wellbeing in the Upper YRB. From March through November of 2023, 121 semi-structured, in-depth interviews were conducted with community members of Kittitas and Yakima Counties. Of these interviews, 65 were with participants classified as "key informants," 52 were with general community members, and 4 were scoping interviews. Scoping interviews were unstructured, preliminary conversations with particularly influential local leaders aimed at understanding community needs, and shaping our research methodology around what may produce useful findings for a given community. Key informants were identified through criterion sampling, snowball sampling, or online searches for influential members of local government, business, or non-governmental civic organizations. They were invited to participate through either email or phone correspondence, interviews typically lasted between 45-60 minutes, and most key informant interviews were conducted over Zoom or the phone.

¹⁰ Each of these food system key informants falls into our general category of key informant interviewees. This classification was given to participants who were recruited by the research team because of their involvement and importance to their community. Key informants were most often identified through either snowball sampling, sampling for meaning, or internet searches.

This classification is meant to ensure coverage across the various perspectives held by influential community entities. Interviews with key informants followed the same basic structure as with community members, although key informants were often asked to go into greater depth on their role in the community and their topic(s) of expertise. As interviews were semi-structured, the interviews varied slightly and often included unique probing questions related to the flow of dialogue with individual participants. However, interviews generally covered perceptions of community life and wellbeing, local food access and agriculture, local environmental conditions, population and demographic change over time, and connections to other communities in the region. Interviews with the 17 food system key informants who worked in food or agriculture often included questions focused on changes in agriculture in the region over time and probing questions on how they view their community's role in systems of food or crop trade. Of these 17 food system key informants, 10 were based in Yakima County and seven were based in Kittitas County. Additionally, nine worked in agriculture while eight worked in food assistance programs. Examples of agricultural professions include farmer, commodity distributor, farmworker advocate, and extension researcher. Examples of food assistance professions include food bank director, government assistance program coordinator, and nutrition education program coordinator.

Drawing upon an ethnographic toolkit (Reyes 2010), working within social networks was helpful for gaining access to different key informants. In an effort to increase understanding of the upper YRB and to offer multiple modes of participation, multiple in-person trips were made to the area during our study period. These trips emphasized conducting interviews, recruitment, outreach, and field observations.

However, the lead author's positionality as a white, male researcher from an out-of-state institution likely hindered their ability to speak with other groups. Given the timeline and other constraints of the research team, we were unable to speak directly with any farmworkers in the region, although we were able to speak with one former farmworker and a number of farmworker advocates who work closely with agricultural labor in their professional life.

Interviews were recorded, with participant consent, transcribed with the software Otter.ai, then edited by members of our research team, and subsequently coded using ATLAS.ti. The research team included bilingual Spanish speakers, who could interview, transcribe, and translate Spanish-speaking interviews into English. Interviews were first coded into general topic groups based on topics of general wellbeing, food access, agriculture, environmental conditions, and population or demographic change. These were the areas of interest that most frequently came up in interviews, as well as the topics that would eventually be coded for specific themes.

A first pass of food sovereignty-specific grounded coding was conducted on selected interviews to allow for emergent themes and to ensure that analysis was rooted in participant narratives (Glaser and Strauss 2010; Bailey 2017; Seidman 2019). Further coding was conducted using an abductive approach¹¹ (Timmermans and Tavory 2012) on four specific food sovereignty themes. Each of these broad food sovereignty themes directly stems from a concept related to La Via Campesina's (1996; 2009) interpretation of food sovereignty, chosen for their repeated appearance during the grounded coding

¹¹ An abductive approach to qualitative research design and data analysis is predicated on the incorporation of existing theories into a process that still allows for new ideas to emerge through traditionally grounded methods. Theory is put in conversation with emergent findings to either confirm, build upon, or counter the existing framework (Timmermans and Tavory 2012). This is different from the traditional, solely grounded approach to research in which empirical findings formulate new theories (Glaser and Strauss 2010).

process. The four themes are food as a human right, agrarian reform and reorganizing the food trade, democratic control of food systems, and protection of natural resources for future generations (Table 2.2). An additional coder was incorporated into the analysis process for 17% of the interviews. Discrepancies between the two coders were discussed and resolved via unanimous decision until an adequate Krippendorff's Alpha of .797 was reached. This Alpha score is deemed satisfactory under the assumption that analysis should always strive for a score of 1.000, while .667 is acceptable and .800 suggests significant reliability in the coding process (Krippendorff 2019).

Theme of Food Sovereignty	Operationalization	Related Research Question(s)
Food as a human right	Food security and access to safe, healthy, culturally relevant food	How does food access vary between and within communities? What are the perceived connections between food access, local agriculture, and wellbeing?

Example Quotation: "And I think it's very important to have several places where we can find food, especially with the variety of cultures we have in Yakima, it's really nice to have food that is close to everyone's culture. And I feel there is such a large Hispanic community in Yakima, that it's very, very important that, at least in the main grocery stores, there is Latin food, there is Hispanic food so that we feel closer to home."

Agrarian reform and reorganizing the food trade	Local foods are available when desired, and the benefits of local agriculture are justly distributed in the local community	What are the perceived connections between food access, local agriculture, and wellbeing? What factors that enable or inhibit food sovereignty on the individual and community level?
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Example Quotation: "You can go to Pike's Place Market in downtown Seattle and find like the biggest, most juicy peaches and you're like, Where the heck did they get these? Well, those came from the Yakima Valley. I can't find those in Yakima in any grocery store. Because the cream of the crops get shipped off to the place where they can get the biggest buck for 'em. So there's certainly some disparity there. And, you know, I think it's more just tied into poverty as far as [food] security goes."

Democratic	Workers, farmers, and	How does food access vary between and

control of food systems	consumers have participatory power in food systems	within communities? What are the perceived connections between food access, local agriculture, and wellbeing? What factors that enable or inhibit food sovereignty on the individual and community level?
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Example Quotation: "The weird thing in our food supply is that it is so focused on accessing national supply chains that we saw that during COVID there were school districts that didn't get their fresh produce deliveries because they had contracted with a particular distributor. So, like the Yakima school district could not get apples because they contracted with Cisco, and Cisco's deliveries were interrupted... It would go from one of our fruit warehouses to a food service distributors warehouse in another town and then it would come back again. How was that efficient? Well, it was economically efficient."

Protection of natural resources	Sustainable and/or regenerative practices are in place to preserve the long-term viability of agriculture, as well as land and water resources	What are the perceived connections between food access, local agriculture, and wellbeing? What factors that enable or inhibit food sovereignty on the individual and community level?
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Example Quotation: "If we're talking about water, the you know, the, the Yakima River Basin is all appropriated and allocated out... It's stretched as far as it can go right now. And, and you know, obviously we have people moving here that wanna use groundwater for residential wells and things like that, so I think there's more competition for the same resources. I think that's something that's changed since I've been here. Just with population growth. But you know, on the flip side of that, if we're talking about agriculture, as an industry we have become a lot more savvy with our use of those resources and use them in a more efficient and effective way."

Table 2.2: Operationalization of Food Sovereignty Themes.

RESULTS

How does food access vary within and between communities?

Food as a human right is most closely tied to traditional notions of food and nutritional security, although a food sovereignty framework also emphasizes the human

right to access culturally relevant food. These aspects of food as a human right all align with our operationalization of food access. In all study communities, the rising cost of food was routinely mentioned as a barrier to universal food security in communities. In the context of a year with rapidly rising costs of living around the globe, increasing food prices are yet another burden for people already struggling to make ends meet.

"I mean, even if we have a grocery store open out here, would it be affordable? Would it be something that is really going to alleviate [food insecurity] or is it just, you know, rubbing it in their face that it's closer but they still can't afford it?" - Tieton

Additionally, residents of rural communities often expressed concern over the need for personal transportation to reliably access food sources. Given the car-dependent nature of much of the U.S., this is not unique. However, the problem is exacerbated in rural communities in which community members and food markets are spread out over large distances.

"For a lot of people, it's 20 to 30 minutes to go to the grocery store, one way. So there's definitely not a lot of choices and then Roslyn has its own tiny little corner grocery store, which a lot of people do like. Of course, the prices are pretty extreme. You have to really want that red pepper to pay four and a half dollars for it... But I don't think for people who struggle with food insecurity that those needs are necessarily being met." Upper County

Even in diverse rural or small urban communities it is not guaranteed that residents will have access to culturally appropriate or desirable foods. In Ellensburg, a small urban town with a growing Hispanic population, community members discussed having to travel to Yakima or other urban areas for a greater variety of food options.

