

TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....	2
INTRODUCTION.....	3
MAXINE JACOBSON AND NEVA HASSANEIN	
PART I. EXPLORING THE VIABILITY OF FARMING AND RANCHING	
OVERVIEW.....	9
CHAPTER 1. OUR AGRICULTURAL PAST AND FUTURE.....	11
NEVA HASSANEIN & LIBBY HINSLEY	
CHAPTER 2. FARM AND RANCH VIABILITY: SURVEY RESULTS.....	15
NEVA HASSANEIN, SHELLY CONNOR, KISHA LEWELLYN, & MELISSA MATTHEWSON	
CHAPTER 3. A CLOSER LOOK: PERSPECTIVES OF SELECTED FARMERS AND RANCHERS.....	30
LIBBY HINSLEY	
CHAPTER 4. HMONG MARKET VENDORS: LESSONS FROM A FOCUS GROUP.....	48
NANCY MCCOURT, JASON SEAGLE, & JEN JONES	
PART II. FOOD CONSUMPTION: ISSUES AND ASSETS	
OVERVIEW	57
CHAPTER 5. SOWING THE SEEDS: UNDERSTANDING COMMUNITY FOOD CONSUMPTION	58
MAXINE JACOBSON	
CHAPTER 6. FOOD CONSUMPTION: SURVEY RESULTS.....	61
MAXINE JACOBSON & JEN VON SEHLEN	
CHAPTER 7: TOUGH CHOICES FOR LOW-INCOME RESIDENTS.....	75
MAXINE JACOBSON, BRENDA ERDELYI, CRYSTAL FOSTER, LARA MATTSON, & TIM RADLE	
PART III. FOOD FOR THOUGHT AND ACTION.....	85
APPENDIX.....	92

ACKNOWLEDGMENTS

The idea for this project was born two years ago, in the fall of 2002. Since that time, many people have made important contributions to this collaborative process.

Over 700 County residents participated in the interviews, focus groups, and surveys reported on in this report. Thank you for your participation; this project would not have been possible without your willingness to share your ideas and experiences.

The members of the Steering Committee have given of their time and expertise, adding this project on to their already full plates. The committee has formulated research questions, suggested approaches to data collection, helped to interpret results, and generated recommendations for change. Working with the Steering Committee has been very rewarding and instructive for University of Montana students and faculty alike.

In addition to the graduate and undergraduate student researchers listed on the front cover of this report, we want to acknowledge the important contributions of all of the students who participated in the Community Food Assessment course in the fall of 2003. They helped to design the research reported on here.

We are indebted to Lita Furby for her valuable research assistance and editing. In addition, we are thankful for the help provided by Coco Anderson, LaNette Diaz, Rachel Goen, Gerald Marks, George McRae, Sarah Nichols, Chelsey Porter, Bao “Moua” Vang, Chu Vang, and Southgate Mall.

Last, but certainly not least, we are grateful for the generous financial support of the following entities at the University of Montana: Office of Civic Engagement, Environmental Studies Program, Department of Social Work, School of Pharmacy and Allied Health Sciences, and College of Arts and Sciences.

Neva Hassanein
Maxine Jacobson
November 2004

INTRODUCTION

MAXINE JACOBSON AND NEVA HASSANEIN

Food is the most basic of necessities. Yet, food is even more than that. Food links us to others socially as we share meals with friends and family. It provides the catalyst for interaction at community events, church socials, farmers' markets, grocery stores, and potluck dinners. It creates economic rewards through employment – for farmers and farm workers, grocery store clerks, restaurant servers, packers and processors, truckers – and it creates commerce through markets, grocery stores, restaurants, and street vendors. Food also has psychological meaning. It comforts and consoles. It links us to people and places through distinctly pleasant memories of Grandma's apple pie, Aunt Edith's country pot roast, Uncle Harold's belly burnin' chili, and Mom's strawberry freezer jam.

Despite the importance of food, in today's global food economy most of us know little, if anything, about the food that nourishes our bodies and our souls – where it comes from, the conditions under which it was grown, and how it got from there to here. Food changes hands an average of 33 times between the farm and the supermarket shelf,¹ and it travels an average of 1,300 miles to reach our plates.² Typically, many North Americans take food for granted, as we do the oxygen we breathe.

Over time, images of pastoral settings graced with tall stalks of corn planted in meticulously spaced rows and chickens pecking in the barnyard have faded from memory, replaced with images of clean, well-stocked supermarkets with tidy shelves of colorfully labeled, packaged foods and an abundance of vegetables and fruits. Some of what we eat comes from far away places we will likely never see – Hawaiian coconuts and pineapples, succulent Chilean grapes, green beans and corn on the cob from Mexico, and New Zealand lamb. While this picture captures the imaginations of those privileged enough to have access to the abundance of food produced in today's global food system, the picture is in sharp contrast for those with access to fewer resources.

Imagine instead waiting in line at a food pantry where choice is determined by the availability of surplus commodities donated by supermarkets; manufacturers and restaurants; hand-me-down food expired, damaged, overproduced or rejected by consumers in the open market; or the generosity of community members. Or consider standing in the check-out line at your local grocery store anticipating the reaction of others as you thumb through this month's miserly ration of food stamps to purchase food supplies you know will only last a few weeks.

¹ Guptill, Amy and Wilkins, Jennifer. (2002). Buying into the food system: Trends in food retailing in the US and implications for local foods. *Agriculture and Human Values*, 19(39), 51.

² Kloppenburg, Jack R., Jr., Hendrickson, John, and Stevenson, G.W. (1996). Coming in to the foodshed. *Agriculture and Human Values*, 13(3), 33-41.

How do farmers and ranchers fit into this picture? Like most eaters, most Montana farmers and ranchers are a small link in a complicated global agribusiness chain. The majority of our agricultural products are exported out of state and into world markets. For example, Montana wheat producers ship 81 percent of their crop out of the country. But farmers do not seem to be benefiting from this export economy, as many of them struggle to survive. Just as most eaters do not know the origins of the food they eat, farmers' options appear increasingly limited as they become ever more economically remote from consumers. Montana is not alone: nearly every state in the country buys 85-90% of its food from some other place. And we now depend on tremendous amounts of fossil fuel, and a small number of food distributors, retailers, and food services to move food from field to plate.

We all have a stake in the health and well-being of our food system – that is, the complex web that includes production, processing, distribution, and consumption. Understanding how our community food system works is the first step toward advocating for necessary change.

A SYSTEMIC VIEW OF COMMUNITY FOOD SECURITY

To understand food issues in a community, we need to think systemically. A “system” is a combination of parts that form a whole. For example, the human body is a system composed of interrelated parts whose overall functioning is compromised should one vital component fail. We know this only too well if an individual has a liver disorder or heart disease. Failure in one part of the system can have grave consequences for other parts of the system. This analogy applies equally well to food. “The food system includes all processes involved in keeping us fed: growing, harvesting, processing, packaging, transportation, marketing, consuming and disposing of food.”³

Because communities have become increasingly dependent on food grown, harvested, processed, and packaged far away, what predicament might we find ourselves in if, for example, transportation of food to our community is somehow curtailed? It would undoubtedly have devastating results and create a ripple effect throughout the entire food system. Produce would rot in the farmer's field, harvesters and truckers would be without work, local suppliers such as supermarkets and restaurants would see a decrease in sales, and families would have fewer choices at the supermarket counter. Given the dependency of one part of the food system on all others, it is important to understand how these pieces fit together and how they shape and influence one another.

By adding the word “community” to “food system” our definition becomes localized. The idea of “a community food system is promoted as an ideal – a food system in which food production, processing, distribution and consumption are integrated to enhance the environmental, economic, social and nutritional health of a particular geographic

³ Wilkins, Jennifer. (2000). *Community food systems: Linking food, nutrition, and agriculture*. Ithaca, NY: Cornell Cooperative Extension.

location.”⁴ A key question is how “secure” a community food system is. A widely used definition of “community food security” is “a situation in which all community residents obtain a safe, culturally acceptable, nutritionally adequate diet through a sustainable food system that maximizes community self-reliance and social justice.”⁵ While most hunger intervention models locate the issue with individuals and families, the idea of community food security claims a much broader stroke. The concept incorporates not only concerns about whether individuals and households have nutritionally adequate foods available, but also considers strategies for empowerment, sustainable food production, and the ability of a locality or region to meet at least some of its own food needs.

THE MISSOULA COUNTY COMMUNITY FOOD ASSESSMENT

Community food assessments are a vital first step in planning for community food security. In the spring of 2003, we initiated a community food assessment (CFA) to increase understanding of Missoula County’s food system. To date, about 15 communities in the United States have undertaken such an effort, with projects ranging from a focus on a single neighborhood to multiple counties in a region.

Community food assessments are a systematic, participatory approach to investigating a wide range of issues related to food consumption and agriculture in a particular location. Broadly speaking, the purpose of the community food assessment is “to inform change actions to make the community more food secure.”⁶ Instead of focusing strictly on problems in the existing food system, we also sought to identify assets, strengths, and community resources that contribute to the food system in positive ways. We wanted to recognize and honor the contributions already made in the community toward addressing food security, creating stronger linkages between producers and consumers, and promoting increased awareness about the possibilities for a sustainable food system.

To guide our efforts and incorporate community input, we brought together a diverse steering committee of 15 organizations, which represent various aspects of the food and farming system and could contribute their knowledge to the process. The committee includes farmers, a County extension agent, a public health official, a planner, anti-hunger advocates, conservationists, and others (see inside front cover). The steering committee identified specific questions to investigate, provided input into the research process, and developed recommendations based on the findings.

University of Montana undergraduate and graduate students, primarily from the Environmental Studies Program and the Department of Social Work, were key participants in this process.⁷ Under our supervision as UM faculty and the guidance of

⁴ Ibid.

⁵ Hamm, M. W. and A. C. Bellows. (2003). Community food security: Background and future directions. *Journal of Nutrition Education and Behavior*, 35(1), 37-43.

⁶ Pothukuchi, K., Joseph, H., Burton, H. and Fisher, A.. (2002). *What’s cooking in your food system? A guide to community food assessment* (p. 11). Venice, CA: Community Food Security Coalition.

⁷ In addition, a student in the Society and Conservation Department and one from Communication Studies participated.

the steering committee, students carried out much of the data collection and analysis for the food assessment. The process has given them a unique opportunity to learn valuable skills while making a strong contribution to a community-based research project.

To begin our assessment, first we had to identify what we meant by community. We limited our project to Missoula County, although we are well aware of its ties to surrounding counties as it relates to our local food system. Because this food assessment is the first of its kind in Montana, we thought other counties in the state might initiate a similar process and learn from our successes and challenges. In addition, much existing statistical data from governmental sources pertains specifically to the county level.

To provide the background information necessary to understand Missoula County's food system, students produced two reports.⁸ The first, *Our Foodshed in Focus: Missoula County Food and Agriculture by the Numbers*, relied upon existing statistical data from various governmental and non-profit agencies to identify trends in the local food system, why these trends might be occurring, and why this information is important to County residents. Seven chapters, authored by students, address relevant food-related trends in the following areas: demographics, agricultural production; environment; food distribution; employment in farming and food-related businesses; consumption; and food security and access. At the same time, several students completed *Grow, Eat and Know: A Resource Guide to Food and Farming in Missoula County*. The guide provides contact information and a brief description of a variety of organizations, programs, and businesses involved in the local food and farming system. Both reports provided a wellspring of information from which to launch our subsequent investigation of agricultural viability and community residents' food-related concerns and assets.

OVERVIEW OF THE REPORT

Food Matters: Farm Viability and Food Consumption in Missoula County presents key findings from the food assessment process. Unlike *Our Foodshed in Focus*, this report is based on original data collected during the spring of 2004. The research was designed in an attempt to answer the following questions about Missoula County's food system that were identified by the steering committee:

1. What is needed for viable and sustainable, commercial food production in Missoula County? What are the existing assets and barriers to creating a more viable and sustainable production system?
2. What concerns do Missoula County residents of various income levels have about food (including quality, access, transportation to food outlets, cost, eating behaviors and choices), and what do they perceive as the County's food-related assets?

⁸ These reports are available at: www.umt.edu/cfa or by contacting Neva Hassanein at the University of Montana.

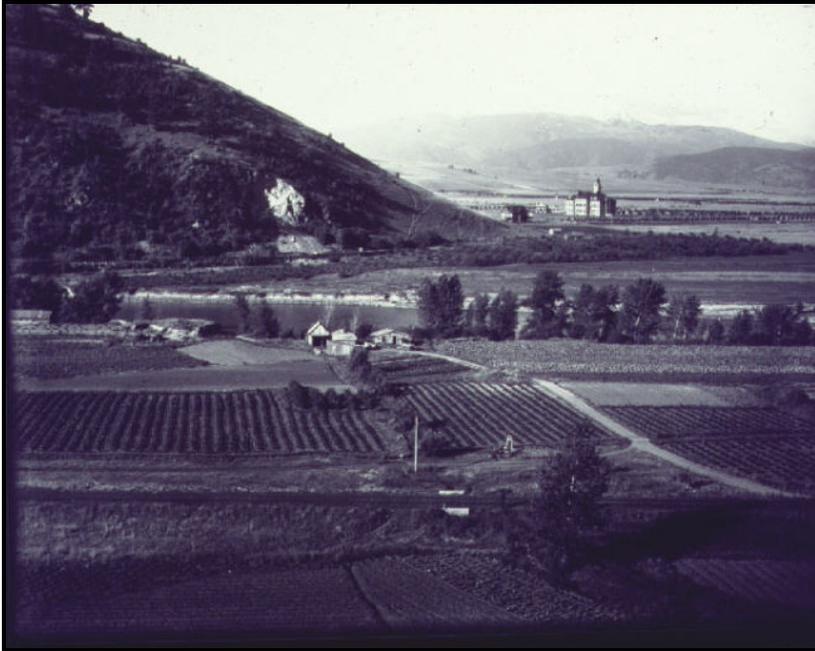
Food Matters is organized into three major parts:

Part I: Exploring the Viability of Farming and Ranching. The first part presents research aimed at answering question one above. The first chapter describes some recent trends in the County with respect to our agricultural resources and their management. Then, in Chapter Two, we present the results from a telephone survey with farmers and ranchers, covering topics ranging from factors threatening and contributing to farm/ranch viability, to perspectives on growth and development, to opportunities for expanding local marketing. Chapter Three takes a closer look at some of the same issues through use of in-depth, qualitative interviews with 13 farmers and ranchers. Lastly, Chapter Four presents results from a focus group with market gardeners who are Hmong and who make up a sizeable portion of the vendors who sell at the Missoula Farmers' Market.