"And a lot of people go from here to Yakima to buy their food, because it's a little cheaper there and they sell food more like for Latinos. There are more Mexican stores and there is everything, there is a lot more there." - Ellensburg

"Their produce is good quality, but it's very expensive. You want to, for example, buy organic things so you can eat better. It is too expensive. There is a store called Grocery Outlet and it is a little bit cheaper, but they don't have everything you need. But on a regular basis, they are the stores where people buy their food. Those types of stores. And as I said, since everything is so expensive, sometimes you limit yourself to buy certain things that you know are better to nourish your body and not get sick, but sometimes because everything is so expensive and many people or I myself sometimes stop myself from buying certain foods because I know they are good for me, but I know they cost a lot." - Ellensburg

La Via Campesina's principle of food as a human right is directly tied to reliable access to healthy, desirable, and culturally relevant food. Understanding the limitations current markets impose on the consumer is crucial to understanding who benefits from the food system. These interviews with people highly involved in food systems clearly highlight the shortcomings of contemporary markets in providing equitable food access. Barriers imposed by food costs and logistic difficulties prevent many from achieving sustained nutritional security and food choice autonomy, and this burden is disproportionately placed on those with less financial resources and available time. Additionally, rural communities may face greater barriers to equitable food access because of a spread out population and price inflation in higher amenity areas.

What are the perceived connections between food access, local agriculture, and wellbeing?

The commodification of food has closely linked food trade and agricultural production with global capitalism. This commodification has not only failed to achieve adequate food security and ensure everybody has access to food per their human rights, it has also led to market-based 'solutions' that hinder community autonomy and wellbeing outcomes (Otero et al. 2013; Lawrence 2017; Sbicca 2018; Carolan 2020).

When general food security needs are not met because of pitfalls in commodified food systems and the global food regime¹², food banks are often the last resort for protecting community members from malnutrition. Food banks often rely on donations of money and goods to stay afloat, yet are often referenced by non-food needy community members as a stable cog in the fabric of the community. Community members often brought up food banks as an example of the *lack* of food insecurity in the community rather than an example of the presence of need. Food banks and the people that run them are aware of the essential service they provide to the community. However, many people who run food assistance programs expressed a further awareness that the high demand for their services was a sign of larger systemic problems with food systems. While it is much better for community members to have a food bank to comfortably rely upon than to go hungry, the number of people relying on food banks demonstrates a deeper flaw within current systems of trade.

"I think [the number of people the food bank serves] is going to just get larger. About four years ago, five years ago, there was a community impact study from the county and it said that our senior population was going to get bigger and poorer and we are beginning to realize that as true... And also, we have two businesses that are coming into Ellensburg or into the county... They're going to employ a lot of people. I have forgotten the exact number, but they're mostly low level jobs and so those people are going to be struggling when they get here... \$20 an hour is not going to do it. \$25 an hour is not going to do it. So those are realities that are out there for us."

Systemic issues within the food system are not limited to consumer access to goods and food or nutritional insecurity. Changes in agriculture over time have led to increasing consolidation of farm ownership and other aspects of the agricultural industry. For example, agriculture in lower Kittitas County is now controlled by the hay industry.

¹² Friedmann (1993) defines the food regime as "the rule-governed structure of production and consumption of food on a world scale."

Timothy hay and alfalfa have almost entirely replaced the more diverse types of agriculture that were once more plentiful in the area.

"I arrived here in '96, and I saw many fields of apples, pears, cherries, and many fruits around. And over the years, as the ranchers, what they want is to make money, now they have been changing them for fields of hay ... Now I don't see trees anymore... So we are losing a lot of fruit that should be cultivated." - Ellensburg

Investment groups or corporations from outside of the community have demonstrated an increased interest in buying agricultural land or holding stake in the food system. While farmers are already facing tight profit margins, outside investment can make financially-sustainable smaller scale farming significantly harder in current systems of trade.

"The other [change] is that big corporations, big entities are eating up those small farmers. There will be a point where there are not going to be many small farmers; it's going to be those big companies owning most of the farming." - Yakima

This changing ownership structure poses a threat to small and mid-sized farmers, who are forced to compete with entities that possess much greater resource capital than nearly any farmer. The corporatization of agriculture and food systems continues to work its way through the food chain, even threatening to dispossess those who have been fortunate enough to own multi-generational farmland.

"There's been a fair amount of private equity purchasing farms. You see more and more guys out there just managing farms for private equity, and that was kind of there, maybe just a handful of guys doing that and now there's quite a few more doing that now. And you know, those guys just have access to capital that we just don't ... And obviously that is a concern for all of us moving forward. What happens there as we have more investment and the size of the industry grows and nobody can make any money and those guys are probably going to outlive the guys that are here. They just have resources that we just don't, that we just can't match. And so yeah, what happens to the family farm long term." - Yakima

As pressure to produce and profit is ratcheted up on farmers, labor relations on farms can be strained even further than they historically have. Changing environmental conditions such as extreme heat events and poor air quality from wildfire smoke have increased stress on workers, but workplace dynamics and unequal power dynamics can further exacerbate labor exploitation.

"[There's] really a disconnect between the way [farm]workers and service organizations experience their work and the way that growers and labor managers describe it. And so in some cases there's overlap, but in other cases it's like they're talking about two different things ... I don't know what that means yet, but I think some collaboration that includes both growers and workers could be helpful and also very complicated. Since workers are unlikely to speak freely around their employers. And so there's this sort of power differential that I think is really inhibiting safe working conditions." - Yakima County

Ultimately, there is a confluence of factors that tie wellbeing to food access and local agriculture in this region. Food banks provide vital services that protect a minimum level of wellbeing by working to prevent complete food and nutritional insecurity. While the cost of food continues to rise, farmers are increasingly facing financial pressures to grow their operations, specialize in certain crops, and/or bring in sources of outside investment. These external pressures can strain relationships between communities, farmers, and farmworkers. When the relational foundations of agriculture are strained, not only does the wellbeing of those involved potentially diminish, but new hazards emerge as environmental changes pose emerging threats to agricultural working conditions.

What factors that enable or inhibit food sovereignty on the individual and community level?

A central tenant to food sovereignty and community-led food systems is the principle of democratic control. Democratically-controlled food systems are those that are run by the people who hold the majority stake in the distribution of 'goods' and 'bads' within food systems. In most cases, these people are consumers, farmers, farmworkers, and food chain workers such as meat packers and restaurant or grocery store employees. In our communities of focus, understanding the empowerment of these entities is crucial to understanding food sovereignty and wellbeing. Insights on the labor dynamics that impact farmworker safety and autonomy, the ownership structures that impact farmers, and the systems of trade that tie food systems together allow an understanding of who food systems are truly working for.

Historically, agriculture in the Yakima River Basin relied heavily on a workforce largely composed of recent migrants from Latin America. However, as these migrant families are now two or three generations settled in the community, many of their children have achieved upward socioeconomic mobility and are no longer looking for hard-labor jobs in agriculture. While these farm workers may not have held direct ownership over agricultural production, they received enough of the benefits of their labor to facilitate multi-generational positive outcomes in their families. Many farms in the area have turned to the H-2A guest worker program to ensure they have adequate staffing during the summer growing season and fall harvest. The H-2A program is complex, in that the presence of regulations can protect farmworker's wellbeing when compared to undocumented, unregulated migrant labor conditions. However, H-2A

workers can feel beholden to their employer and lack the knowledge or feelings of empowerment needed to advocate for just living and working conditions.

"Most of the H-2A people that come here are, again, from Mexico. ... They come here and they like the program, too. They make a lot more money compared to what they are used to in Mexico. And so they really come here to work hard no matter the conditions, to get money and bring it back to their families in Mexico. And so there's two things there. One is that they become a very vulnerable community in the farm industry because, again, they come here to just make money so they want a lot of hours and the examples that we have of people that had heat strokes last year, they were mostly from the H-2A program ... And so they're very exposed to being harmed during the farming processes. ... They have less power to protect themselves because they are obliged to one grower and they want to come back." - Yakima

Not only are the burdens of negative externalities in agricultural labor unequally distributed, but the benefits of rich local agricultural production are sometimes not immediately experienced by the community. While many interviewees discussed the presence of farmers markets and fruit stands as opportunities for people to purchase locally produced foods, cost was routinely referenced as a barrier for many community members to regularly obtain high quality local produce. Additionally, globalized trade and complex supply chains often mean that the most profitable outlet for locally produced goods is not to sell the highest quality food in local marketplaces, but rather to ship them elsewhere. The following quote illustrates an example of an interviewee discussing Yakima County-grown peaches only available in Seattle, but those connected with agriculture often discussed national and international markets as the final destination for many crops grown in the Yakima area.

"I live in the middle of cherry, apple, and pear orchards. I could literally walk across the street and grab some off the tree. And so many places are like, "what?" And there's such an abundance, and yet so many of our population don't have access to that." - Yakima

"And honestly, I think even though in the summer we are this basin of fruit and

things, I think most people still just go to the store, and probably get fruit and vegetables that were from Mexico or California or whatever, which I just think is funny. But, again, the wealthier you are, I think the more people go to things like the farmers market or fruit stands... But, you know, there are definitely food banks and other programs and things that get the extra [produce] that isn't perfect for the grocery store. So it's not that those things don't exist. I think it just strikes me every time because, it's just always the people doing all the work that don't reap the most benefit from, you know, the produce." - Yakima

Furthermore, these supply chains rarely maximize financial benefits for farmers. Interviewees often referenced decreasing profit margins and increasing difficulty making ends meet for both producers and smaller-scale distributors. While these findings have established that farmworkers often receive unjust treatment in their positionality within food trade and labor relations, it seems to be an increasingly common sentiment in agricultural circles that farmers are also receiving inadequate compensation in financial arrangements.

"Someone is making the big money but it's not the growers ... And so we were looking at prices of the fruit and the growers were getting not even a tenth of that. ... Somehow the fruit becomes really expensive and not accessible for the people, for the community... So, there's something going on in that process that someone is making money with the fruit that they don't produce, and it's increasing the price of fresh fruit for the community. So I don't know what to do about that but it's a big problem, it's a big problem." - Yakima

In addition to participant's discussions of increased consolidation of ownership in agricultural production as a major issue for community food sovereignty, interviewees discussed consolidation and corporatism in the food retail sector as another way in which food systems are centralized. Smaller community-owned stores are being displaced by larger retailers with significantly greater market control. This can have implications for food availability, food prices, and job quality in the community, as bigger box stores are much less likely to tailor their services to community wants or needs.

"You can drive down pretty much any main drag in any rural town and see all

these small [grocery] stores that have been closed up over the years, and then just outside of town is a big box store." - Yakima County

"Safeway has classifications for their stores and we are classified as a tourist community, so the prices are reflected as such. So the Safeway that my mom goes to in [suburban Washington] has different prices than the Safeway that we have here [in Cle Elum]. And it's quite a bit higher, which makes it difficult for the people that live here." - Upper County

Along with the importance of considering the impact of economic forces and supply chain dynamics on agriculture, it is also consequential to understand dynamics at the nexus of local environmental conditions, climate change, and the social dimensions of food systems. Comprehending the role of the environment in local agriculture is extremely important for evaluating contemporary community-level food sovereignty, as well as the ability of future generations to produce food. The Yakima River Basin is environmentally unique in a number of key ways. As a semi-arid region reliant on snowpack, water resources are carefully monitored and strictly adjudicated. Actors in the region have taken immense steps towards future environmental sustainability, as the Yakima Basin Integrated Plan (YBIP) has been nationally lauded as a proactive effort to protect hydrologic resources into the future.

"And so we, there's reservoirs that feed the, feed the valley that have been developed over time and, and for — to have a consistent water supply and and so it's, it's, it's a good sustainable place. I mean, we're not pulling groundwater to feed crops, we're relying on annual snowmelt and rainfall, but just, you know, we're kind of a semi-arid environment that's close to a good water source, which is kind of a unique place really." - Yakima

While the agricultural community has continued to work towards policy and planning that protects natural resources into the future, there are still immediate threats to farm production. The impacts of climate change are already being discussed by those

close to agriculture. Issues such as extreme heat have an impact on both crops and workers.

"So with climate change, now we can see that the temperatures are rising every year. We have summers that start with really high temperatures much earlier every year so that has an impact on fruit growth and fruit development. Sometimes they don't develop the right way because they needed more time to grow before that, those hot temperatures heat the fruit. Also it affects farm workers because being in such high temperature means that they have to start working earlier or maybe sometimes working at night to avoid those high temperatures during the day. So it also has many more fires and workers having to work in the middle of that smoke, having to wear masks anyway because they want to avoid breathing those smoke particles. So we also had a very weird spring [last year] where we had snow during spring, which affected the growth of apples and cherries. So we had a significantly lower crop load last year. And farming is the economic prosperity of Yakima. So if farming is affected, it affects the entire profitability of the city. So climate change is having a big impact on our farming operations." - Yakima

As noted in the previous quotation, changes in precipitation and winter weather conditions pose a potential threat to some of the crops that are crucial for the Yakima River Basin's agricultural economy. Farmers in the local fruit and hay industries have experienced issues with unusual weather conditions disrupting their anticipated harvest. In the hay industry, low snow years may influence water rights dispersion, and limit the number of cuts a farmer can make from their crop. In the fruit industry, unforeseen weather may harm the crop.

"For example, in the winter there's less cold so the trees don't get dormant, and they become very susceptible to frost. And then we have these frost events that are more randomly happening, in the last three years, that have frozen the bats and the future fruit so they have lost a lot of crop last year. Cherries were about 45% less due to the frost plus a rain event at harvest that was unexpected and cracked the fruit. So there's a lot of events that, although they might say it happened many years ago, now they admit that is happening not only more frequently, but more erratically. And also, for example, the heat is not just about having hotter days, but prolonged weeks of hotter days... So what I do for that is, well, one is to

make the growers aware that this change in climate is not gonna be less in the future, that it's gonna probably increase in the future. And how we manage or mitigate some of these issues, those are related to the use of water, be more proficient or precise in the use of water and fertilizers, and the use of techniques to reduce the heat stress on the fruit." - Yakima

The treatment of farmworkers, the distribution of locally produced foods, changing environmental conditions, and the political economy of agricultural ownership are all extraordinarily important factors to understand when discussing community-level food sovereignty. While food sovereignty is uplifted in this region through farmers markets, the continued presence of some locally owned farms, and the adequate compensation of some agricultural workers, there are also examples of overly expensive local foods, absentee ownership of farms, and exploitation of farmworkers.

Community-level food sovereignty is complex, but it is easily recognizable that broader social, economic, and political forces are inhibiting food sovereignty in this region. While the people represented in these interviews are working tremendously hard to provide their communities with autonomy within food systems, broader change is likely necessary to empower people on the individual and community level.

DISCUSSION & CONCLUSION

The primary weakness of this research is the limited number of farmers and farmworkers included in our dataset. Despite the research team's best efforts to offer interviews in Spanish and English, recruit both before and after the growing season, and make multiple trips to conduct in-person research in the area, we were only able to speak to a limited number of people in these interest groups. However, we were able to speak with a number of particularly involved stakeholders from a wide range of positions

within food systems. This resulted in our rationale to utilize the food system key informant classification for this research. True community-engaged research with groups such as farmers and farmworkers would likely take much longer than a several-month time period, and a research team with better established community connections prior to beginning research. Future directions for work in this area could strive to accomplish these goals and gain an even greater understanding of the differences in perspectives between groups with varying amounts of participatory power in food systems. Despite this weakness, this paper still builds an understanding of community-level food sovereignty and its impact on wellbeing.

These findings resonate with, contribute to, and expand upon existing food systems research in a number of key ways. The first of which is centered upon food and nutritional insecurity in current systems of trade. Although food is recognized as a human right and food security is often pointed to as a sociopolitical priority (Carolan 2020), rising food prices and logistic difficulty accessing food sources seriously hinder individuals dietary autonomy. These findings further demonstrate that capitalist markets and corporately controlled food systems may have created reliable access to food for wealthy individuals with personal transportation, but this system of trade inequitably impacts the food access of lower income individuals, particularly in rural places or food deserts (Otero et al. 2013; Lawrence 2017; Sbicca 2018; Carolan 2020).

Additionally, food banks serve a very important role in delivering basic human needs to food insecure community members, but they are not long-term solutions for the systemic causes of food injustice. While many of the food bank employees we spoke with discussed ample funding and community support at the moment, they also recognized

that deeper flaws within the political economy are the cause of food insecurity, and that the solutions to those flaws are very complex. Generosity of wealthier community members and the hard work of food bank staff allows food banks to keep serving those in need, but relying upon fundraising and donations can lead to future difficulties if donations decrease in amount or quality (Bazerghi et al. 2013).

The results of this research also further our knowledge of the community impacts of changes in agriculture over time. Patterns of consolidation in farm ownership has been a longstanding issue researched by sociologists (Guthman et al. 2006; Horst and Marion 2019; Carolan 2020), but this paper contributes to our understanding of how changing control impacts community wellbeing. Agriculture was often referenced as crucial to local economies, local identities, and community heritage, particularly in Yakima County and around Ellensburg. As ownership continues to shift away from local farmers and power accumulates with outside entities, smaller scale local farmers are left with fewer resources or ultimately facing the tough decision of whether to sell their land. This has many downstream effects referenced in interviews, including lower levels of community philanthropy, greater proportions of local crops becoming exports, and changing labor structures in local agriculture.