Part II: Food Consumption: Issues and Assets. The second part of the report presents research aimed at answering question two above. Chapter Five provides context for the consumption study by looking at related trends drawn from the literature and *Our Foodshed in Focus*. Chapter Six presents the methodology and results of an extensive survey used to investigate consumers' concerns about food-related issues and what consumers perceive to be the food-related assets in the County. Chapter Seven analyzes the findings of two focus groups with low-income residents of the City of Missoula. Key areas of concern are discussed, as well as food-related assets and resources in the County.

Part III: Food for Thought and Action. The food assessment process reveals that there our local food system has many things going for it, but there are also a number of challenges that deserve public attention. The report calls attention to the value of an integrated and comprehensive approach to food system issues. The final part of the report presents recommendations based on a series of conversations among steering committee members and their University of Montana partners and on a review of the research findings from the entire CFA process.

This report presents the first comprehensive analysis of food system issues in Missoula County. Based on that analysis, it also offers recommendations that are designed to generate a community dialogue about the future of our food and farming system. In describing our methodologies, we have also tried to identify the assessment's limitations; thus, the report should be utilized with these limitations in mind.



Missoula in 1909, K. Ross Toole Archives, University of Montana

Diverse farms, such as the one pictured above, and an associated processing industry met the needs of Missoula's population in the early 20th century. Below, the same view today illustrates how much local food production has been displaced by development. Now, about 85-90% of our food comes from someplace else. We depend on a tremendous amount of fossil fuel, extensive transportation networks, and a small number of food distributors, retailers, and food services to move food from field to plate. But how secure is our current food system?



Missoula in 2003, photo courtesy of Yogesh Simpson

PART I EXPLORING THE VIABILITY OF FARMING AND RANCHING

OVERVIEW

Part I of *Food Matters: Farm Viability and Food Consumption in Missoula County* looks at issues related to agricultural viability. Two of the central research questions of the Community Food Assessment were: What is needed for viable and sustainable, commercial food production in Missoula County? What are the existing assets and barriers to creating a more viable and sustainable production system?

We used several different approaches to begin to answer these questions. First, we reviewed existing statistical data on trends in the County related to agriculture, recognizing that we needed to get a sense of how things have changed here and the current state of agriculture. Much of that review is contained in *Our Foodshed in Focus*, an earlier report of the Community Food Assessment. Here, in Chapter 1, we briefly summarize the key trends, updated with more recent figures, in order to provide context for the next three chapters.

Beyond collecting existing data, we decided to ask farmers and ranchers themselves about the viability of agriculture here, in order to draw on their experiences and knowledge. Accordingly, we conducted a telephone survey of farmers and ranchers (N = 52) in the County. We wanted to hear from producers about their views on the state of agriculture generally in the County; factors threatening and factors contributing to farm and ranch viability; perspectives on growth and development; local marketing; and the possibility of a task force that would promote local markets and agricultural land. The results of that survey are presented in Chapter 2.

Third, to complement the survey, we conducted in-depth interviews with a selected group of farmers and ranchers. Thirteen face-to-face interviews generated rich, qualitative data that illustrates the range of perspectives that producers hold on topics similar to those covered in the survey. While the survey provided a way to reach a greater number of people in a relatively short time, the interviews afforded an opportunity to go more deeply into the relevant topics. Analysis of the interview data is presented in Chapter 3.

Fourth, we recognized the unique and valuable contribution that the Hmong make to Missoula's Farmers' Market. Based on discussions with leaders in the Hmong community, it became apparent that the best way to get the input of these market gardeners was to conduct a group interview (i.e., a focus group) with them. In this case, a focus group with 11 Hmong vendors allowed us to overcome some (but not all) cultural barriers to participation in the research. The results of the focus group are presented in Chapter 4.

Readers should bear several things in mind while reading the chapters in Part I. First, the data collected and reported on in each of the chapters complements the work presented in other chapters, as well as previous analyses of agricultural trends presented in *Our Foodshed in Focus*. Second, much of what is reported here is based on the perspectives, experiences, and knowledge of the farmers and ranchers we spoke with. We did not attempt to evaluate the veracity of their statements pertaining to factual issues, because our goal here was to understand the perspectives that often motivate behavior and influence decision making.

CHAPTER 1

OUR AGRICULTURAL PAST AND FUTURE

NEVA HASSANEIN AND LIBBY HINSLEY

INTRODUCTION

Over one hundred years ago, agriculture in Missoula County developed with the aid of irrigation projects, the Homestead Act of 1862, and the building of the railroad in 1883.¹ Diverse farms and an associated processing industry expanded to meet the needs of the local population and increasingly an export market. Although subject to several economic and climactic fluctuations during the first half of the 20th century, the agricultural industry included orchard fruit and sugar beet processing, meatpacking, flour mills, dairies, wool production, and more.

After the Second World War, technology increased production in the area, farms consolidated, and the average farm size grew to over 1,000 acres by 1969.² In the late 1960s, however, agriculture here began to decline rapidly, as the number of farms dropped and local producers were affected by wider economic changes in agriculture. Slowly most of the processing facilities closed. Indeed, much has changed since the days when Missoula earned the moniker “the Garden City” because of the large gardens and truck farms that used to provide much of the food people in the valley ate.

These changes did not go unnoticed. In the early 1980s, the Missoula Planning Office conducted a study in order to develop a plan to protect and expand agriculture here.³ A fairly comprehensive analysis, the “Agricultural Protection Study” looked at consumption patterns, imports and exports, changes in the farm service and supply industries, opinions of local producers, and various strategies for protecting and promoting agriculture.

It has been over twenty years since farmers and ranchers were systematically queried about their perceptions of the factors that threaten and facilitate the viability of their operations. This Community Food Assessment updates many of the aspects of the 1983 study, and unfortunately, many of the trends noted then have continued and even intensified. The remainder of this chapter provides some context for understanding the perspectives of area farmers and ranchers described in subsequent chapters.

¹ Missoula Planning Office. (1983). *Missoula County Agricultural Protection Study*. Missoula, Montana.

² Hinsley, L., Lewellyn, K. and Seagle, J. (2004). Agricultural resource base indicators. Chapter 2 in *Our Foodshed in focus: Missoula County food and agriculture by the numbers*. Missoula: University of Montana.

³ Missoula Planning Office, Op cit.

LOSS OF WORKING FARMS AND RANCHES

Every five years the National Agricultural Statistics Service conducts a Census of Agriculture throughout the United States. An analysis of trends based on those statistics is presented in *Our Foodshed in Focus*; since publication of that report, the findings from the 2002 Census of Agriculture have been released. As discussed below, the new numbers suggest that earlier trends are continuing. The upshot is, we are losing working farms and farmland.

At first, the idea that we are losing farmland might seem paradoxical since the number of farms in the County has gone up consistently since 1974, which was when it reached its lowest point (310 farms). That was also the year when the Census adopted its current definition of a farm: “any place from which \$1,000 or more of agricultural products were produced and sold or normally would have been sold during the census year.” In other words, the threshold for a parcel being defined as a “farm” is extremely low.⁴

The number of “farms” in Missoula County reached 641 according to the 2002 Census of Agriculture, a level not seen here since 1954.⁵ But fewer than half – only 312 – of those farms had land from which crops were harvested (down from 359 in 1997). Also, 60% of all farms in the County had sales of less than \$2,500 in 2002. Not surprisingly, the total market value of production dropped 2% between 1997 and 2002, to \$8.361 million in 2002 (averaging just over \$13,000 per farm).

While the number of farms is technically increasing, average farm size is decreasing. By 2002, the average farm size was 403 acres, a drop of 9% since 1997. We are basically losing our larger farms, while the number of small farms has increased dramatically. The median farm size for the 641 farms in the County in 2002 was only 42 acres.

Perhaps most striking of all is the fact that the total amount of land in working farms is dropping dramatically. The total land in farms in the County went down 4% between 1997 and 2002 to 258,315 acres. Over half of those “farmland acres” are woodland, with about 17% in cropland and 29% in pasture. Although over a quarter of a million acres is in farms in the County, only 22,290 acres (8.6%) was harvested cropland in 2002. Moreover, harvested cropland in 2002 represented a drop of over 20% from the 28,045 acres harvested in 1997.

⁴ In the Census of Agriculture, the term “farm” also includes ranches.

⁵ All 2002 Census of Agriculture figures are available from www.usda.gov/nass/. It is important to note that the 2002 publication has a different approach than previous censuses. The difference is an adjustment for incompleteness at the county level. The 1997 and earlier censuses were also incomplete, but the adjustment was published only for the state as a whole rather than for particular counties. In contrast, the 2002 Census re-published the 1997 County data to make it comparable with the 2002 data. As a result, the reader may notice that the numbers presented here for 1997 do not match those presented in *Our Foodshed in Focus*, which relied on earlier censuses. The 1997 adjusted numbers are used here for all comparisons with 2002 figures.

Taken together, these trends suggest that many of our smaller farms may be primarily rural residences with agricultural enterprises playing a fairly minor role. There are more “farms” for purposes of the census count. But the total market value of production is on the decline, and a small percentage of our “cropland” acres are actually harvested. In addition, rural areas of the County saw a 46% increase in population during the 1990s (as compared with a 22% increase for the County as a whole). Over 10,000 acres in the County were subdivided between 1990 and 2000, and flat lands previously in agricultural production are among the most common areas to have seen this subdivision and development activity.⁶

LAND USE PLANNING CONTEXT

Rural residential development appears to be having a profound effect on the landscape of farming and ranching in Missoula County, and in turn on the food security of the County as a whole. As land becomes more valuable and desirable to developers, farmers and ranchers may generate less profit from their work on the land relative to potential profits from selling the land. As will become clear in the next three chapters, many local farmers and ranchers are acutely aware of these trends, and they report feeling the effects of growth and development. These development effects are compounded by economic factors currently limiting agricultural viability, as will also be discussed. If development affects farming’s future here, it simultaneously becomes crucial to our long-term food security, as the potential for local food production and local food consumption decreases.

To discuss solutions to these issues, one needs to recognize the context within which land use decisions are made.⁷ The County’s Growth Policy, adopted by the City of Missoula and the County Board of Commissioners in 2002, includes an explicit objective regarding agriculture:

Encourage the continuation of agricultural and forestry operations and protect them from adverse impacts of urban development. Distinguish between urban and rural land use patterns in land use decisions related to agriculture. Support local sustainable agriculture.⁸

Despite this strong language, state law mandates that the Growth Policy cannot be used to regulate land use in the County; rather, it provides guidance for subdivision review.

Regulatory tools – such as subdivision regulations and zoning ordinances – are the means by which counties may implement values expressed in the Growth Policy. However,

⁶ Missoula County and the City of Missoula. (2002). *Missoula County growth policy*. Adopted by the Board of Commissioners and the City Council, August. Missoula, Montana. Retrieved October 11, 2004 from the Office of Planning and Grants website: <http://www.co.missoula.mt.us/opgweb/Publications.htm>

⁷ A complete discussion of land use planning in the County is beyond the scope of this assessment. For a more in-depth review, see the Growth Policy (ibid.) and see: Hinsley, L. (2004). “*Left for dead*” or “*hope on the horizon?*” *Perspectives on the future of agriculture in Missoula County*. Master’s Thesis. Missoula: University of Montana.

⁸ Missoula County and the City of Missoula. Op cit.

subdivision proposals are currently reviewed one at a time, rather than on a landscape or cumulative scale. Such a piecemeal approach makes it hard to measure the cumulative impacts of development to agricultural resources, let alone take those cumulative impacts into account when reviewing a single proposal. Thus, it is very difficult for governing bodies to deny a subdivision proposal for its own impacts to agriculture. Zoning, which designates different types of land uses, theoretically could provide another regulatory tool to protect farmland. However, most of the County is not zoned, and there is a high degree of public opposition to it. In other words, despite the limitations of subdivision review, it is currently the only practical regulatory tool available to local governing bodies.

LOOKING FOR A WAY FORWARD

Missoula County has a long history of agriculture. Despite recent trends indicating the loss of agricultural land to development, there is also a growing interest here (and elsewhere) in re-building local food economies in order to promote community food security, as well as the health of our residents and of the environment. Consumer support for local food is expressed in the survey described in Chapter Six. A reinvigoration of our local food system requires both farmers and farmland. Local government is limited in its ability to aggressively protect farmland from development at this time; therefore, it may be important to look at other opportunities, such as voluntary and market-based approaches. The Community Food Assessment is an attempt to take stock of where we are and to identify some strategies for moving forward toward increased community food security.

CHAPTER 2 FARM AND RANCH VIABILITY: SURVEY RESULTS

NEVA HASSANEIN, SHELLY CONNOR, KISHA LEWELLYN, AND MELISSA MATTHEWSON

INTRODUCTION

This chapter reports on the results of a telephone survey with 52 farmers and ranchers from Missoula County during early spring of 2004. Like the in-depth interviews described in Chapter Three and a focus group with Hmong market vendors explained in Chapter Four, the survey was designed to increase understanding of what is needed for viable, commercial agricultural production in the County from the perspectives of producers themselves. The phone survey covered the following topics: views on the state of agriculture generally in the County; factors threatening and factors contributing to farm and ranch viability; perspectives on growth and development; local marketing experiences and prospects; and the possibility of an agricultural task force. After a description of the methodology and the characteristics of those who participated in the survey, the remainder of the chapter discusses each of these substantive issues in turn.

THE SURVEY: METHODS AND SAMPLE

Data Collection and Analysis

We utilized a phone survey to reach as many farmers and ranchers as possible and to learn about their perspectives on what is needed to keep farms and ranches viable here.¹ We developed a questionnaire based on a review of relevant literature and a previous study of producers in the County.² Several farmers, ranchers, and agricultural professionals in the area also provided valuable information about local agriculture. The questionnaire was pre-tested with three area farmers, and revised based on our experiences and their feedback.