These findings also further our understanding of changing agrarian labor structures and their community impacts. The H-2A guest worker program is a complex system that can provide decent wages to agricultural workers and much needed labor to farms, but can also lead to worker exploitation. As most H-2A workers are from Latin American countries, the program also perpetuates racialized dynamics in agriculture. Particularly given the temporary residency of H-2A workers, it is very difficult to

accumulate capital, community connections, or the power needed to transgress the role of temporary worker. Allowing guest workers to transition to permanent US residency and employment may afford them the opportunities that longer term migrant families in the Yakima area have been able to take advantage of. Interviewees often referenced the upward mobility of multigenerational families who originally came to the area as farmworkers, and now have a current generation of 20-30 year olds who own businesses or have advanced degrees.

If ownership consolidation in agriculture and food points-of-sale continues, community food sovereignty will only be able to occur in spite of capitalist systems of food trade. Food banks, community-run agricultural organizations, local university extension agents, and smaller scale farmers are all crucial to ensuring communities maintain some degree of autonomy within food systems. These entities should get assistance from government agencies whenever possible. Additionally, government regulations imposed on agriculture or other parts of the food system must consult closely with those working on the ground. Food system policy should protect consumers, farmworkers, and farmers regardless of their relative power within the political economy.

Our findings may provide insights into forward-looking adaptations that could increase equity in food systems. Many initiatives in the upper YRB have worked to increase equity in food access, such as food delivery programs, food assistance usage at farmer's markets, and a free grocery store. Additionally, community-led agricultural cooperatives may further empower people to grow and sell their own high-quality food. This is of course easier said than done. However, examples such as the Detroit Black Community Food Sovereignty Network illustrate the potential benefits of community

collaboration in this manner (White 2010; White 2011). The path towards just outcomes in food systems is complex, but the potential benefits may reap immense rewards for equitable wellbeing in the future.

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CHAPTER III

UNDERSTANDING THE ROLE OF FOOD SYSTEMS IN PERCEPTIONS OF SUBJECTIVE WELLBEING: A CASE STUDY IN WASHINGTON'S UPPER YAKIMA RIVER BASIN¹³

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ABSTRACT

As bodies of research on both subjective wellbeing and food systems continue to grow, qualitative assessments linking the two areas builds an understanding of how varying experiences within food systems may impact quality of life. This research engages with data from 121 interviews across six different communities in two counties in central Washington linking subjective wellbeing to community experiences within food systems. Analyzing participant perspectives illuminates important insights into food access and the impacts of agriculture on both individual and community wellbeing. Findings suggest that variations in food access between and within communities often disproportionately hinder the food access of people in rural places, lower income demographics, and people without access to personal transportation. Additionally, changes in agriculture over time have put long-standing agrarian livelihoods under threat. In particular, we find that as ownership structures continue to shift, some community

¹³ This paper is written to meet the requirements of the Journal of Hunger & Environmental Nutrition. According to this journal, research articles should no more than 25 double-spaced pages and written with the following elements in the following order: title page; abstract; keywords; main text introduction, materials and methods, results, discussion; acknowledgments; declaration of interest statement; references; appendices (as appropriate); table(s) with caption(s) (on individual pages); figures; figure captions (as a list).

members believe they are less likely to reap the economic and cultural benefits that have historically resulted from a close relationship with agriculture. However, agriculture is also seen by some as providing a valuable source of jobs and economic security in several communities of focus, suggesting a complex variance in community perspectives. To assess the implications of these findings, we draw upon La Via Campesina's food sovereignty framework. Taking these qualitative perspectives into consideration, we conclude with a forward-looking discussion of potential food system reform suggests potential improvements for increased equity.

KEYWORDS:

Food sovereignty; Food justice; Food insecurity; Food access; Community wellbeing; Individual wellbeing; Subjective wellbeing

INTRODUCTION

Wellbeing is a complex concept that can be broadly defined as "anything that creates a good life" (Bache and Reardon 2016, p.5). Prioritizing wellbeing as a metric for success is becoming an increasingly common goal in policy-making and community decision-making (Bache and Reardon 2016). Food systems, as currently constructed, are understood to pose potential threats to long-term social, environmental, and economic wellbeing (Ericksen 2008). These wellbeing implications of food systems are important to understand on both large and small scales. When we consider the multidimensional nature of food systems, from individual food security to community relationships with agriculture, it becomes clear that the interplay between food systems and wellbeing is

complex. This complexity deepens when utilizing Ericksen's (2008) definition of food systems as a set of interactions between biogeophysical and human environments that generate activities (from production to consumption) and outcomes from those activities.

Given that both wellbeing and food systems are recognized as important areas for future research and policy-making, research discussing individual and community perceptions of both are vitally important. There are many different ways to assess individual and community wellbeing, but current best practices often center holistic measurements that allow for a case-by-case understanding of wellbeing variation (King et al. 2014). Qualitative research linking food systems to subjective wellbeing can build upon a growing body of critical food systems literature to better our understanding of how food systems impact people's perceived quality of life.

Among the framing of social issues within food systems, perspectives can vary from food sovereignty (La Via Campesina 1996, 2009), to food justice (Alkon & Norgaard 2009; Gottleib & Joshi 2010; Alkon & Agyeman 2011; Cadieux & Slocum 2015; Sbicca & Myers 2017; Sbicca 2018; Norgaard 2019; Carolan 2020), and food security (Guthman et al. 2006; Mooney & Hunt 2010; Otero et al. 2013; Lawrence 2017). Of these three frames, food security alone is widely critiqued for not considering enough dimensions of the food system in discussing its shortcomings (Lawrence 2017). Food security is an obviously important policy goal, but a holistic approach to food system research that also considers labor issues, environmental concerns, and local control of agriculture is important (La Via Campesina 1996, 2009; Carolan 2020).

This research is guided by La Via Campesina's (1996, 2009) framing of food sovereignty into distinct policy positions that can promote positive food system change

and help us understand the current linkages between food systems and wellbeing. La Via Campesina (2009) is a self-described international "organization of peasants, smallfarmers, indigenous peoples and farm workers" who advocate for changes within food systems that empower communities and working people. The group organizes food sovereignty into seven central tenets that are as follows: food as a basic human right, "agrarian reform for food sovereignty", protection of natural resources, "reorganizing the food trade", "ending the globalization of hunger", social peace, and democratic control (La Via Campesina 1996). Several of these themes are particularly helpful for assessing food access and agriculture in the study site.

The concept of food as a basic human right encompasses food security, nutritional security, and access to culturally relevant foods (La Via Campesina 1996, 2009). This compliments La Via Campesina's (1996) ideas around "reorganizing the food trade" as a way to ensure that food systems are working to provide people with the nutrition and foods they want and need, rather than merely trying to produce a profit. As we will discuss later on, food access is often unequally distributed and many barriers exist that prevent equitable food access. Thus, desirable food is not currently guaranteed as a human right and the food system likely needs to be reorganized.

"Agrarian reform for food sovereignty" and democratic control of food systems are directly linked to relationships between communities and agriculture. La Via Campesina (2009) recognizes that the consolidation of ownership in agriculture may threaten community wellbeing, and that many farmworkers do not receive adequate compensation for their extraordinarily valuable labor. In this research, we assess whether changing dynamics of farm ownership are mentioned by interview participants as a

concern in the community and whether individual wellbeing challenges faced by farmworkers are a lived reality.

To expand upon our understanding of the food systems-wellbeing nexus, we analyze data from a qualitative research study in Washington's upper Yakima River Basin (YRB). Interviews were conducted with 121 people in six communities across two counties in an area with prominent agriculture and recreation economies. Yakima County is world-renowned for fruit and hop agriculture, while lower Kittitas County produces a large share of timothy hay for race horses. The wide variation of communities in this study allows for a unique analysis of food access across different types of communities with large demographic variances, as well as changing agricultural circumstances in different commodity sectors.

This research will aim to answer the following questions: 1) How do various dimensions of food access and agriculture influence individual and community wellbeing perceptions? 2) How do these perceptions vary between and within communities in the Upper Yakima River Basin? As we answer these research questions with data from semi-structured interviews, our analysis is driven by participant narratives and experiences (Seidman 2019).

METHODS

Case Study Area

This research engages with six municipalities in two counties in the upper YRB.

Ellensburg, Roslyn, and Cle Elum are in Kittitas County on the eastern slope of the

Cascade Mountains. Naches, Tieton, and Yakima are in Yakima County to the south of

Kittitas. To avoid confusion between similarly named geographic units, we refer to the river basin as the Yakima River Basin or the YRB, the county as Yakima County, and the city of Yakima as Yakima.

The upper YRB's deep agricultural history and natural resource dependence makes this region a suitable site for food systems research. Yakima County is heavily dependent on fruit and hop growing, while lower Kittitas County economy relies heavily upon growing timothy hay for export. Particularly in Yakima County, agriculture makes up a significant amount of land use (Figure 3.1) and is central to local culture. Residents of Ellensburg and other parts of lower Kittitas County also describe agriculture as important to local identity, but Kittitas County's mixed land use also relies on economic activity from tourism and recreation near Cle Elum and Roslyn. This has also led to an influx of wealthy people to the Roslyn and Cle Elum area, often referred to as "Upper County." Some of these newcomers are full time residents while others are seasonal or part-time. This influx of wealth is important to mention, because the impacts of "amenity migration" and rural gentrification are well-chronicled, and are often noted to increase inequality and cost of living stress for working-class people, particularly in places like Upper County that were once dependent on industries such as mining and logging (Pilgeram 2021; Sherman 2018; Winkler 2013).

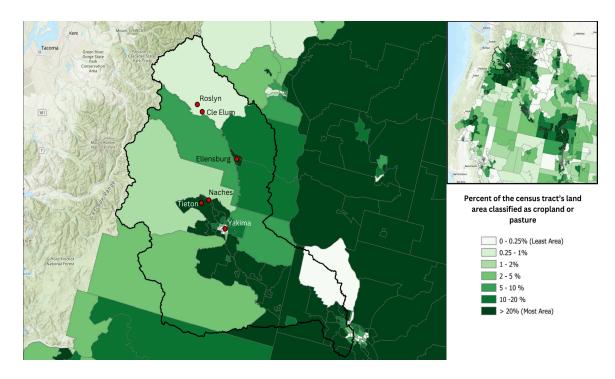


Figure 3.1. Upper YRB percent of census tract land classified as cropland or pasture. Source: Flint et al. 2023.

These unique community dynamics across the study area provide an interesting population for researching linkages between food systems and wellbeing. Both producers and consumers are represented, and there is variance in the degree to which agriculture is expected to provide economic benefit for different communities of focus. Additionally, the demographic differences we will discuss in the next section may provide a lens for discussing socioeconomic and/or racialized differences in food access. The communities of focus in the upper YRB provide a diverse set of demographic compositions.

Study Area Demographics

Despite Yakima County's greater reliance on agriculture, Kittitas County is the more rural of the two (Table 3.1). Ellensburg, Tieton, and Yakima are the towns with the

greatest connection to agriculture, and all three present distinct demographic trends. The vast majority of Tieton residents and nearly half of Yakima residents are Hispanic.

Despite Ellensburg's relative homogeneity when compared to Yakima County communities, Ellensburg is home to a much more substantial Hispanic population than the rest of Kittitas County. Ellensburg is getting more diverse over time, in part given the presence of Central Washington University. As the only major 4-year university in the research site, the university not only impacts Ellensburg's demographics, but also serves as a key employer and cultural cornerstone in the community.

	Kittitas County	Yakima County	Cle Elum	Roslyn	Ellens- burg	Yakima	Naches	Tieton	
Total Population ¹	44,337	256,728	2,157	950	18,666	96,968	1,084	1,389	
Median Household Income ²	\$64,134	\$58,380	\$52,586	\$63,947	\$47,407	\$50,673	\$69,861	\$51,742	
% Food Insecure ³	12%	12%	X	X	X	X	X	X	
% Hispanic ¹	10.4%	50.7%	6.7%	7.7%	13.9%	48.5%	31.3%	72.3%	
% Non- Hispanic White ¹	79.7%	40.3%	84.6%	84.6%	73.4%	43.5%	62.1%	24.0%	
% Employed in Agriculture	7.2%4	27.8%4	2.4%5	9.9%5	3.6%5	11.1%5	17.3%5	18.2%5	

Table 3.1: County and place demographic profiles.

Note: "X" indicates that data at that level is unavailable.

¹Source: Social Explorer Tables (SE), Census 2020 – Preliminary Data (2020).

²Source: Social Explorer; U.S. Census Bureau (2021).

³Source: Gundersen et al. 2021.

⁴Source: Washington State Employment Security Department. 2023.

⁵Source: Social Explorer Tables (SE) ACS 2022 (5-year Estimates), U.S. Census Bureau. Note: Includes forestry, fishing and hunting, and mining, which accounts for Roslyn's high percentage.

Research Design

From March through November of 2023, the research team conducted 121 semi-structured, in-depth interviews with community members Kittitas and Yakima Counties. Of these interviews, 65 were with participants classified as "key informants¹⁴," 52 were with general community members, and four were scoping interviews. Scoping interviews were unstructured conversations with local leaders. The goal of these scoping conversations was to begin gaining an understanding of community needs and work with an influential community member to shape our research methodology around their place-based expertise. Scoping interviewees helped with initial snowball sampling, and we relied heavily on snowball sampling throughout the research process to identify new key informants. Sampling for meaning and online searches were also used throughout the research process to help gain a wider variation of participants. Ultimately, we aimed to interview key informants involved in various 'spheres' of influence, namely local government, business, or non-governmental civic organizations. Individuals identified as potential key informants were contacted via email or phone correspondence and invited to participate in a 45-60 minute interview, often held over Zoom or the phone.

¹⁴ "Key informants" are individuals believed to be particularly knowledgeable about their community because of their involvement in important sectors of community life (Krannich and Humphrey 1986). These individuals are often involved in local leadership positions or are otherwise recognized as carrying influence in their community.

	Upper County ¹	Ellens- burg	Yakima	Naches			Yakima County	Total
Government	3	3	3	1	3	6	4	23
Business	5	2	5	1	1	1	2	17
Non-Govern ment Civic	9	7	8	3	1	3	2	33
Total (place)	17	12	16	5	5	10	8	

Table 3.2: Key Informant Interview Breakdown²

Interviews with general community members were conducted through a variety of modes depending on the community context and advice from key informants, community member interviews generally lasted between 15-30 minutes. In Ellensburg, approximately half of the 17 community interviews were conducted in-person, while half were conducted via Zoom meetings or phone calls. In-person interviews in Ellensburg were conducted during a day in which the research team rented a space in the town library and advertised our desire to speak with community members about community wellbeing. In Roslyn and Cle Elum, all 24 interviews were conducted in-person during community events over Labor Day weekend. In the Yakima County communities of Naches and Yakima, all 11 community interviews were conducted remotely over Zoom or the phone. No community interviews were conducted in Tieton, although the research team collaborated with community partners on recruitment efforts several times throughout the summer and fall of 2023. Flyers were distributed in Spanish and English through public postings in local businesses, at community events, and through food bank distributions. but no Tieton community members volunteered to participate.

¹ Cle Elum and Roslyn are grouped together under their regional moniker, Upper County.

² Total adds to greater than 65 key informants because some interviewees are classified in multiple spheres because of their multiple roles in the community.

Interviews with key informants and interviews with general community members followed the same basic structure, although key informants were often asked to go into greater depth on their role in the community and their topic(s) of expertise. As interviews were semi-structured, the interview protocol had slight variations and often included probing questions. However, interviews generally covered general perceptions of community life and wellbeing, food access and agriculture, local environmental conditions, population and demographic change over time, and connections to other communities in the region. The variation of topics covered in these interviews allows for insight into how food systems are prioritized in conversations about community wellbeing when compared to other issues.

Interviews were recorded, with participant consent, transcribed using the software Otter.ai, then edited by members of our research team, and subsequently coded using ATLAS.ti. The research team included bilingual Spanish speakers, who could interview, transcribe, and translate Spanish-speaking interviews into English. Interviews were first coded into general topic groups based on topics of general wellbeing, food access, agriculture, environmental conditions, and population or demographic change. These were the areas of interest that most frequently came up in interviews, as well as the topics that would eventually be coded for specific themes.

A first pass of grounded coding was conducted on a select set of interviews with extensive discussion of food and agriculture to allow for emergent themes and to ensure that analysis is rooted in participant narratives (Glaser and Strauss 2010; Bailey 2017; Seidman 2019). Further coding was conducted using an abductive approach¹⁵

¹⁵ An abductive approach to qualitative research is based upon the incorporation of existing theories into a process that also allows for new ideas to emerge through grounded methods. Essentially, theory is put in conversation with emergent findings to either confirm, build upon, or counter the existing framework

(Timmermans and Tavory 2012) on specific themes tying food access and changes in local agriculture to participant's framing of wellbeing.

An additional coder was incorporated into the analysis process for 10 of the interviews. Discrepancies between the two coders were discussed and solved via unanimous decision until an adequate Krippendorff's Alpha of .797 was reached. This Alpha score is deemed satisfactory under the assumption that analysis should always strive for a score of 1.000, while .667 is acceptable and .800 suggests significant reliability in the coding process (Krippendorff 2019).