Unfortunately, there is no comprehensive list of County farmers and ranchers available from which to draw a random sample. Therefore, we generated as large a list of producers as possible by compiling names obtained through a variety of sources (e.g., Missoula County Extension, word of mouth). This process generated a list of 65

¹ For a copy of the telephone survey tool, contact Neva Hassanein at the University of Montana. Authors of this chapter, along with students in a course centered on the food assessment in fall 2003, developed the survey tool. Our approach was greatly informed by Dillman's Total Design Method. See: Dillman, Don A. (1978). *Mail and telephone surveys: The total design method*. New York: John Wiley and Sons.

² Frost, Jane R. (1982). *Preparing an opinion survey on agricultural production in Missoula*. Internship report for Missoula County Planning. Unpublished manuscript. See also: Missoula Planning Office. (1983). *Missoula County agricultural protection study*. Missoula, Montana.

potential interviewees for the phone survey.³ We sent these farmers and ranchers a postcard in advance of phoning them to explain the purpose of the study, invite their participation, and let them know we would be calling. We made repeated attempts to contact everyone on our list.

Three interviewers conducted the phone survey during February and March of 2004. Of the 65 potential interviewees, 52 agreed to complete the survey,⁴ four refused to participate outright, and nine were never reached (e.g., no answer, asked us to call back but were never reached). This gives us a response rate of 80%.⁵ The interviews lasted anywhere from 10 to 51 minutes in length; the median length was 20 minutes.

For many questions the respondent was given a series of options to choose from (i.e., closed-form questions). The survey also included some open-ended questions, which allowed the respondent to answer in his or her own words while the interviewer wrote down the response. We analyzed the closed-form questions using statistical software. For the open-ended questions, we used a technique known as content analysis, a process that involves coding the qualitative data for relevant themes.⁶ The number of respondents to articulate a particular theme was recorded, and these numbers are noted in the presentation below. In addition, direct quotations are an important part of depicting the experiences and perspectives of the participants in the study, and are used here to illustrate the meanings of the categories.

About the Study Participants

The findings presented below give us a good sense about the barriers and opportunities to agricultural viability in the County; however, the results cannot necessarily be generalized to the whole population of farmers and ranchers. Although social scientists consider the response rate of 80% to be very good, our sample is not a random one. Thus, we cannot say with confidence the extent to which the opinions and experiences of the study participants reflect the larger population of farmers and ranchers in the County.

Nevertheless, by examining some of the characteristics of those who participated in the study, it seems that our sample is reasonably representative of the diversity of producers in the County. We know this because we can compare the characteristics of the study participants to the findings of the U.S. Census of Agriculture for Missoula County on several key dimensions, such as farm size, crops produced, and the extent to which they

³ Necessarily, this list excluded those who did not have current or listed phone numbers. In addition to the 65 identified as potential participants in the phone survey, we identified people whom we asked to participate in the focus group and in-depth interview (see subsequent chapters for details).

⁴ One of the 52 respondents stopped the survey in the middle, but his responses up to that point are included in our analysis below. Also, occasionally a participant did not answer a particular question. Percentage of respondent results are based on the total number of respondents who actually answered the question unless otherwise noted.

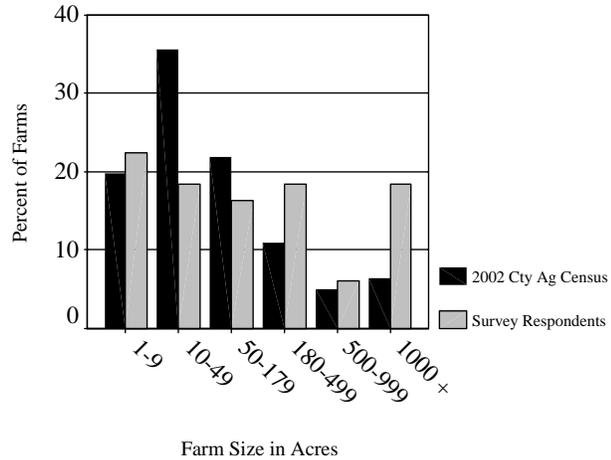
⁵ Of those we actually contacted, 93% agreed to participate in the survey (52 out of 56), which is an extremely high response rate. Response rate is important in interpreting results because one does not know whether non-respondents differ in some fundamental way from those who choose to respond.

⁶ Berg, B. (2004). *Qualitative research methods for the social sciences*. (5th ed.). Boston: Allyn and Bacon.

consider farming to be their principal occupation.⁷ Other characteristics of the study participants are described below as well.

Farm Size. The survey included farms and ranches from a range of size categories, as seen in Figure 1. Each size category was represented in our sample. Very large farms were slightly overrepresented, while farms between 10-49 acres were underrepresented somewhat in comparison with the Census of Agriculture. The median number of acres farmed by study participants was 100 acres.

Figure 1: Farm Size, Respondents vs. Cty. Ag Census



Crops Produced. Participants in the survey produce a range of crops.

Table 1 shows the number of farms/ranches in the sample that produce a particular crop and the percentage of the sample those producers make up. For comparative purposes, the numbers and percentages from the Census of Agriculture are provided.

Table 1: Crops Produced and Sold by Survey Respondents, Compared with 2002 Agricultural Census for Missoula County

Crops produced	No. of farms in survey	Percent of survey sample	No. of Co. farms, 2002 Census	Percent of Co. farms, 2002 Census
Barley	2	3.8	5	.8
Beef	20	38.5	156	24.3
Chicken/Poultry	2	3.8	34	5.3
Milk cows	2	3.8	7	1.1
Fruits/Orchards	2	3.8	19	3.0
Hay	18	34.6	274	42.7
Horses	7	13.5	91	14.2
Nurseries/Greenhouses	3	5.8	16	2.5
Sheep	34	65.4	60	9.4
Vegetables	3	5.8	7	1.1
Wheat	2	3.8	7	1.1
Other ⁸	7	13.5	N/A	N/A

⁷ The National Agricultural Statistics Service (NASS) conducts a Census of Agriculture every five years, most recently in 2002. It provides data at the county, state, and national levels. Data from the 2002 census are available at the following website: www.usda.gov/nass/ (August 2004).

⁸ For purposes of this study, “other” crops include oats, mushrooms, wine grapes, goats, canola, small grains, Tibetan yaks, and boarding horses. This is not an applicable category for comparison with the Agricultural Census.

The comparison in Table 1 shows that beef producers are somewhat overrepresented and sheep producers are heavily represented in the sample (probably because some of the producer lists we were able to obtain reflected livestock ownership). We conducted statistical analyses to be sure that the greater number of sheep producers did not badly skew our sample in other ways. Those analyses showed that sheep producers do *not* differ substantially from the other producers in the sample in terms of their experiences and opinions expressed in the survey.⁹

Location. As seen in Figure 2, many of those who participated in this study farm or ranch near the City of Missoula or in the Lolo area, although outlying areas of the County are also represented to some extent.

Gender. Of the participants in the phone survey, 33 are men (63.5%) and 19 are women (36.5%). According to the US Agricultural Census, women made up 19% of the *principal* farm operators in Missoula County in 2002.

Experience, Principal Occupation, and Income Sources. Many of the people who participated in this study have had considerable experience farming and ranching in Missoula County. As Figure 3 illustrates, about half of the sample has farmed or ranched here for more than 20 years. Nearly all interviewees were involved in farming and ranching at the time of the study; four had been involved in the past.

Despite this breadth of experience, only 37% of the study participants considered farming or ranching to be their “principal occupation.” In comparison, the 2002 Census of Agriculture for Missoula County reports that 45% of the principal farm operators considered farming or ranching to be their primary occupation. Note that the participants in the present study were not necessarily the principal operator of the farm (as defined by the Census). Not surprisingly, over half of the study

Figure 2: Farm/Ranch Locations of Participants

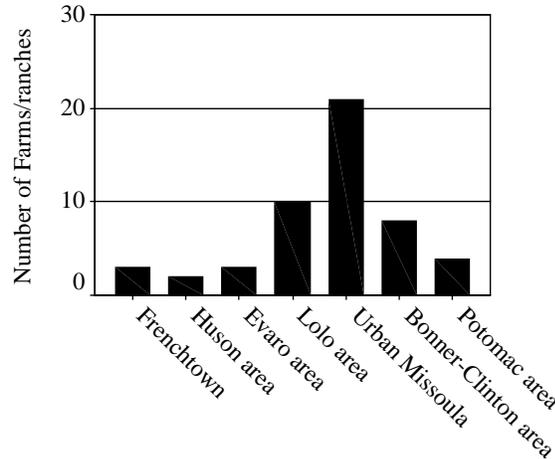
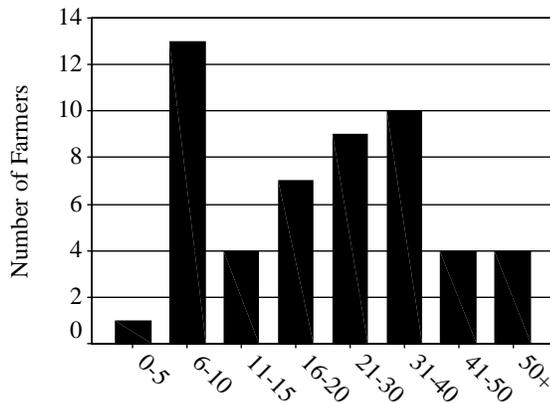


Figure 3: Involvement in Farming or Ranching



Years Farming or Ranching in Missoula County

⁹ The sheep producers do differ substantially from other participants in our sample on two characteristics: (a) sheep producers are more likely to work off-farm (67%) as compared with others (35%), and (b) they rely more heavily on income from off-farm sources (79% of the sheep producers get most of their income from off farm, while only 50% of the other producers do).

participants (56%) work off the farm, and 69% report that most of their income comes from off-farm sources. Nineteen percent report that all or most of their income comes from the farm, and 10% earn about half of their income from the farm and half from off-farm sources.

VIEWS ON THE STATE OF MISSOULA COUNTY AGRICULTURE

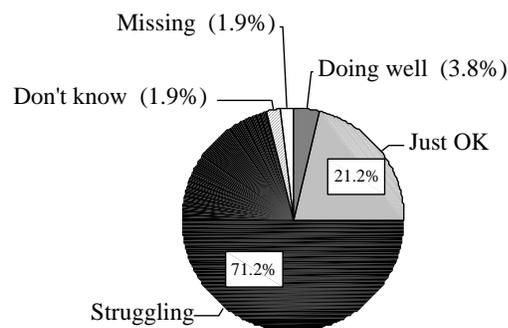
To get a general sense of the farmers' and ranchers' perspectives on agriculture in Missoula County, early in the survey we asked whether they thought agriculture in the County is "struggling, doing just okay, doing well or thriving." Overwhelmingly, respondents have a negative view on the state of agriculture in the County today with over 90% saying it is struggling or doing just okay, as seen in Figure 4.

"Struggling" or "Doing Just OK" Explained

As a follow-up question, we asked the farmers and ranchers who answered that agriculture in the County is "struggling" or "doing just OK" what they think is "the most significant problem facing agriculture in Missoula County." This was a general, open-ended question regarding the overall state of agriculture, rather than factors that are personally problematic. Analysis of the responses identified two prominent themes, which emerged repeatedly throughout the survey.¹⁰ Specifically:

- ❖ Half of the respondents (26) identified problems related to development, population growth, and consequent higher land values in the area as major factors affecting agriculture. They expressed concern that valuable farmland is being lost to development and to "subdivisions" in particular. As one producer said, agricultural land has "grown houses." Seven respondents specifically referred to the increasing value of land, which both makes it attractive for landowners to sell and hard to acquire land for farming.
- ❖ Thirteen producers expressed the concern that low prices for their commodities and/or the lack of a good market make it hard or impossible to get a good economic return from farming. Contributing to these low returns, 10 people identified production costs such as electricity, hay, and irrigation as problematic.

Figure 4: Views on the State of Agriculture in Missoula Cty.



Respondents identified issues related to development as the primary factor threatening agricultural viability in the County; low economic returns are also a major concern.

¹⁰ Other themes were mentioned by respondents; however, those mentioned by five or fewer people have not been included here.

“Doing Well” Explained

Only two people said they thought agriculture is “doing well.” One of those mentioned their ability to supply their own hay and other resources as a contributor to doing well, and another explained their response by saying they think most producers sell locally and do well as a result. None of the respondents viewed agriculture as “thriving” here.

FACTORS THREATENING FARM AND RANCH VIABILITY

After asking the study participants about their views on agriculture in the County in general, we wanted to learn more about the factors that they feel pose a problem or take away from their ability to keep their *particular* farm or ranch in operation over the long term. In a series of 15 questions we asked them to state whether the specified factor was a “very significant problem,” a “somewhat significant problem,” or “not a problem” for their farm’s long-term viability. The results are presented in Table 2, listed in order of the most to the least problematic.

Table 2: Degree to which Specified Factors Pose a Problem or Take Away from Respondent’s Ability to Keep Farm or Ranch in Operation over the Long Term, as Percentage of Respondents

Factor	Very Significant Problem	Somewhat Significant Problem	Not a Problem	Don’t Know
Cost of producing your crops or livestock	73.1	25.0	1.9	0
Prices you have been getting in recent years for your crops or livestock	46.2	42.3	11.5	0
Property taxes	46.2	34.6	17.3	1.9
Recent electricity rates	50.0	28.8	21.2	0
Lack of grain handlers, food processors, and packers in our area	38.5	26.9	34.6	0
Competitive markets to sell your products into	34.6	30.8	34.6	0
Irrigation and access to water	28.8	32.7	38.5	0
Local land use policies affecting agriculture	34.6	23.1	40.4	1.9
Transporting your products to market	23.1	25.0	51.9	0
Total debt load	11.5	28.8	59.6	0
Environmental regulations	19.2	19.2	61.5	0
Interest rates	17.3	19.2	61.5	1.9
Government programs	11.5	23.1	63.5	1.9
Difficulty obtaining credit	5.8	21.2	69.2	3.8
Workers’ compensation costs	9.6	15.4	73.1	1.9

Of the factors specified in the questions, respondents considered the high cost of production and the prices for their products to be the most significant threats to their own farm and ranch viability. Interestingly, in a 1982 survey of area producers, the same two factors were at the top of the list, followed by interest rates which were very high at that time.¹¹

It should be noted that the list of factors specified in our questions did not include growth and development, which we saw above was frequently mentioned as a threat to agriculture in general. After listing the series of factors, however, an open-ended question asked respondents if there were any other factors not mentioned that are a serious problem for the viability of their own farm or ranch. The most frequently mentioned response was related to growth and development. Ten respondents raised this problem and discussed their concerns that growth and development are leading to farmland loss, high land values, discouragement of agriculture within city limits, and other social impacts.