FINDINGS

To restate from the introduction, the central questions in this research are 1) How do various dimensions of food access and agriculture influence individual and community wellbeing perceptions? 2) How do these perceptions vary between and within communities in the Upper Yakima River Basin? To provide short answers to these questions, there are several different dimensions of food access and agriculture that impact both individual and community-level wellbeing outcomes. Participant insights also illuminate interesting discrepancies between and within communities in these wellbeing impacts, oftentimes these differences were even explicitly noted by interviewees. Some of the recurring themes regarding food access are the accessibility and high cost of local food, reliance on food banks or other food assistance programs, food insecurity, and the price of high-quality food. Recurring themes regarding agriculture include the importance of small and/or family farms to community life and

⁽Timmermans and Tavory 2012). This is different from the purely grounded approach to research in which empirical findings formulate new theories (Glaser and Strauss 2010).

community identity, as well as changes in ownership of agriculture over time (Table 3.1). In this section we further explore each of these takeaways.

	Describing food insecurity		Discussing usage of food aid		Disc. high cost of food		Disc. Consolid-ati on of ag. ownership		Talking about prevalence of small or family farms		Disc. access to local food		Total
Ellens-b	•		4.0		•				10	0	22		101
urg N=30	20	14	43	20	20	14	3	3	12	8	33	24	131
Upper County N=38	27	16	18	11	18	10	2	1	3	2	25	17	93
Kittitas County N=10	20	7	16	6	12	4	1	1	5	5	18	10	72
Naches N=6	7	3	1	1	5	3	2	2	3	3	8	4	26
Tieton N=5	8	3	13	5	1	1	5	4	4	3	5	4	36
Yakima N=25	22	17	31	19	9	8	15	6	23	14	45	22	145
Yakima County N=7	6	3	5	4	1	1	15	5	12	5	11	6	50
Total N=121	110	63	127	66	66	41	43	22	62	40	145	87	553

Table 3.3: Prevalence of selected codes by community.

Note: The first number in each column is the total coded quotations, the second is the number of interviewees who mentioned that theme.

Food Access

While many individuals in each community discussed rising costs of living and grocery bills as stressors for many people, these financial pressures have variations in the ways they are experienced between and within communities. For example, the influx of tourists and wealthier residents in Upper County has been met with price hikes at the

local grocery store, an unwelcome burden that is only compounded by rising property values in the area.

"But as we move forward and they're, the need continues to grow, especially with the problems we have with availability of food and the price of food for people that are trying to live and work in this community that are maybe making minimum wage or a little bit more at restaurant resort type jobs."

"It sounds weird, but Safeway has classifications for their stores and we are classified as a tourist community and so the prices are reflected as such. So, the Safeway that my mom goes to in [suburban Seattle] has different prices than the Safeway that we have here. And it's quite a bit higher, which makes it difficult for the people that live here."

High cost of food was also discussed in other communities as an additional source of inequality, as only well-off residents can afford high value organic or local goods.

Many participants expressed concern about the quality of food that working class families are able to afford, recognizing that many cheaper foods come with potentially negative health consequences.

"I will say food's gotten more expensive, access to healthy, fresh foods. It's like poor people get the processed stuff. And I just think access to healthy food is a difficult one just for price more than anything."

Despite the strong presence of local agriculture, many participants discussed the unequal

distribution of locally grown foods in their communities. This can result in a paradoxical situation in which farmworkers quite literally do not have access to the fruits of their labor. Additionally, in many communities this means that those with less purchasing power often are priced out of high-quality local goods. Agricultural exports are important for local economic vitality, but can come at the expense of readily available local produce for many in the community.

"Like I said, we are the fruit basket of the region. We have apples, we have everything, tree fruit, ground fruit, vine fruit, whatever it is. And then also a lot of dairy, a lot of meat stuff. We have pastures and with all of these resources out here, all this fresh organic food that's constantly growing. Yakima, actually the entire region down here, has absolutely no market, supermarket or a retail store, or like, you know, some type of more health-based market dedicated to organic produce, organic food. And that is painful. Whether that can be accessible to people based on the income here, I don't know, maybe that's the reason. But I also think that there could be a little bit more focus on bringing the food that we're sending everywhere here for a reasonable price. Based on loss of prices and distribution, lowering costs related to that. So, food access generally isn't here."

In rural communities such as Tieton, where agriculture produces large quantities of fruits and vegetables, many local people are not only cost limited when it comes to purchasing food, they are also burdened by a dearth of grocery options. Interviewees in Tieton noted their lack of an adequate grocery store, and discussed the necessity of personal transportation to access the goods they need in other towns. Individuals in other communities also noted the difficulties some rural residents face accessing food market places regularly, especially homebound seniors or migrant farmworkers.

"I consider [food access] to be poor. I have to drive about 12 to 14 miles to a regular grocery store. We do not have a farmers market. We do have a small grocery store about three to four miles from my house. But it does not have things like organic produce, it has mostly packaged foods."

"I mean, if you are an H2A worker and you're buying food in Tieton because this is where they take you to shop, in the little markets here you can only buy like five different produce items. Maybe 10. To me, that is almost a food desert. It requires transportation to get to a full menu of food."

Even in larger communities, food access is unequally distributed across town, and some individuals face a larger travel burden than others. In Yakima, some interviewees discussed how the higher quality stores with more food options are located in parts of town with a higher population density of well-off people. This means that people who may already face socioeconomic challenges are further challenged with an additional

transportation cost if they want to access culturally relevant food and desired stores, oftentimes to avoid an additional health inequality from eating more processed or low-quality food.

"Where there are more big, pretty houses there are lots of stores to go buy food. There is a store I really like, but it's all the way over there. Like where they live in those big, pretty houses, it's further up. So, I barely go there, and there they sell healthier food. And here where I live lower down there is no store like that one."

When food access is unequally distributed either within or between communities, food banks often have to pick up the slack to ensure that all community members have their basic needs met. Many interviewees discussed the significant role of food assistance programs in their community. Examples of food aid are traditional food banks, food delivery programs, free hot meals, Supplemental Nutrition Assistance Program (SNAP) usage at farmer's markets, and even a free to use grocery store in Yakima. As food insecurity persists for some, food banks will continue to provide a bandage on the gaping wound that is inequality within food systems. Without the resources provided through food assistance programs, the detrimental effects of contemporary food systems may weigh even more heavily on subjective wellbeing.

"But my wife says [groceries] are all going crazy expensive. And I know that there's been an influx of folks using our food bank. So, I think that's an indicator that it's getting unmanageable."

"I also think because of the economy, how it has been over this last little bit, people who've never asked for resources before or really thought about resources before are asking for resources for the first time."

Agriculture

Despite the changing social and economic landscape of agriculture, participants in Yakima County communities and Ellensburg often discussed the presence of agriculture as important for the future of their community. As both an economic resource and a source of cultural and community identity, farming has been central to livelihoods in these communities for generations and will continue to be a point of pride and jobs for many. However, there is a growing recognition that these jobs and agricultural livelihoods will likely look different in the 21st century than they have in the past.

"I think agriculture will be here and will be an opportunity for people... The small family farm is becoming a thing of the past, right? You might have families or farmers that are working for a larger corporation that owns the land, infrastructure, all the equipment and everything and you work for them. But as far as careers go for people in agriculture, I think it'll stick around."

Jobs in agriculture technology and farm management may provide more opportunities for high paying occupations in traditional farming communities. However, the viability of the stereotypical small family farm was frequently discussed as a relic of the past by many interviewees. The consolidation of ownership in agriculture has resulted in larger but fewer farming operations, pushing out many small-scale producers. Additionally, outside investment from private equity groups and investment funds has increased the frequency of absentee ownership in local agriculture.

"And what unfortunately we've seen happen at least twice is that some of these family farms have sold to huge investment firms. And obviously, they do not have a connection to the community. It's all about the bottom line and their shareholders and we don't see the same investment philanthropically back into the community. And that is a concern."

The importance of agricultural philanthropy was routinely mentioned by many key informants in agricultural communities as important to both local economic vitality

as well as the social fabric of their community. As the ownership of agriculture shifts to people who are not involved in the community, there is a concern that farming communities will lose some of the investments they have historically relied upon.

Additionally, there is a fear among some interviewees that pieces of community identity and pride in local agriculture may be lost as farms grow and are owned by outsiders.

"There are less and less small family farms. They are almost non-existent. Which is worrisome because we are an ag. based community, we have that rich history, and there are a lot of old families that have owned farms for generations and generations and generations, and they're being gobbled up by large corporate entities that own equity in these farms. And so, as a result, you're losing that personal touch that your ag community used to have."

Some interviewees also discussed farmworkers as essential to their community. The dynamics around agricultural labor are complex, and the landscape of this labor is rapidly evolving in these communities. Historically, fruit agriculture in Yakima County relied heavily on farmworkers coming to the area from Mexico, and many of these families have now made the Yakima area their permanent home. As these families have settled in the community for multiple generations, many of their children have achieved upward socioeconomic mobility and are no longer working as laborers. Thus, many farms in the area have turned to seasonal migrant workers on H-2A visas¹⁶ to provide a badly needed workforce. The treatment of these workers can vary highly based on the degree to which labor regulations are actually enforced, and under the wrong circumstances the workers may be vulnerable to workplace hazards that directly threaten their wellbeing.