FACTORS CONTRIBUTING TO FARM AND RANCH VIABILITY

Given the purpose of this study, we also wanted to learn about those factors that might facilitate or contribute to keeping farms and ranches operating in Missoula County for the long term. Thus, in a series of 12 questions, respondents indicated whether a specified factor was “a very significant contributor,” “a somewhat significant contributor” or “not a contributor “to keeping their particular farm or ranch in operation over the long term.” Results are presented in Table 3, listed in the order of most to least contributing factors.

Perhaps not surprisingly, many producers report that getting a good price in some years even if they get a low price in other years is the most significant contributor to their operation’s viability. Physical features of their property – both the amount of and quality of their land – figured prominently in their responses as well.

Farming practices that help keep costs of production down are also important, and directly relate to the concern about high costs of production discussed above. The most frequently mentioned cost-saving practices fell into the following two categories: (1) water, energy and soil conservation practices, such as conservation tillage, gravity irrigation, and regulating irrigation (mentioned by 11 people); and (2) savings on feed costs, such as raising own hay or using poor quality/cheaper feed (mentioned by 11 people).

For nearly 65% of the respondents, income from a job off the farm was a *very* significant factor contributing to the farm’s viability. Indeed, over half of those interviewed have off-farm jobs, and about 69% rely mainly on off-farm sources of income. Reliance on off-farm income fits with the perception that economic returns from agriculture in the area have been too low to support many agricultural operations.

¹¹ The *Missoula County Agricultural Protection Study* by the Missoula Planning Office (1983, pages 10-12) reported the results of Jane Frost’s 1982 survey (see footnote 2, this chapter).

Table 3: Degree to which Specified Factors Contribute to Keeping Respondent’s Farm or Ranch in Operation over the Long Term, as Percentage of Respondents (N = 51, unless noted)

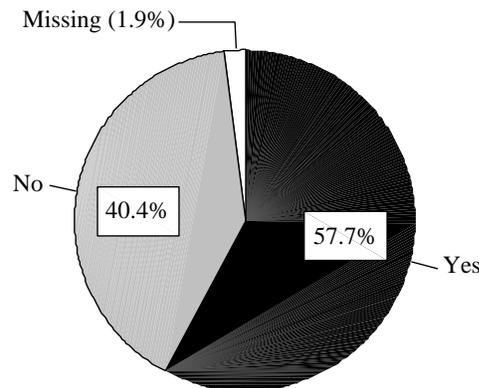
Factor	Very Significant Contributor	Somewhat Significant Contributor	Not a Contributor	Don’t Know
A good price in some years even if other years are bad (N = 49)	53.1	34.7	10.2	2.0
Amount of land you have available	62.7	19.6	17.6	0
Quality of land you have available	60.8	21.6	17.6	0
Farming practices that help keep costs of production down	54.9	27.5	17.6	0
Technical assistance or help from Extension or NRCS	45.1	33.3	21.6	0
Direct, local markets for your crop or livestock	51.0	23.5	23.5	2.0
Income from a job off the farm	64.7	7.8	27.5	0
Support or help you get from other farmers in the area	33.3	35.3	31.4	0
Market value of your land (N = 48)	29.2	35.4	35.4	0
A specific niche market	47.1	11.8	39.2	2.0
Marketing contract for your crops or livestock (N = 50)	30.0	26.0	40.0	4.0
Government programs	19.6	27.5	52.9	0

PERSPECTIVES ON GROWTH AND DEVELOPMENT

We asked the respondents a series of questions about growth and development in Missoula County and how it relates to farming and ranching. In particular, we were curious whether respondents were directly affected by development, whether they viewed it as positive or negative, and what role they saw the County playing in farmland protection.

As illustrated in Figure 5, nearly 58% of the respondents feel their

Figure 5: Development Affecting Respondent's Farm/Ranch

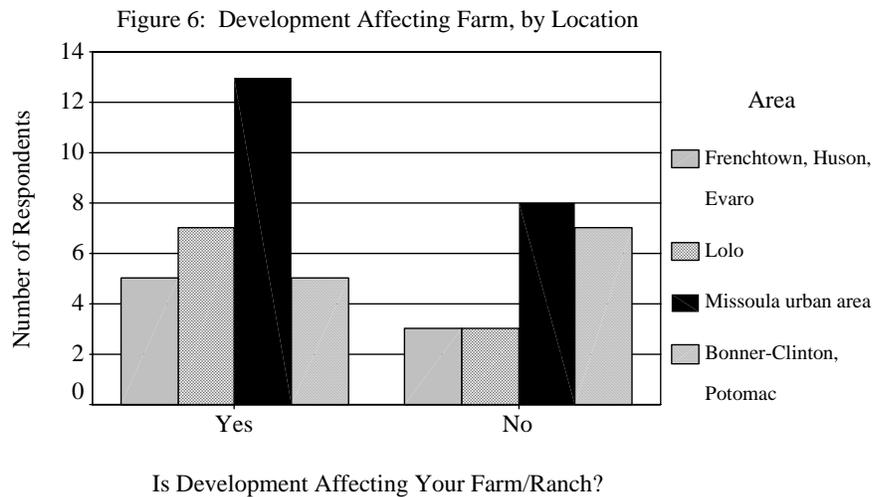


operations are affected by development trends. The introduction to this question gave respondents statistics regarding development. We let them know that in the last ten years, the County's overall population grew by 22% or about 17,000 people. We also mentioned that the population in areas outside of city limits of Missoula increased by 46% and that also during the 1990s, over ten thousand acres outside of the city have been subdivided. Then, we asked them whether this development was affecting their farm and ranch, and if so, whether those effects were positive, negative or neutral (see sidebar).

Is Development Positive or Negative?
 Of the 30 respondents who said that development is affecting their farm or ranch, 22 (73%) considered those effects negative, four saw development as positive, three were neutral, and one was undecided.

Development Effects by Location

As the city of Missoula spreads out from the center, farmers on the fringe of the city, including areas near Lolo and Frenchtown, are feeling the effects of subdivision and development more than in other areas of the County. We analyzed the 51 responses to the question of whether development is affecting their farm or ranch by their general location (see Figure 6). With the exception of areas near Bonner, Clinton and Potomac, a majority of respondents from each area said that development is affecting their farm or ranch.



Comments on Effects of Development

Throughout the survey and specifically in response to questions about development, many people repeatedly raised the issue and elaborated on their perspectives about growth. We recorded these comments (which include both those who feel directly affected by development and those who do not), and analyzed them for general themes. These themes are presented below, and can be used to help us interpret why people see development as positive or negative.

- ❖ Several farmers/ranchers mentioned positive effects of development. These comments were largely related to their economic worth being tied up in the land and the need to sell for retirement or because the economic returns of farming are so low. As one participant simply stated: “Our retirement is in the land value.” Others simply see development as “inevitable.”
- ❖ Four people specifically explained that increased land values make selling some or part of their land for development appealing. One mentioned: “You can do better by selling to developers than keeping it in pasture. It’s sad that it is happening. I would probably sell if someone offered. There are a lot of houses going in here. People are getting more money.”

“Growth is making the place worth more, which makes it tempting to sell for development. You just don’t make money from ranching, but love to do it.”
~ Respondent
- ❖ Four people mentioned that development has negative impacts because it reduces the amount of land available for agriculture. As one person put it: “Availability of land is a problem that will kill farmers...Development is going to drive farmers out.” Another explained: “It’s the pressures of a growing population that drive real estate through the ceiling. You can’t afford to buy land.” Some specific concerns mentioned include loss of land to lease and loss of land in hay production leading to increased cost of hay. One participant explained: “We don’t have enough hay because of lack of land from development.”

“It is a shame we are losing so much land to development, and agriculture isn’t important.”
~ Respondent
- ❖ Three people mentioned a need for subdivision control and for incentives and/or compensation to farmers for keeping land in agriculture.
- ❖ Three people identified local government as part of the problem. They perceive that City and County government favor development or do not understand rural needs.

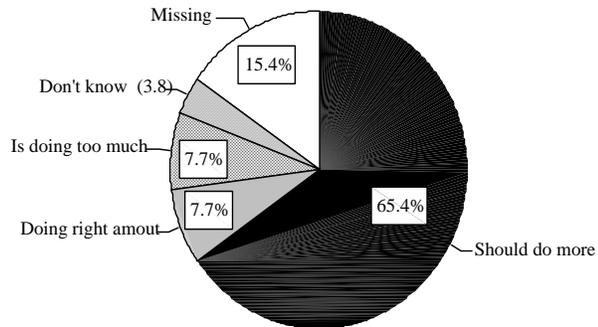
“The County is allowing too many houses and subdivisions to go up.” ~ Respondent
- ❖ One respondent who did not feel development was directly affecting their ranch said that it “indirectly affects” them. This person noted that it “reduces the amount of farm products which limits the interest of buyers...Have less, too hard to get to market and have fewer buyers looking for it. It is subtle. You notice it when it is gone.”
- ❖ Some respondents mentioned that development brings problems with neighbors, especially dogs running loose and complaints. Other concerns included: increased taxes; increased land values, which limit the ability to expand farm or ranch; and increased traffic.

County's Role in Farmland Protection

The respondents' perspectives suggest that both the low economic returns from agriculture and high land values associated with development are often driving changes in areas surrounding Missoula and in other rural parts of the county. Many respondents felt, however, that more should be done to protect farmland from development.

Specifically, we asked respondents whether they thought Missoula County¹² should be “doing more, is doing about the right amount, or is doing too much” to protect farmland from development. As seen in Figure 7, the majority (65%) of farmers and ranchers we spoke with feel the County should be doing more. Indeed, at several points in the survey people expressed their view that County government fosters development. Analysis of these findings in relationship to the farmer's or rancher's location did not identify statistically significant differences among respondents in different locations.

Figure 7: To Protect Farmland, Missoula County . . .



Note that 15% of the study participants had problems with the response options presented in the question, and hence are “missing” from the pie chart in Figure 7. Four of these respondents said the County “should not” or “does not have the right” to do anything, largely because of private property rights. Another person said it “depends” on how the County gets involved. A couple of people mentioned that the County cannot help address the economics, while another suggested that the County should act to help farmers stay in business. One person thought it was “too late” to do anything.

Thus, most of the farmers and ranchers we spoke with would like the County to “do more” to protect farmland. Yet, it was also clear that at least a fair number of respondents did not want the County to do anything that might infringe on property rights and/or they felt that the County should not do anything more.

LOCAL MARKETING

Scholars and agricultural experts increasingly recognize the importance of local marketing and the economic and social opportunities it can create in a community.¹³ Therefore, we asked the participants a series of questions about their perceptions and

¹² What was meant by “Missoula County” was not specified in the question, but it appeared to be generally assumed to refer to County government.

¹³ Kloppenburg, Jack R., Jr., Hendrickson, John and Stevenson, G.W. (1996). Coming in to the foodshed. *Agriculture and Human Values* 13(3), 33-41.

involvement in local marketing. We asked study participants about whether they currently market locally, the ways that they market locally, their perceptions on the advantages and disadvantages to local marketing, whether they would like to sell more in the local market, and how such markets could be pursued.

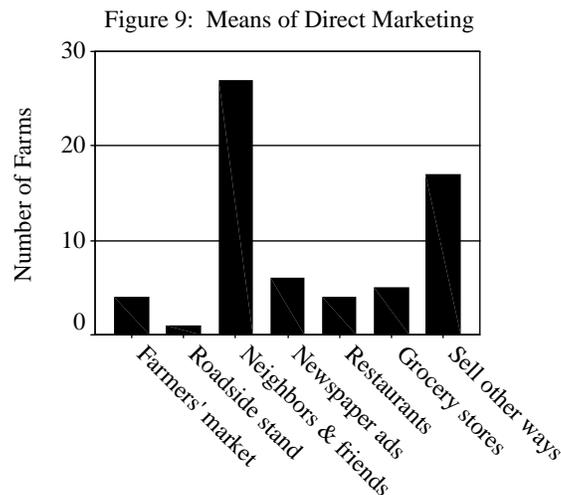
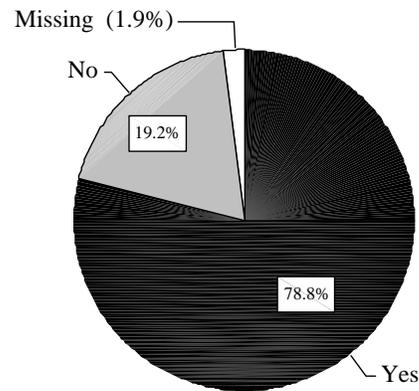
Participation in Local Markets

Interestingly, the majority of the farmers and ranchers we surveyed sell directly to consumers or participate in local markets to some extent, as seen in Figure 8. Note, however, that we did not ask them what percentage of their sales are local, which means that a producer may only very occasionally use such avenues.

A comparison of direct market sales by farm size suggests that farms and ranches in each size category, including those over 500 acres, are engaged in some local or direct marketing. In other words, farm size alone is not a good predictor of whether someone sells locally or directly to consumers.

We asked the 41 respondents (79% of the sample) who said they market locally about how they do it (see Figure 9). Selling directly to neighbors and friends is the most common method of local sales. Thirty-three respondents sell in other ways, including word-of-mouth, to Lolo Locker, spinners' guilds, and livestock sales in the County. In addition, farmers and ranchers in all size classes report that they are engaged in direct marketing to neighbors and friends.

Figure 8: Marketing Directly to Consumers or Locally

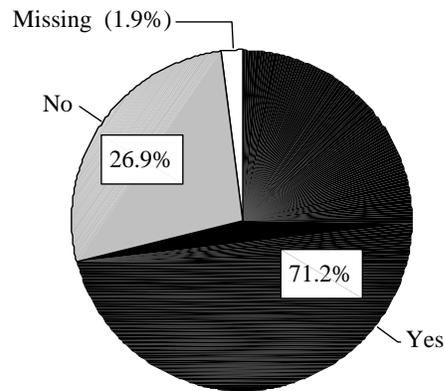


Selling More Locally: Advantages and Disadvantages

A majority of the study participants would like to sell more locally, indicating the potential for greater connection between producers and consumers (see Figure 10).

We asked the 37 people who would like to sell more locally what they see as the advantages and barriers to such markets. It is clear that the study participants perceive a number of economic and social benefits to local marketing. Analysis of their comments revealed the following themes and the number of people who mentioned them:

Figure 10: Interest in Selling More Locally



Advantages to local marketing.

- ❖ Getting a better price (13 people)
- ❖ Saving money, especially shipping costs (12 people)
- ❖ Connecting producers and consumers, especially because it creates greater knowledge of food's origin (9 people)
- ❖ Making marketing more convenient, no middleman (7 people)
- ❖ Producing better quality food (includes health, freshness and fewer additives, hormones and pesticides) (6 people)
- ❖ Providing benefits for community and local economy (5 people)
- ❖ Encouraging local appreciation for particular product (2 people)

Disadvantages to local marketing.

- ❖ Lack of or closed markets, including location and people's receptivity (13 people)
- ❖ Lack of processors/packers, especially for livestock (7 people)
- ❖ Costs, especially transportation and advertising (6 people)
- ❖ Lack of time or it is a hassle (5 people)
- ❖ Rules & regulations, especially government/health department (5 people)
- ❖ Limited by farming practices and products raised (4 people)
- ❖ Need more land or no place to raise more livestock (3 people)
- ❖ Prices or economy prohibits (2 people)
- ❖ No marketing co-ops (1 person)

Why not market locally?

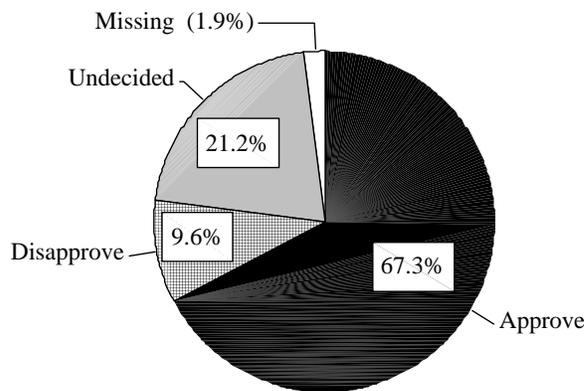
Twenty-seven percent of all respondents did not want to sell more locally. We asked why, and here are the themes in their responses:

- ❖ Other markets better (because of price, scale of operation) (7 people)
- ❖ Hassle or it takes too much time (includes having to be a salesperson) (4 people)
- ❖ Old age of the respondent (2 people)

AGRICULTURAL TASK FORCE

We asked study participants about whether they “approve, disapprove, or are undecided” about “the creation of a task force that would recommend ways to promote local agricultural markets and preserve agricultural production in the County.” As seen in Figure 11, over 67% of the survey participants approve of the idea, although a substantial percentage (21%) were undecided. A similar question was asked in the 1982 survey and found that 56% approved, 26% disapproved, and 18% were undecided.¹⁴ Several raised questions about who would be on the task force, and stressed that farmers and ranchers would have to be represented.

Figure 11: Opinions on County Agricultural Task Force



“Having a task force is a good idea. Open space and farmland should be protected. This area has some nice farmland.”
~ Respondent

SUMMARY OF THE FARMER AND RANCHER SURVEY RESULTS

Our original research question asked what the exiting assets and barriers are to viable agricultural production in Missoula County. Several themes emerged repeatedly and prominently from the analysis. Although the survey is not based on a random sample, the themes are bolstered by the in-depth interviews described in the next chapter and shed light on some of the key opportunities and concerns among producers in the area.

Clearly, the farmers and ranchers surveyed conveyed their sense that agriculture is struggling here. The source of that struggle is often due to two interrelated problems: low economic returns and development pressures. Respondents viewed high costs of production as a major threat to farm and ranch viability. Another major concern was low prices; however, it also appears that getting a good price in some years even if other years are bad is a major contributor to keeping these farms and ranches going. Interestingly, assets for long-term viability included the amount and quality of the land individual

¹⁴ The Missoula County Agricultural Protection Study by the Missoula Planning Office (1983, pages 10-12) reported the results of Jane Frost’s 1982 survey (see footnote 2 above).

producers have, suggesting that these are assets worth maintaining if we are to keep agriculture viable here.

Throughout the interviews, the majority of the farmers and ranchers we spoke with expressed feeling the effects of growth and development in the County, and they tend to see these effects as negative. They are concerned about the loss of working agricultural land to subdivisions and the associated loss of a way of life. Development has other effects as well, including conflicts with new neighbors.

The issue is not clear-cut, however. Many respondents find themselves in a bind because their equity – and therefore their retirement income – is in their land and other farm-related assets. Increasing land values mean that new farmers or existing farmers who want to expand cannot afford to buy land. In other words, low economic returns often mean that one cannot pay for farmland by farming it. In that context, selling land for development becomes appealing. Thus, a major conclusion we can draw is that farm economics are integrally tied to perceptions of and decisions about development.

One way to begin to address issues of farmland loss is to improve the economics of farming and ranching locally. A growing population can also be a growing market. Indeed, the survey results suggest that there is a strong interest among producers in local marketing. They see economic benefits, especially in terms of getting a better price for their product. Some respondents also expressed an interest in reducing the distance between consumers and producers so that eaters may have a better sense of where their food comes from. As the survey of local consumers discussed in Chapter 5 illustrates, there is also strong interest among consumers in buying locally.

Local marketing is not without challenges, however. Although some respondents feel that local marketing helps them save on transportation costs, others say that it costs more to market locally. In addition, producers feel that local markets need further development, and there is a need for more processing infrastructure.

Where do we go from here? The majority of those who participated in the survey would like to see the County “do more” to protect farmland. They also conveyed fairly strong support for the creation of an agricultural task force that would promote local agricultural markets and protect agricultural lands. A similar recommendation for a task force emerged from the 1982 study of producers in the County. Unfortunately, that strategy was not pursued. Over the ensuing twenty years, the trends toward agricultural decline have continued and even intensified here; yet, consumer interest in buying local food has grown. Such a task force could devote attention to the issues and opportunities highlighted in the survey. The idea of a task force is discussed further in Part III.

CHAPTER 3
A CLOSER LOOK:
PERSPECTIVES OF SELECTED FARMERS AND RANCHERS

LIBBY HINSLEY

INTRODUCTION

This portion of the Community Food Assessment reports on in-depth interviews with agricultural producers.¹ The interviews were designed to get a richer, more detailed description of perspectives from participants about the challenges and benefits of agricultural production in Missoula County than was possible with a phone survey, thereby illuminating some of the thinking and feelings underlying our survey results. Thirteen farmers and ranchers from around the county participated in interviews during February and March of 2004.

Overall, participants expressed a wide range of views on many of the topics we discussed, reflecting differences in their individual needs, assets, and experiences. Despite the variability, the analysis suggests several important themes. Below, I summarize these findings, beginning with factors that participants report threaten their operation's long-term viability. This is followed by a discussion of factors that contribute to participants' ability to continue farming or ranching for the long term and an overview of the conservation techniques practiced by participants. I then highlight participants' views about growth and development in Missoula County, which leads into a discussion about farmland protection. The final two sections cover participants' thoughts about local marketing and the creation of a countywide agricultural task force.

METHODS

Interviews ranged in length from 45 minutes to 1.5 hours, and were conducted at the homes of the study participants. Of the 13 interviews, 11 were tape recorded and transcribed verbatim; extensive notes were taken on the other two. A fourteenth study participant declined an interview, opting instead to send a letter detailing some of her challenges. Two potential participants initially agreed to participate in an interview to be scheduled at a later date, but I was never able to reach them again to conduct the interview. Thus, the study reported on here consists of 14 participants: thirteen in-depth interviews and one letter.

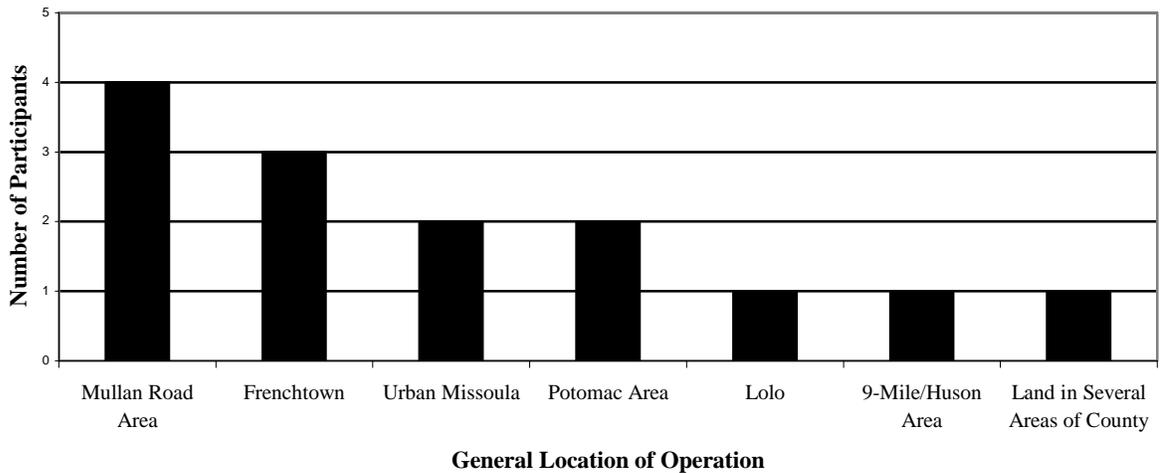
¹ The research presented here is part of the author's Master's Thesis research. For a more detailed discussion of the findings and context, see: Hinsley, L. (2004). *"Left for dead" or "hope on the horizon?" Perspectives on the future of agriculture in Missoula County*. Master's Thesis. Missoula: University of Montana.

I selected participants from the Community Food Assessment’s master list of agricultural producers in the county, which was assembled from many sources. Many interviewees were suggested to me either by virtue of their location in the county, or their perceived willingness to talk about these issues, regardless of their particular viewpoint. In addition, my goal was to hear from different types of producers, in terms of crops or livestock raised, and geographic locations in the county. Eleven of the participants were male, while three were female. Table 1 illustrates the crops and/or livestock grown by the study participants; Figure 1 shows the general locations of the farms and ranches. Their operations ranged from very small, intensive vegetable production on less than five acres to one of the largest landowners in the county.

Table 1: Crops or Livestock Produced by Study Participants

Crop or Livestock Sold by Participants	Number of Participants (total = 13)
Cattle	8
Hay	7
Leased for Grazing	2
Grain	2
Organic Vegetables	1
Eggs	1
Conventional Vegetables	1
Bedding Plants	1
Timber	1

Figure 1: Geographic Distribution of Study Participants



Using a technique known as content analysis, I analyzed the interview transcripts and letter for relevant themes, coding the data to make it systematically comparable.² This allowed me to count the frequency of responses regarding each particular topic, as well as to identify larger themes that emerged. While it is important to note how many participants gave certain responses, the strength of in-depth interviews is that they provide detailed, qualitative data. Quotations are an important part of depicting the perspectives of the study participants. In presenting quotations below, I use verbatim language; however, in some cases, awkward phrases (e.g., “you know”) have been eliminated to make it easier to read. Deletions are indicated with ellipses; numbers in parentheses refer to the code given to the interviewee and the transcript page number.

These data are not to be interpreted as representative of the views and perspectives of *all* farmers and ranchers in Missoula County. Rather, the in-depth interviews enable a deeper understanding of the views and experiences underlying the survey results described in Chapter Three.

THREATS TO FARM AND RANCH VIABILITY

Participants noted that economic and policy-related concerns are among the greatest threats to their long-term viability. When asked what factors most threaten participants’ ability to keep their operations going for the long term, these farmers and ranchers spoke about a wide range of factors. The most prevalent ones, however, were the lack of economic viability of agriculture, policy concerns, environmental conditions, community attitudes, and the impacts of growth and development in the County. Since I devote a later section specifically to development, here I will discuss these other factors.

Economic Concerns

The most common threat, cited by twelve participants, was the lack of economic viability of agriculture, which affects them in various ways. Seven noted pricing, whether it be low prices for commodities or lack of farmer control over pricing, as a major factor influencing viability. As one interviewee explained: “Agriculture is such a loss—an economic loss.... It’s the lack of value of the crops relative to the cost of production... It does not pencil out economically” (#9, 2). Three participants talked about our society’s expectation of cheap food as a problem related to pricing. As one explained: “We’ve got a society that’s used to having cheap food, and that’s not going to change in the near future. You know, if we told everybody in the United States that you’re going to pay three times as much as you

“When I look at the records that my father kept of the prices that he received for his beef every fall, they’re not much higher now.... People that are involved in agriculture today are receiving essentially the same income that they received forty years ago.... It makes it extremely difficult for people to survive” (#3, 2).

² Berg, Bruce. (2004). *Qualitative research methods for the social sciences*. (5th ed.). Boston: Allyn and Bacon.

are for your groceries so we can keep our farmers on our land, nobody'd care. They'd say 'No way, we're not going to do it'"(#5, 8).

Another commonly mentioned factor influencing economic viability was the cost of production, noted by six participants. Cost of production included everything from the cost of equipment to the cost of electricity to power an irrigation pump. Four participants specifically spoke about labor costs as a negative factor, stating that they are unable to pay labor adequate wages to keep consistent, qualified workers on their operations. Several respondents noted that the high cost of production in this country limits U.S. farmers' ability to compete on the global market.