"[Agriculture] is the major economic driver here. Whether it's trucking or cold storage or the manufacturing of the boxes and all of the things that go into the marketing. There's so much that's dependent on the agriculture industry here. And

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¹⁶ The H-2A visa program is a temporary agricultural worker program utilized by many producers in the United States. The program is strictly regulated to enforce maximum amounts of time that H2A workers can stay in the U.S., and minimum amounts of time they must return to their home countries (USCIS 2024). In the YRB, many H2A workers are from Latin American countries.

the people who work out in the fields and pick the fruit and prune the trees and, you know, do the labor, without that we wouldn't have the food, we wouldn't have all of the things that come from that without their investment here."

"Most of the H-2A people that come here are, again, from Mexico. ... They come here and they like the program, too. They make a lot more money compared to what they are used to in Mexico. And so, they really come here to work hard no matter the conditions, to get money and bring it back to their families in Mexico. And so, there's two things there. One is that they become a very vulnerable community in the farm industry because, again, they come here to just make money so they want a lot of hours and the examples that we have of people that had heat strokes last year, they were mostly from the H-2A program ... And so, they're very exposed to being harmed during the farming processes. ... They have less power to protect themselves because they are obliged to one grower and they want to come back."

DISCUSSION AND CONCLUSION

There are limitations of this project that may be addressed through future research. Given that the research team are 'outsiders' to these communities, it is possible that we were not able to access certain social networks that may be available to people with longer-standing community connections. Particularly in some of the rural communities, we were told that people are inherently distrustful of people they do not know. To combat this, we relied heavily on collaborations with trusted community members and partnerships with both Washington State University and Central Washington University. Additionally, longitudinal research that takes place over several years may provide better insight into how food systems are evolving and impacting wellbeing over time. Shifts in environmental conditions, development, and other areas of community life may impact the answers people provide, and it is likely that their perceptions are embedded in their current state of mind. Research spread out over a longer period of time can more holistically assess subjective wellbeing.

As demonstrated in the participant experiences and opinions that came to light in these interviews, food access and agriculture are impacting wellbeing on both the individual and community-level. To explicitly answer our research questions regarding food access, the accessibility and affordability of desirable, quality food varies across groups within the Upper YRB. These variances often disproportionately hinder the food access of people in rural places, lower income demographics, and people without access to personal transportation. Additionally, non-white racial and ethnic groups often have to work hard to gain access to certain culturally relevant and desirable foods. Each of these factors can hinder wellbeing on the individual and community level. When individuals' material needs are not met, they are less likely to have high wellbeing (Wilkenson 1991). Additionally, when community members may need to regularly travel long distances to gain access to food, community wellbeing may be hindered through a variety of factors.

While food banks do great work to ensure basic food security needs are met, there is much work to be done in regards to nutritional security and consumer choice in the marketplace. Thus, food as a human right as defined by La Via Campesina (1996) is not being met. This burden should not fall solely on food banks, increased funding through government programs could further increase equitable outcomes. Potential policy options include the expansion of government-funded "food as medicine programs" (Food is Medicine Coalition 2024; U.S. Department of Health 2024), expanded ability to use food assistance programs for purchasing at farmers markets or CSA subscriptions, as well as regulations on price gouging in rural areas and high amenity tourist destinations. Even if these "solutions" do not provide full food sovereignty to communities, and are merely

band-aids on systemic issues, they will still move towards improving the delivery of adequate food as a basic human right.

Many of the discussions in interviews in this research suggest that people are interested in buying local and high-quality foods, but there is clearly a price barrier in place that prevents many from achieving this goal. Shifting government subsidies and funding from large corporate funds (Carolan 2020) to smaller, community-oriented operations may help decrease the costs of local food. This may improve food access for lower socioeconomic status communities while also helping smaller scale farmers confront the challenges discussed in this research.

To answer the agricultural portions of our research questions, a multitude of factors in agriculture are potentially threatening and uplifting wellbeing in different ways. Consolidation of agricultural ownership is not a new phenomenon and is not unique to the upper YRB. However, it is clear that this issue is at the forefront of agricultural communities' minds as they plan for future economic development in their towns and counties. There is already a push in many of the research communities to train future generations for jobs in agricultural technology, and a recognition that the mechanization of agriculture will rapidly shift farm labor. While this mechanization of agriculture was noted by some interviewees as helping farmworkers avoid dangerous working conditions such as heat or poor air quality, some participants also expressed concern about the job loss that may result from farms needing fewer workers. Social programs designed to allow people to work less while still receiving adequate pay for a high level of wellbeing are necessary to ensure job losses in agriculture do not throw more community members into poverty. Additionally, funding allocated for technical schooling or other forms of job

training may help with adult career changes while easing the financial risk of temporarily being out of work.

Neither of these solutions confront the sense of loss that was expressed by some interviewees regarding fewer family farms and lower levels of community ownership in agriculture. The solutions to this issue are systemic and not easily fixed by economic programs or policy changes. As La Via Campesina lays out, democratic control of food systems and agrarian reforms that empower communities are necessary for community-level food sovereignty. However, outside investment groups hold a disproportionate amount of power in the current political economy compared to individual farmers. The cost of new technology, H2A labor, and other inputs in a rapidly changing agricultural landscape are making many farmers' margins become even more thin over time. There is not an easy solution to the "grow or get out" model that was described by many participants.

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CHAPTER IV

CONCLUSION

DISCUSSION

Taken as a whole, this thesis builds upon an understanding of the social dimensions of food systems and the factors that influence community-level food sovereignty in a number of key ways. In the first paper, interviews with food system key informants illuminate some of the specific mechanisms that can result in unequal impacts of food systems on wellbeing. The principles laid out by La Via Campesina (1996, 2009) are helpful in understanding how community-level food sovereignty varies within and across different communities.

Food as a human right is not guaranteed through default modes of trade in current food systems, so food banks and food assistance programs have to carry a disproportionately heavy burden in guaranteeing a basic level of material wellbeing. While many wealthier individuals may have access to desirable healthy and/or locally produced foods, communities at large do not have democratic control over the distribution of products grown in their immediate vicinity. Local food is often expensive, and many of the crops produced in the Upper YRB are exported in the current globalized market. Reorganizing the food trade so that communities where food is produced are prioritized in their ability to access local goods may help make significant strides in returning control of food systems back to community members and increasing environmental sustainability. Additionally, the ongoing changes that are impacting the ownership structure of agriculture are not the agrarian reform that La Via Campesina

advocates for as a path towards food sovereignty. Higher levels of corporate and absentee ownership may remove even more food system autonomy from communities, threatening food sovereignty and community wellbeing. This finding resonates with research on absentee ownership in agriculture (Wunderlich 1993; Petrzelka 2014), although it is still important to note as the community impacts of this phenomenon can vary on a case-by-case basis.

The labor dynamics of agriculture in the YRB are also complex, impacting the community in a multitude of ways. In some instances, participants expressed that farmworkers have been able to achieve upward mobility for their families. In other instances, interviewees expressed concerns over the vulnerability of farmworkers to climate change and the intricacies of guest worker programs. The landscape of agricultural labor is very heterogeneous across industries and farms, and the factors that influence farmworker wellbeing are a key area for future research.

Similarly, the role of the environment and the protection of natural resources for future generations is a rapidly evolving field of study (Dale 2023; Minh Ly 2023). Social and physical scientists alike are studying the impacts of climate change and different conservation practices on agriculture's future (Rosenzweig et al. 2020; Carolan 2022). Many of the food system key informants in Chapter II shared the viewpoint that future changes in water, temperature, and air quality must be planned for. Much work has already been done in the YRB to protect the future of water in the area (YBIP 2024), but plans must continue to adapt as the agricultural landscape changes, and other environmental factors must always be considered in addition to hydrologic needs.

In Chapter III, the discussion widens from those with explicit professional knowledge of food systems to include a wider array of stakeholders. When incorporating perspectives from many different groups across the communities of focus, some themes from Chapter II continue to resonate while new viewpoints also emerge. Interview participants generally sense that food prices are high, and that transportation is a major barrier to equitable food access. These burdens are often disproportionately placed on rural communities, communities of color, and/or lower socioeconomic status communities. Food banks provide an important role in protecting food security in the region, but they do not solve the systemic underpinnings of food insecurity.