"We would love to provide health care, dental, all those things, you know. But we can't because our profit margin is so small... It would be nice to have a real good quality employee that you could keep here for thirty years, and that he's got a light at the end of the tunnel, and benefits... We can't do that" (#8, 11).

Several participants also mentioned the lack of agricultural infrastructure in this area. Missoula County lacks processing facilities that might allow producers to add more value to their crops. In addition, the agriculture support base here is dwindling, they explained, noting the loss of livestock feed outlets and other support businesses that provide for the needs of farmers and ranchers. As one explained: "You have to have support for production... You have to reach farther for your support base. ...Manufactured livestock feed comes from Great Falls or Billings... It doesn't come from Missoula anymore. It used to...because there were two mills in Missoula" (#2, 3).

Policy-Related Concerns

Among the policy-related threats brought up by eight participants, the most often mentioned was a high rate of taxation, whether property tax or estate tax. Another commonly mentioned concern was reduced access to grazing opportunities on public lands, or imperiled grazing opportunities on Plum Creek land due to changing ownership. Several participants expressed concern that weed laws are not being enforced, and that policies are ineffective at preventing the spread of weeds. A couple of others felt that the County Road Department is inattentive to outlying roads, leaving rural farm areas with excessive dust that sometimes impacts production.

"Taxation is extremely depressive to ranching because it takes a high amount of capitalization, and that capitalization is taxed. And as such, it decreases its profitability" (#10, 2).

Environmental Conditions

Eight participants also spoke about environmental or physical conditions they feel make it difficult for them to keep their operations going. These included weeds and other pests, predation by wolves, water availability, climate, drought, and the short length of our growing season.

Community Attitudes

Although many factors threaten participants' ability to keep going, five participants mentioned one that is different in that it does not necessarily impact them materially or financially. That factor concerns changing community attitudes toward agriculture. The participants who raised this issue noted the difficulties that come with the fact that many of their neighboring landowners are no longer farming or ranching, resulting in a loss of their sense of agricultural community. As one put it: "The support system—the neighbors that are around you, doing the same things, kind of support each operation. That's dwindling away. And people with different interests like the area, but they don't necessarily like cows" (#2, 2).

"I think the new neighbors don't value agriculture...and they make it difficult for you to run your operation. We're all the time having to spend time defending our right to be here. And the attitude of the community has changed. There's no community" (#2 wife, 5).

Growth brings in many different types of people with different interests, and these farmers and ranchers feel many newcomers are not friendly toward agricultural practices. One felt that many people do not understand the financial difficulties of farming and ranching, and an unfortunate result is that sometimes the community looks upon ranchers who need to subdivide land for development as greedy.

Some participants sense that agriculture has been "left for dead" here in Missoula County—that it is simply on its way out the door as the community changes. This sense is intensified by the fact that many feel the younger generations are not interested in staying in agriculture.

"It's hard to teach somebody to lose money and still survive. So I don't think we've got long to go, and we'll all be gone in Missoula County, anyway" (#11, 3).

FACTORS CONTRIBUTING TO FARM/RANCH VIABILITY

Working off-farm, selling to local markets, and reducing production costs are key factors mentioned as contributing to participants' long-term viability.

Off-Farm Jobs

When asked about factors that contribute to participants' ability to keep their operation going for the long term, the factor most often mentioned was off-farm employment. Eight participants spoke about the fact that income from sources other than their agricultural operations makes it possible for them to stay in production.

"When my father passed away, I took over...but I had an outside source of income...That's really the only way that the operation could continue" (#3, 2).

Local Markets

Five participants noted market considerations that facilitate their operations' long-term viability. Most of these producers mentioned dedicated and accessible local customers. One talked about the importance of finding a niche for the local market, and another expressed pride in the quality of his product, something that aids in his local marketing success.

“We’re close to town, and that makes it easy to deliver things. We have easy access to restaurants and stores and the farmers’ market. It’s a great farmers’ market. Mostly, there are good markets” (#7, 2).

Reducing Production Costs

As discussed in the previous section, issues surrounding the cost of production emerged as a primary negative factor for many participants. Some cost of production issues, however, also emerged as positive factors for a few respondents. One producer talked about the fact that his operation is less labor intensive than in the past, due to better machinery, better communications, and better communication technology. As he put it: “It doesn’t take near the physical labor to do the job that it did thirty years ago” (#2, 3). Two interviewees mentioned the fact that they do not purchase expensive commercial fertilizer, a practice that keeps their costs down. In addition, two participants mentioned that environmental or physical conditions were on their side, citing good soil and good water for production.

Other Factors

Respondents mentioned several other positive factors. Two view the agricultural property tax rate as beneficial, and another has placed a conservation easement on his property, something he feels contributes to his ability to keep his operation going for the long term. Another participant noted that he is encouraged to continue ranching

“We’ve just not fertilized. ...We’re not getting some of the yields that maybe some of the other places in western Montana...are getting, but our input costs are much lower. And so, I think overall we’re better off” (#5, 4).

by being able to watch his land value appreciate in the meantime. Lastly, a substantial number of participants spoke about personal factors, such as a love for the farming lifestyle, playing an important role in keeping them going for the long term. These are discussed after the following section.

CONSERVATION PRACTICES

Mention of techniques designed to maintain environmental quality and sustainability on the farms and ranches of interview participants was prevalent, showing that at least these particular farmers and ranchers in Missoula County try to be stewards of the quality and health of our agricultural resources. Environmentally sustainable practices reported by participants include attention to water and soil quality and reduced chemical use.

Water Conservation

Six participants have taken steps on their land, sometimes out of economic necessity, to conserve water and protect its quality through improved irrigation systems and ditch designs. Four have taken measures to protect creeks and creek side vegetation, either by fencing off riparian areas, creating streams to keep cattle off the main creeks, or by installing fish screens on irrigation systems so that fish stay in the creeks.

“We fenced off the riparian area... The cattle like to trample the banks as they go down to the water, and that’s highly destructive to the vegetation along the river... The results are highly promising and the vegetation is coming back beautifully” (#3, 9).

Soil Quality

Practices pertaining to soil quality and health are also typical of study participants. Through careful grazing practices, crop rotations, and erosion control methods mentioned by eight participants, farmers and ranchers are protecting the long-term production capacity of their land, often offering many side benefits to the larger community.

“We try to leave a third to half of our grass every year. It holds the snow better, it controls the weeds better, and if you get a dry year, you’ve got some residue from the years before to get you through. One of the rewards of that to conservation is, you’ve got some cover for the birds to nest in the next spring. There’s something for the elk and the deer to winter on because you’ve got some stuff sticking out of the snow. Those kinds of things help everybody” (#5, 5 and 22).

Chemical Use

Study participants also employ practices that limit their use of chemicals, commercial fertilizer, and antibiotics. Among the eight participants who mentioned minimizing their use of chemicals, several use no chemical pesticides or commercial fertilizers at all, and others minimize the use of these substances whenever possible. Several have tried alternative methods for pest control, such as biological controls and strategic irrigation practices. Still others avoid using hormones and antibiotics during cattle production.

“I prefer not to ever have to use chemicals to get rid of the weeds. ...Every so often, every so many years, I turn my ground. I plough it up, and I plant oats and peas. And that seems to be a good, you know, buffer or off season crop that puts nitrogen back into the soil” (#12, 14).

DECISIONS REGARDING KEEPING LAND IN AGRICULTURE

Given the range of factors influencing participants' ability to keep their operations going for the long term, I asked them to describe how they make decisions regarding whether they will keep their land in production. These farmers and ranchers tend to base this decision on either economic or personal reasons, and often both. Many noted it is not an easy decision to make. In other words, economic considerations balanced by personal commitments to the land and to a way of life are key factors in the often-difficult decision about whether to keep land in agriculture.

“It sometimes feels like a big boat anchor around your neck. You wonder sometimes why you're doing it, because...we're not going to see any benefit of our labor for a long, long time” (#5, 1).

Economic Reasons

Six participants talked about economic influences on their decision to continue farming or ranching. Three of them indicated that they plan to keep their land in production as long as they can afford to do so. One reported that he keeps his land in production to watch it appreciate in value until he sells it for profit. Another reported that she's been forced to develop her property due to financial considerations, and portions of it will remain in production only if subsidized by the development through homeowners' associations or some other way.

“It only stays in agriculture... to watch the appreciation of the land... The only paycheck you get on ranching is when you sell the ranch” (#10, 2).

Personal Reasons

Although financial reasons weighed heavily in decisions about whether to keep land in production, ten participants mentioned personal reasons. Seven of those indicated that it is a sacrifice to keep their land in agriculture, because it would make more economic sense to sell or subdivide it. Many, however, feel strongly that agriculture is the best use of their land, and they want to keep their land in production. One respondent's sense of responsibility is connected to his family's long history on the land.

“The biggest thing that weighs on my mind is that you have his grandfather, my grandfather, my dad, and now me. And I don't want to be the one that goes, ‘Okay, let's just cash out, put the money in the bank’ and you know, live high off the hog... I feel a sense of responsibility... If you think about all the blood, the sweat, the tears...the child death...cold winters, hot summers, the Depression, two World Wars, all those things. That weighs heavily on me” (#8, 13).

Another said that despite the hardships of farming and ranching, he feels that many farmers hold onto hope that conditions will improve, and that is what keeps many on the land. This same participant, as well as several others, spoke about the fact that they simply love the work and the lifestyle of

farming or ranching. As one put it succinctly: “I support the ranching. The ranching does not support me” (#10, 1).

IMPACTS OF GROWTH AND DEVELOPMENT

When asked about factors that threaten their ability to keep their operations going for the long term, eight participants discussed development as a significant factor. These responses generally had to do with impacts of increasing land values and simply having more people live nearby. Growth and development impact participants by increasing land values and creating conflicts with neighbors, among other concerns.

Increasing Land Values

For several, the high cost of land has made it impossible to purchase additional land to expand production. Sometimes those land values make them feel like their best option is to sell their land and get out of production. As one put it: “There’s not room for growth. All the ranchland is so inflated in price that you can’t afford to buy more land...” (#5, 2). As another explained: “You know, the best crop you can raise on a ranch in western Montana in this location is one acre with a house on it” (#8, 2).

“A lot of guys say, ‘I’m land rich, and cash poor.’ And all that means is that I’m sitting on a lot of land that’s worth a hell of a lot of money, but the only way I’ll ever get it is to sell it” (#5, 12).

More Nearby Neighbors

In addition to the high cost of land that goes along with growth, several participants mentioned the more immediate impacts of development in their vicinity, including an increasing number of neighbors, some of whom are not friendly to agriculture. One described physical damage to his property resulting from adjacent developments.

“Subdivision encroachment...causes more trespass, roaming dogs... Increasing numbers of elk and deer and decreasing wildlife range due to subdivision cause loss of forage for income-producing livestock” (#14, 1).

Development Trends: Positive or Negative?

I asked participants if they thought recent trends in increasing growth and development are positive, negative, or neutral for their *particular* operation. Many participants were able to list several positive aspects of development trends as well as listing negative aspects. Thus it appears that the issue is not clear-cut. Overall, eleven participants gave negative responses, while five gave positive responses. I then asked them if they thought those trends are positive, negative, or neutral for agriculture in the County *in general*. While several could see both positive and negative aspects of development for agriculture in general, ten participants gave negative responses, and two gave positive responses. Eight participants, however, spoke about the inevitability of these trends, expressing a resignation of sorts to the perceived fate of Missoula County agriculture.

“I think it’s inevitable. If the growth is going to go west and you’re in the path, economically you’re going to be forced to sell it, or subdivide... Thirty years ago if you’d asked me if I would have done this, I would have said no. But as you get older and see the handwriting on the wall, you either move, or uh, join in, and we’re just trying to stay with what we have” (#13, 7).

COUNTY’S ROLE IN DEVELOPMENT AND FARMLAND PROTECTION

Eight participants expressed the view that in general, the County government does not respect agriculture, and instead makes things difficult for farmers and ranchers trying to make a living here. As one put it: “They just have a mindset, they don’t *care* about agriculture” (#1, 3). Five participants feel that development is not handled well by the County. A few of these respondents feel that the County is simply not doing the right things; others noted specific areas, such as public participation, in which the County could improve the way it deals with development issues.

County’s Involvement in Protecting Farmland

When asked whether they think Missoula County is currently doing too much, the right amount, or too little to protect farmland from development, participants gave a range of responses. Many perceive that the County is doing nothing to protect farmland from development. Furthermore, five participants discussed their view that the County is permissive to development, sometimes bending over backwards to appease developers, regardless of other considerations. These five participants felt the County should do more to protect farmland.

“I don’t think the County is doing anything to protect farmland, as far as I can see... I would say if anything, the County is permissive in encouraging development of land” (#6, 4).

A few participants disagree, however, claiming that the County should not do anything regulatory to protect farmland. Four participants felt like the County should not do anything to protect farmland, claiming that is not the County’s proper role. Only one participant felt that the County is already doing too much to protect farmland from development.

“Personally, I think they’re doing too much, because they’re dictating to everybody...what they can and can’t do with their land, and I think that’s wrong” (#12, 8).

Suggestions for Change

Several participants offered suggestions for how the County might approach development issues differently or better. One suggested distributing water rights on land that has been subdivided back to farmers in that area so they can use the water. Several others

complained that County leadership lacks long-term vision, feeling that the County needs to address central planning issues such as the long-term carrying capacity of this area. A couple of participants felt strongly that farmers and ranchers themselves ought to play a significant role in the creation of subdivision and zoning regulations for the County. Some think the County should offer greater incentives for farmers and ranchers to keep their land in production and out of development.

“I think that people need to look at Missoula and figure out, how many people can live here without totally ruining—you know, in fifty years, is there going to be any water left? Any air to breathe? ...Are we going to be on fire? I think that some of those issues need to be addressed” (#7, 12).

VIEWS ON FARMLAND PROTECTION STRATEGIES

Given the increasing growth and development in Missoula County, it is important to understand farmers’ and ranchers’ views about protecting farmland from development in general, as well as specific methods for doing so. Seven participants clearly feel it is important to protect farmland from development for the long term. Only one person said outright that farmland protection is not important. Several others expressed more ambivalent views on the subject, or did not have an opinion on it.