Community members are generally noticing many of the same changes in agricultural ownership as food system key informants. Many interviewees discussed the decreasing number of local families running smaller farms, and expressed concern about the potential impacts of increased outside ownership on the social fabric of their community. Additionally, many interview participants still hold their community's agricultural past in high regard, and believe that agriculture will continue to be an economic and cultural cornerstone for years to come. More work needs to be done to understand the interplay between this simultaneous sense of hope and apprehension. Interview data does not necessarily suggest that these views are mutually exclusive, as some interview participants expressed both concern and excitement over the future of agriculture in the Upper YRB.

LIMITATIONS

As briefly mentioned in chapters two and three, this research has some key limitations. The first and most pressing is the 'outsider' status of each member of our research team. Since we relied heavily on community networks to identify and recruit interview participants, we were likely only able to access certain kinds of people (Baca Zinn 1979; Reyes 2019). While many key informants were very helpful throughout the research process, and the research team worked hard to supplement snowball sampling with internet searches for underrepresented interest groups, it is unlikely that we garnered as many viewpoints as would be possible through research conducted by community 'insiders'. Additionally, most interviews were conducted virtually via Zoom, potentially creating an additional barrier to the interpersonal relationships that can help qualitative research thrive.

The timeframe of this project is also a limitation. At the time of writing, the research team is still engaged in a process of incorporating community feedback into our findings, and working with participants on individualized project reporting by locality. However, all interviews were conducted within a nine-month period from March to November of 2023. Deeply community-engaged research often takes much longer than this, and data collection spread out over a greater period of time likely could have cultivated stronger relationships with communities and thus generated even greater levels of participation. Additionally, this time period made it difficult to recruit farmers and farmworker participants. Although the research team recruited before and after the growing season, we were only able to speak with a limited number of people in these interest groups. Despite this shortcoming, we were able to speak with a number of key

stakeholders with positions and points of view that span a number of areas within food systems. As mentioned in Chapter II, this facilitated the decision to utilize the food system key informant classification.

Another limitation of this study is the lack of Indigenous representation, namely the Yakama Nation. While the research team conducted interviews with Indigenous people in Yakima, the Upper YRB does not include any places in the Yakama Indian Reservation. Thus, no communities of focus are on reservation land. However, Indigenous knowledge is critical to community-level food sovereignty research moving forward (Grey and Patel 2015; Norgaard 2019), and Indigenous food sovereignty is extraordinarily important for Indigenous wellbeing. If future research is conducted on food systems in the YRB, expanding the research area to include more lower basin communities, particularly Indigenous communities, is important for a greater understanding of food systems wide-ranging impact. Additionally, future research should aim to include a greater representation of the Hispanic community. While interviews were conducted in Spanish interviews and we had moderate Hispanic participation, it was not proportionate to the demographic profile of the Upper YRB.

POSITIONALITY

Similar to the primary limitation mentioned above, my positionality as an 'outsider' conducting research in the Upper YRB undoubtedly impacts this study. I do not live in any of the communities included in this research, nor have I spent significant time in them for non-research purposes. I likely have blind-spots to community needs that a person more intimately familiar with the communities of focus may not possess.

Additionally, I am a white male in academia. While I was able to use my status to facilitate social connections in some communities and with some groups, my identity likely also prevented me from gaining the full trust of other demographics in the Upper YRB. While our research team includes native Spanish speakers and Latine researchers, the majority of the research team is white, non-Latine, and likely shares the same positionality limitations as myself.

IMPLICATIONS

I believe that this thesis has important theoretical and practical implications for community-level food sovereignty. The primary theoretical advancement is the use of a concise framework for food systems research. La Via Campesina's food sovereignty approach (1996; 2009) provides clear, actionable principles that can unite social scientists studying food systems around a common framework. Food justice can easily be incorporated into food sovereignty paradigms, and the two fields of study have much more in common than the areas in which they diverge. Additionally, moving beyond food security framings has long been understood as beneficial for adequate food system reform, and this thesis demonstrates the multitude of factors that impact wellbeing beyond food security. Mechanistic food production and delivery may come at the cost of workers and the environment, and current market systems do not even guarantee that the plentiful food we are producing will be equitably distributed (Friedmann 1993; Holt-Gimenez 2011; Sbicca 2018).

When considering practical implications of this work, there are future areas for policy development as well as community action. Better policy protections for

consumers, farmworkers, and farmers are necessary for more equitable food system outcomes, but these policies must come about via close consultation with communities on their unique needs. For example, grocery store prices should be geared towards the purchasing power of the majority of full-time residents, not towards busy periods when wealthier tourists and seasonal residents are frequenting the store. Farm subsidies that are intended for things such as worker wages or implementing environmentally friendly practices may help smaller scale farmers stay afloat and modernize as the times change in agriculture. These are merely vague suggestions to demonstrate the possible actions that could be taken by the government at multiple levels to increase food sovereignty moving forward. In many interviews with people in agriculture and agricultural communities, participants expressed skepticism over government and regulation. Generally speaking, the best practice for implementing policies that community members approve of is to directly involve communities in the policy-making process. Thus these developments are yet to be determined and likely to be highly individualized, as they should be.

Programs such as community gardens and community-led food networks may also provide people access to local foods who may not otherwise have access. These programs have succeeded in other communities (White 2010, 2011), although I must acknowledge they are labor intensive. Additionally, funding and subsidies towards food banks and food assistance programs must not only continue but also increase in many instances. The path towards systemic food system reform is likely to be long and arduous, and food aid is vital to ensuring that a basic level of wellbeing is maintained. Ultimately, adequate change under capitalist food regimes is not likely to occur, but empowering

communities to have food autonomy is the best path towards greater justice within food systems.

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APPENDIX I

KEY INFORMANT INTERVIEW PROTOCOL

Introduction

Can you please describe your role [city] or the "hats you wear"

General Wellbeing/Community Life

- What do you consider to be your "community"? Is it [city], your neighborhood, or something broader?
- How would you describe [city] to someone not from here?
- Wellbeing has been described as anything that goes into a making a "good life." What contributes to wellbeing here?
- What excites you (or concerns you) about the future of your community?

Food

- How would you describe food access in this area?
- Where do people generally get their food in this area?
 - Do you think this differs for different groups of people?
- Is there a strong relationship with local food producers in this area?

Deeper Food Systems Questions

- Is there a strong relationship between the community and local food producers?
- Would you say agriculture in the region has changed over time?
 - Has the size of farms in the area changed?
 - What is agriculture's role in the community?
- Are there any challenges you are facing in your work in [food arena]?

Local Environments

- Are you and your community noticing any changes in environmental conditions? If so, what changes are you seeing?
- Have you noticed any changes related to water resources in this area?
- Have you noticed any changes related to the amount of snow you get in this area or in the mountain areas near here?
- Are there any impacts of these changes on the [city] community?
- Are there any actions that are being taken in response to these changes?

Population/Demographic Change

- Are you noticing any changes related to population or demographics?
 - What is the time frame of these changes? (Recent vs. Last few decades)
 - What do you see as some of the impacts of this population change?
 - Are there different types of people living here than there used to be?
 - Has the character of the community changed?

Regional Systems

- How do you see your community as connected to the broader region? For instance, the county, the watershed, the region?
 - How do rural and urban communities in this area connect to each other? How do these connections influence community or regional wellbeing?
- Would you say your wellbeing or your community's wellbeing relies on factors outside of this area?

Concluding Questions

- Is there anything particularly innovative or unique about [city] that will be helpful in the future?
- Is there anything I haven't asked about that you think it is important for us to know about [city]?

APPENDIX II

SAMPLE RECRUITMENT FLYERS

SHARE YOUR THOUGHTS ON LIFE IN TIETON!

HOW TO PARTICIPATE:

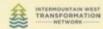
We are doing a study on community wellbeing in Tieton and would like to interview community residents age 18+. If you would like to participate in a 20 to 30 minute Zoom or phone interview, please email WellbeingProject@usu.edu or call 435-797-8635. Participants will be given a \$10 token of appreciation. Interviews are available in both English and Spanish.

WE LOOK FORWARD TO HEARING FROM YOU!

Please reach out to Courtney.Flint@usu.edu with any questions.









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COMPARTA SUS PENSAMIENTOS SOBRE LA VIDA EN TIETON!

COMO PARTICIPAR:

Estamos haciendo un estudio sobre bienestar en Yakima y queremos entrevistar a residentes de la comunidad que sean mayores de 18+ años. Si le gustaría participar en una entrevista que dura entre 20 y 30 minutos por teléfono o via Zoom, por favor envíe un correo electrónico a WellbeingProject@usu.edu o llame al 801-906-1105. Los y las participantes recibirán \$10 como una muestra de gratitud. Las entrevistas se llevarán a cabo en ingles y/o en español.

ESPERAMOS ESCUCHAR DE USTED

Por favor contacte a claudia.mendez@cwu.edu si tiene alguna pregunta.





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