Tax Dollars for Farmland Protection

Participants hold a wide range of views regarding specific farmland protection methods. For example, when asked whether they would support the use of tax dollars such as a bond, to raise money for some type of farmland protection program in Missoula County, eight participants said yes, while only three said no. Several participants expressed doubt that the public would support such a measure, regardless of their particular opinion about it.

“I don’t know that I could say what the next generation is gonna need or do. I know they’re gonna need farmland somewhere, but I don’t know whether it’s in Missoula County, or whether it’s in Brazil, or whether it’s in Argentina or Australia” (#3, 7).

Agricultural Zoning

Another method discussed was countywide agricultural zoning. Nine participants oppose agricultural zoning, while three support it. Many cited the importance of private property rights as central in their views about zoning. Others noted a range of drawbacks to zoning, including the feeling that having one’s land zoned for agriculture would make it difficult to borrow money. The constraints of agricultural zoning were also raised as a reason for many to disapprove of it. These farmers and ranchers feel they need the flexibility of not being zoned for agriculture. They believe

“To zone land and take away development rights is absolutely wrong” (#9, 9).

this would place their economic well-being in the hands of others. A couple of participants also mentioned that agricultural zoning could take tax revenue away from badly needed services. For these reasons and others, many believe agricultural zoning is unlikely to be supported here by the public or by policymakers anytime in the near future.

Conservation Easements

Another method for protecting farmland is the use of conservation easements, where a landowner sells or donates restrictions on his or her property that limit or prohibit development. Only one of the study

“The conservation easement programs, that’s what’s going to keep us here” (#5, 13).

participants currently has a conservation easement on his property, and several others have explored the possibility. Eight participants showed either full interest or potential interest in placing a conservation easement on their property at some time, yet four do not think they would ever be interested in a conservation easement for their property.

Six participants think conservation easements are typically too restrictive for the landowner or their heirs. Six participants also think easement programs only benefit wealthy landowners who are in a financial position to make

“Conservation easements are instilling your ideas upon the future. Those people in the future should have *their* opportunities to make their decisions. We have no right to be making decisions for generations down” (#10, 6).

use of the tax breaks that landowners often receive in return for a donated easement. As one put it: “I need to go out and get a job as a doctor or a lawyer and make two hundred grand a year to take advantage of that tax break” (#8, 8). Much for this reason, seven participants think that actually paying farmers and ranchers for their easement, rather than asking them to donate the easement for a tax write-off, is a necessary condition for conservation easements to be effective farmland protection mechanisms here. As one explained: “I know of ranchers that would gladly put their place in a conservation easement if they could get enough money for it” (#8, 7).

County Management

Under conservation easement programs, development restrictions on a piece of property are typically held by a non-profit, land trust organization. I asked participants what they would think about the County managing a program like that, acting as the holder of development restrictions on property.³

Every respondent to this question was opposed to the County managing such a program. Even those participants who think farmland protection is important do not think the County is the appropriate agent to actually manage a farmland protection program. Nine participants do not trust the County to manage such a program. As one put it, “From what I see of the County’s management of all this development, I don’t think I’d even

³ Such programs might include transfer of development rights or purchase of development rights, both of which have been used elsewhere. The question was posed in a general way to get at what people would think of such a role for the County.

trust ‘em getting into something like that” (#4, 23). For some, their opposition to County management stems from a belief that it would not be a priority for the government. Others do not see the County as a good steward of its own land and business. Also, because “political climates change” (#5, 19), they question the stability of such a program. Four participants feel like the County simply does not have the resources such as money, personnel, and expertise, needed to manage such a program.

A Role for the County

Where some participants do see the County playing a role in farmland protection is in the arena of raising money and supporting organizations involved in farmland protection that have the appropriate expertise to manage such a program. Several participants suggested that the County could prioritize the most productive farmland for protection. For example, one recommended: “If where we are right now is really good soil...maybe this is a place where they should think about conserving some of it” (#7, 12).

“I think if the County wants to get involved with the conservation easement process, the way to do that is to be financially supportive of the organizations that do it” (#6, 6).

Some interviewees suggest that smart in-fill development could help ease development pressure on farmland throughout the County. One respondent felt that if the County lowered property taxes for producers, there would be no need to spend millions of dollars on open space, because we would have our open space in surviving farms and ranches. Another called for strong incentives for development that would be clustered and for incorporating open space and agriculture in it.

“I think to provide incentives for cluster development, for preserving open space, for preserving agriculture...is exactly the way to go” (#9, 9).

Beyond Farmland Protection: Economic Factors

Some noted that regardless of whether farmland is protected, farmers and ranchers must still be able to make a living on the land, indicating that protecting farmland is only one piece of the farm viability puzzle.

“If you put an easement on a piece of ground, right next to Missoula—say it’s the highest value farmland—and it’s still not economically able to be operated as a farm, what have you accomplished?” (#2, 9).

LOCAL MARKETING: PROSPECTS AND BARRIERS

Understanding that farmland protection is only one tool available to support farmers and ranchers, I asked participants about local marketing as a way to keep local operations economically viable. We discussed the prospects for local marketing in the area, as well as a variety of benefits to producers, consumers, and the community in general.

Positive Prospects for Local Marketing

When asked if local marketing of agricultural products could be an effective way to support local farmers and ranchers, ten study participants saw good prospects for local marketing. Many noted that increasingly, citizens here and elsewhere are thinking more carefully about where their food comes from, and making more informed purchasing decisions to buy locally and organically raised food.

Several respondents also noted that Missoula County residents in particular seem interested and willing to purchase locally-raised food. The two respondents who primarily market their goods to local consumers indicated that they enjoy and depend on a very loyal local customer base that includes individuals, restaurants, and some grocery stores.

“I think it’s particularly apparent after the Mad Cow outbreak... We have some huge issues in our food chain, and they’re real.... It’s mainstream now to talk about it... So, with the affluence that’s coming with this development, and with the increase in population, I do think that we can support exactly the type of thing that’s happening at the Good Food Store—you know, Lifeline Meats. ...I think as a community we could do some exciting things” (#9, 12).

Benefits to Producers. In conversations about local marketing, many cited benefits for the producer, the consumer, and the larger community. Eight participants noted that local marketing financially benefits the farmer because it brings a premium price (and therefore profits) to the farmer, cuts down on transportation costs, decreases the amount of money spent on fuel, and decreases the environmental impact of using resources to ship food long distances for consumption. For these reasons, many think that local marketing could significantly support farmers and ranchers here.

“All they have to do is look at the Farmers’ Market to realize that selling local produce is tremendously popular” (#3, 9).

Benefits to Consumers. Four participants spoke about benefits to consumers of buying local food. These respondents feel that it is important for consumers to understand where their food comes from and how it is grown. One respondent suggested this understanding gives consumers peace of mind about the food they eat. Buying local food was mentioned as an opportunity for consumers to learn about where they live in a new way—through food—and to create valuable ties with local producers. As one put it: “I would certainly [like to] see many more of the people who remain on the land having this closer tie with local consumers so that they’re getting a premium price for their produce. But the people

who buy it are also getting premium produce, and they're able to watch it grow...which I think would be extremely important" (#3, 10).

Benefits to the Community. In addition to benefits to individual consumers, two participants brought up the positive impacts of local marketing on the community at large. One participant noted that by selling products locally and thus increasing farm profits, local marketing could contribute to producers' ability to stay on their land, making a connection between local marketing and keeping our remaining farmland in production. Another respondent spoke about the positive impact local marketing could have on our local economy. Buying locally-raised goods keeps money circulating through the local economy. Local processing and marketing also has the potential to create good jobs, something the community needs. In this way, local marketing of agricultural products has the potential to strengthen the local economy and community through a ripple effect.

"Now, if I start feeding out a hundred head of cattle, and so do all my neighbors here... now we're going to need a facility right here. That creates jobs. Right away" (#5, 28).

Barriers to Local Marketing

Participants identified several barriers to local marketing in the Missoula County area, including: limited markets, local processing concerns, and resistance to change.

Limited Local Market. Although many participants see benefits to local marketing, many also spoke about the limitations of and barriers to it. Seven respondents perceive the market for locally-raised food to be limited. For example, some view local marketing as an option only for vegetable crops, but not for commodities such as grain. A couple of respondents even think the local market for vegetables is limited, viewing the farmers' market as insufficient to sustain a farmer, although they view it as a positive market to get a producer started. A couple participants noted the difficulty for a small-scale local producer to break into the large grocery store market. Several expressed doubt that consumers would be willing to increase the amount they pay for local or organic food enough to significantly impact farmer profits.

"If you raise grain, you've got to plan on haulin' it to the coast or somewhere. There's no place anymore that takes it in town" (#4, 18).

"There's only a certain amount of incremental money the consumer's gonna pay to get a steak that was grown in Missoula County versus the one that was grown in the state of Montana versus one that was grown where she doesn't even know where it was grown—which is the more typical.... Will people...buy local beef that they think is better? Sure they will, but only to a certain point. How much of that flows back to the farmer? Probably not enough to keep him in business if he's a marginal producer at this point" (#6, 15).

Barriers to Local Beef Processing. Several barriers to local beef processing and marketing were mentioned. The main one, raised by six participants, was the lack of nearby processing facilities with the needed level of capacity. Several producers also spoke about the enormous financial risk involved with establishing a local beef processing and packing facility, and the economic difficulty such a facility might have competing with regional or national facilities. To process beef locally, some felt there may need to be local feedlots established where cattle are “finished,” which may not be welcomed by Missoula County residents. In addition, there is concern that local beef production would exceed local consumption. The fact that many ranchers calve at a certain time of year means that our local beef market could have an influx of too much beef all at one time.

“Let’s say the Good Food Store wanted to buy our cattle, and they say we hear you’ve got great cattle’... Now I’d have to hang onto my cattle, maybe take them to a feedlot... and they’d feed them out to 1200 pounds. Then, I would have to take them to a facility like White’s. Now, they can only kill about ten calves a day, so my entire herd is gonna take them a long time to go through. Once that’s all processed, then the Good Food Store can go ahead and buy my meat.... And then there’s the fact that I calf in February and March and the cattle will be ready...next August. So they’re gonna get too much meat all at once.... So it’s just easier for them to order meat in from Pasco every day...and then they can control their inventory.... The only other thing I could do is I could calve all year round. Well then, man, you’re just making me work and work and work...calving every day and I’m up at night” (#8, 25).

Resistance to Change. Lastly, two participants talked about difficulties for farmers who want to switch to a more local market for their goods. Local marketing is more labor intensive, it requires new marketing skills, and it takes time to establish new connections, all of which could be barriers. One respondent also pointed out that some farmers might be comfortable with how they have always marketed.

“I guess we’re all comfortable right now. We’re eeking along, you know, and it’s a whole lot easier just to put those calves on a truck and they’re gone... It’s just gonna take a lot of courage to take that step and do it. I think it can be done” (#5, 29).

Improving the Prospects

Study participants offered several suggestions for how local marketing could be encouraged or strengthened here. These suggestions ranged from establishing a local meat processing plant, to cooperating with institutional food purchasers such as schools and hospitals, to garnering the community’s commitment to support local agricultural production through public education.

“A lot of this is consumer driven. In order to support a local economy you’d have to have higher prices per unit in order to make that happen. And I don’t know whether the majority of the consumers would buy stuff at that higher price... It would take a commitment by the community in order to make it work” (#2, 16).

CONSIDERING A COUNTY AGRICULTURAL TASK FORCE

When asked if they would approve of the creation of a task force that would recommend ways to the County to promote local agricultural markets and preserve agricultural production in the county, most participants expressed some degree of support. Nine participants support the idea, would likely support it, or are unopposed to it. Two participants are undecided, and two oppose the idea, holding that any involvement with the County would be negative. Several respondents who approve of the idea expressed concern that such a task force would lack effectiveness. Four participants' support of such a task force would be dependent on its makeup. Several mentioned the need to include farmers and ranchers on the task force.

“It depends on who’s on it. I don’t think they should all be from the University or all from Extension. I mean, they should include people who know what they’re doing out here... You’d have farmers and ranchers on the panel” (#13, 20).

Many participants offered specific suggestions regarding what such a task force ought to do. These suggestions include educating consumers about where their food comes from, exploring tax-free bonds to promote a local processing facility, and helping create producer cooperatives that connect local producers with local consumers.

“The more the consumers are educated about the food grown by the farmers and ranchers that we’ve got left in Montana, we’d have more demand and more money coming in” (#11, 9).

SUMMARY

The in-depth interviews with farmers and ranchers around Missoula County suggest that there is a range of perspectives among producers concerning long-term farm viability, growth and development, and other issues affecting the future of agriculture. The voices heard here help to clarify what lies behind the survey findings presented in Chapter 2.

From the perspective of area producers, the major threats to the long-term viability of agriculture here appears to be lack of economic viability, as well as the impacts of growth and development. Key factors contributing to farm and ranch viability include off-farm employment, local market opportunities, keeping production costs down, and water and soil conservation practices. Although economic factors clearly weigh heavy in the decision making of these farmers and ranchers, it is also clear that many are deeply attached to farming as a way of life. These concerns are brought into sharp relief in the context of population growth and development in the area, trends which most (but certainly not all) of the participants viewed as negative and/or inevitable.

In terms of strategies for addressing farmland loss, these producers voiced the most support for using tax dollars, such as a bond, to create a farmland protection program. While about three-quarters of the participants support the use of conservation easements, others see them as restrictive or limited in particular ways. All of the participants were fairly critical of the County government, although they articulated some particular roles that they would like it to play (e.g., supporting land trusts, providing incentives, and prioritizing the most productive lands for agriculture).

Regardless of what programs are put into place, farmers and ranchers still need to be able to make a living from the land. While many benefits to and opportunities for local marketing were discussed, it is also clear that there are a number of obstacles in terms of infrastructure that need to be overcome.

Perhaps the most common theme that emerged is that the future of farming in this county will largely depend on the will of the community, whether it be through consumer demand for locally-raised food or the community's desire to protect farmland through governmental or non-governmental means. Many study participants are clear that agriculture in Missoula County is vulnerable to extremely difficult economic pressures; yet several are hopeful, and even optimistic, that as a community we can maintain a place for agriculture to thrive here. Whatever the future holds for agriculture in Missoula County, many agree that farmers and ranchers ought to play a key role in determining that future.

“For a lot of us, it’s all we’ve ever done. We’d like to stay here. It’s our home. A lot of us, it would break our hearts to see our land subdivided, that we’ve worked so hard on, oh, forever... Most farmers and ranchers don’t want to get rich... Keep them comfortable, and they’ll stay on the land, because that’s what they love to do... Right now, I see there’s still hope on the horizon to keep us here... I think that’s what’s keeping a lot of us here. (#5, 34).

CHAPTER 4 HMONG MARKET VENDORS: LESSONS FROM A FOCUS GROUP

NANCY McCOURT, JASON SEAGLE, AND JEN JONES

INTRODUCTION

Beginning in 1975, many Laotian Hmong were granted asylum in the United States for their contribution to defending Laos from communist forces during the Vietnam War. When U.S. troops were withdrawn from Vietnam, the North Vietnamese persecuted the Hmong for their role as U.S. allies. The Hmong were forced to flee, first to refugee camps in neighboring Thailand, then overseas to countries with a dramatically different set of customs, values, and ways of life. Missoula was one of several areas in the U.S. in which the Hmong resettled. Originally introduced to the Missoula valley by Vietnam-era Hmong/CIA liaison officer, Bitterroot rancher, and Missoula Smokejumper Jerry Daniels, hundreds of Hmong refugees have since made Missoula their home. According to the U.S. Census, 207 ethnic Hmong were living in Missoula County in 2000.¹

The Hmong have a long history in agriculture. As a highland ethnic group living in Southeast Asia, the Hmong historically practiced swidden farming, which is the clearing and burning of small forested plots that are used for production for several years then allowed to fallow and regenerate forest cover while production shifts to the clearing of a subsequent parcel nearby. Upon their arrival in the Missoula area in the late 1970's, many Hmong employed their farming knowledge and skill towards cultivating backyard plots to help meet their basic household needs.

The Hmong soon began to fill their present day agrarian niche as they grew in number, became more acclimated to Montana's growing season, established ties with the Missoula Farmers' Market, and consumer demand for locally produced vegetables increased. Today, members of the Hmong community play a large role in the Missoula Farmers' Market, and they make up about 40% of all vendors.²

Little research has been conducted to understand Hmong farming concerns around the production and marketing of their crops in the Missoula area. To obtain a more complete picture of food production in Missoula County, researchers involved in the Community Food Assessment felt it was critically important to include Hmong producers in the project. Essentially, we wanted to ask the Hmong the same things that we were asking other producers regarding the factors that support their farming/gardening and those that threaten its viability. The methods and findings of our research follow below.

¹ U.S. Census Bureau. Census 2000. Retrieved at: www.factfinder.census.gov

² Bradford, Kate. (2003). *Building social relationships, building business: A case study of vendors at the Missoula farmers' market*. Master's Thesis. Missoula: University of Montana.

STUDY METHODS AND LIMITATIONS

A Focus Group Approach

In order to maximize the participation of Hmong growers in the food assessment, we decided to conduct a focus group with them rather than attempt surveys or individual interviews. In part, this decision was influenced by the experiences of Kate Bradford who identified significant language and cultural barriers in her attempt to involve the Hmong in in-depth interviews during her study of Missoula Farmers' Market vendors. The decision was also greatly influenced by the advice of the Missoula Refugee Assistance Corporation (MRAC), whose staff recommended and agreed to help us in a group interview approach.

Focus group research offers a flexible, low cost and relatively quick way to explore the perceptions of an event, experience or idea held by specific groups of individuals.³ Focus groups typically consist of 5-12 pre-selected participants, one or two moderators and a note taker. These guided group interviews seek to confirm and/or challenge existing ideas, as well as uncover new information. Ideally, the social nature of the group interview encourages and draws out individual views and explores divergent opinions in a respectful and systematic manner. The group interview is taped and transcribed. Then, it is analyzed for themes and discrepancies, and may be used to develop recommendations and/or questions for further research.

Focus group interviewing creates an informal group environment where the conversation is gently directed, giving individuals permission to share opinions and perceptions of experiences. We hoped that the social nature of focus group interviewing would address and minimize language and cultural differences, thus increasing the information shared. The flexible nature of focus group research helped address the Community Food Assessment (CFA) researchers' limited cultural knowledge about Hmong traditions and communication styles. This flexibility was an attempt to encourage and allow for participation by Hmong growers and minimize possible power factors associated with the race, culture and education of the moderators. In this case, we had two moderators (one woman and one man), and a third researcher recorded notes and managed the equipment. This flexibility, however, presented some problems, as discussed below.

Data Collection

Typically focus group participants are unfamiliar with one another. However, certain work situations, rural communities and other groups with small numbers make this nearly impossible. Given the history of the Missoula Hmong community, it would be difficult to locate growers who are unknown to one another. Only one focus group was conducted so our findings only apply to that particular group of growers and not to the entire Missoula Hmong community. Nevertheless, the findings in this exploratory research provide valuable insights into some local Hmong growers' perceptions of market gardening, their

³ Krueger, Richard A. (1994). *Focus groups: A practical guide for applied research*. South End Oaks, CA: Sage Publications Inc.

desire to continue growing and selling produce in Missoula, and some ideas of what might help or hinder the meeting of this goal.

The Missoula Refugee Assistance Corporation (MRAC) contacted potential focus group members and a translator. In a letter to the MRAC staff, we described the community food assessment (CFA) and the specific goals of our proposed focus group. Several follow-up meetings with the MRAC clarified our desire to learn more about Hmong gardening in Missoula and to identify possible factors that may facilitate or threaten their abilities to grow and sell produce here. The MRAC staff contacted area Hmong farmers, and found eleven men and women who were willing to participate in a focus group.

Researchers hosted the focus group in a location convenient and familiar to many of the participants. Several participants arrived late. To avoid offending members of the community, participants were included, despite their late arrival. While their understanding of the overall purpose of the group was likely compromised, their comments are considered helpful in developing a basic understanding of the issues and concerns around food production. All participants were familiar to each other and many were related, including the translator.

One Hmong woman translated at the interview. While this was essential, the translation process also posed several challenges. The nature of translation in general reflects a possible filtering and altering of the idea as expressed in the first language. Moderators attempted to address this by providing the translator with a copy of the questions prior to the actual focus group. Some clarification of questions and concepts were discussed prior to the group; however, there were several instances, noted in the findings, where direct translation of specific ideas or concepts appeared challenging, leaving doubts about the overall comprehension of the questions asked.

This focus group developed a certain ‘consensus’ style of translation, that is the translator often summarized the comments of an extended group discussion rather than providing individual translation of each statement made by each individual. This obviously inhibited the direct expression of individual ideas and minimized any appearance of dissent. This limited the moderators’ ability to probe further, clarify individual responses and search for all possible perspectives. The translator’s familial relationships with participants and her personal role as a grower and seller of produce overlapped into the focus group process as well. Power and communication issues that may be inherent within the relationships between participants due to family or cultural or other factors are unknown and present other potential limitations to the overall picture presented by data.

To help address concerns about translation, the translator met with the focus group moderators several weeks after the focus group was conducted. Through review of a typed transcript and the tape, the translator helped to clarify the content of recorded conversations that were not originally translated during the focus group. Further, the translator provided more background information about Hmong farming and went into detail about the history and relationships between the different focus group participants.

Analysis

The two moderators analyzed the transcript independently using content analysis. We identified common themes describing the participants' experiences growing and producing food in Missoula County. The common themes identified include: (1) the importance of gardening to the Hmong families, (2) motivations to sell produce at the farmers' market, (3) problems faced as a Hmong farmer in Missoula County, (4) use of unsold produce, and (5) gardening operations. It is important to note that generalizations cannot be made from this particular group of growers to the larger Missoula Hmong population, but these findings offer insights from which further study and recommendations can be developed.

ABOUT THE PARTICIPANTS

The 11 participants consisted of eight women and three men who have grown and sold produce at the Missoula Farmers' Market, some for a few years and others for nearly 20 years. Introductions and relationships between participants indicated that a variety of age groups and generations were represented. Additionally there seemed to be a fair balance between those who own land on which they garden and participants who find other sources of land. One participant exclusively grew and sold cut flowers. It was noted by the translator that all other participants grew an assortment of produce and herbs similar to one another, both for market and personal consumption, including: carrots, onions, green beans, snow peas, sugar peas, potatoes, cucumbers, zucchini, cabbage, kohlrabi, basil, and chives. Several of these latter producers supplemented their gardening with the production and sale of cut flowers.

THE IMPORTANCE OF GARDENING TO HMONG FAMILIES

Comments shared suggest that gardening is interwoven into some aspects of Hmong quality of life ideals. Gardening is described as a joyful activity, a healthful food source, an economic opportunity, and an important aspect of cultural transition. As one vendor explained: "Gardening is such an important thing for me and my family. We get to save a lot of money, from buying stuff from the grocery. In the wintertime, you still have some potatoes in the basement, green beans in the refrigerator, basil, whatever. So it's important for my life, especially in the winter."

"[Gardening's] important because for the Asians like us...It makes us happy when you walk through the gardens and see everything growing up, it makes us feel so happy and excited. Also food for our families, we are the kind of people who eat a lot of vegetables, so that is important to us. So always we are reminded of what we did in Laos, its not that much different here." ~ Participant

The cultural implications apparently are particularly important for older members of the Hmong community who may not speak English and who may otherwise lack productive social and physical activities.

“It’s difficult if you don’t have an activity to do. If you stay at home then insulation, depression, stress. During the summer time, if they [seniors] have farming or gardening to do, then they do an activity every day. Saturday you have something to sell, you get a little money to pay for gas or something...Most of our people have changed county, culture, regulation system, everything changing. For some of the younger persons, like my daughter, they are born here in the United States, they ok. They learn everything new, everything. They grow up and they say ‘my family here, they see only everything good. But all the elderly they are a little different. When they get here, it’s very different; stress. If they do [gardening] in the summertime, they feel better. For our people over 40, 50, 70 years old...they have a lot of problems: body aches, headaches, stomach hurting, shoulder, everything. If they do a little bit of gardening, then summertime they feel good, yea.” ~ Participant

MOTIVATIONS TO SELL PRODUCE AT THE FARMERS’ MARKET

The distinction between the themes of motivations for selling at the farmers’ market and the importance of gardening to Hmong producers seems to be subtle. The importance of gardening describes more the specific activity of gardening, whereas motivations to sell produce attempts to identify incentives that bring some of those producers to the farmers’ market.

According to the participants, selling produce at the farmers’ market provides a family activity and a work incentive. Participants identified both economic and social motivations. For instance, one grower explained that the money made at the farmers’ market helps offset increased costs of living in the winter: “In the winter I only do a couple of days a week of outside employment. I think gardening is important for me and my family...you can make a couple of thousand dollars in the summertime to help pay for heat and rent in the winter time, so it’s really, really important to me.” Another grower expressed a sense of community connection and appreciation by providing healthy food to people around Missoula.

“I see moms [at my office], and they ask ‘aren’t you a vendor at the farmers’ market?’ and I’m like yea I am. They say they just love coming there every summer because their kids eat healthy. I think that’s awesome. I love when people say that because you are not doing this for nothing. It’s actually helping people during the summer. They’re eating a lot healthier and it’s all organic stuff, none of that fast food stuff. They can have fresh vegetables right there for their kids.”

~ Participant

PROBLEMS FACED BY HMONG MARKET GARDENERS

The study participants stated a number of issues constraining their ability to continue their market gardening in Missoula County. Growing and marketing issues surfaced as the primary areas of concern.

Production Issues

Within this category, land access, time, costs of operating, and local biophysical growing conditions provide challenges for the Hmong producers.

While some Hmong farmers cultivate on land they own, others utilize land owned by other people. For farmers who borrow or rent gardening space, this creates a subtle form of land insecurity. Like many other Missoula County residents, members of the Hmong farming community may be limited by escalating land values and costs of property ownership. According to the participants, increasing subdivision appears to be influencing the availability of potential garden spots, and has resulted in several Hmong producers who rent garden space having to relocate to new garden plots on a regular basis.

“My aunt says she has had many plots over the years. She’d be farming on them for one or two years then they wouldn’t let her farm on them any more because they were going to be using that land to build up subdivisions or something. She felt that there were a number of times that it happened like that. She felt that it was such good farming land, they knew it was such good farming land, how could they not let her farm on it anymore...They’ve always got that fear that land is going to be taken away from them.” ~ Participant

Participants also mentioned that limited personal time, or specifically the need to dedicate their time to more lucrative employment, is a factor that impacts their ability to increase the size of their farming operation and fulfill larger market expectations. As one explained: “I have a full-time job, we can’t [garden] ten or twenty acres to provide...what Missoula County needs. So what you see at the farmers’ market that’s all we can produce for the two or three days [of our available time]. We can’t do any more than that....Gardening is kind of a little family business; it’s not a big one that can serve all of Missoula County, or Missoula City. It’s for whoever wants to buy it, whoever needs the fresh produce, something just like that.”

Increases in gardening expenses present another challenge to Hmong food production. As one participant put it: “Everything is so expensive so we can’t afford to do such a big garden, you know like a ten or twenty acres or so you can provide to a grocery, or especially the Good Food Store or Tidyman’s or those things you know.”

“I think that probably we need something to cover the crops, so you can be able to grow a little earlier, like starting in April, March and maybe the middle of March and April. So you need something to cover so it’s not freezing, to make it long enough. I think that’s a problem we have.” ~ Participant

Missoula’s short growing season and recent drought have also posed challenges to these market vendors’ ability to increase their food production in this region. As a participant explained: “A lot of Hmong have gardens here in Missoula where they’re able to irrigate their gardens from the local ditches. But for a lot of us...we usually don’t have enough water (for our produce) so we sit and we pray for heavy snow and lots of rain.”

Marketing Issues

Participants discussed a variety of marketing issues, including: time and vendor space constraints at farmers’ market, vendor competition, possible racial or cultural discrimination, pricing, and limitations posed by other area market opportunities.

Several participants expressed apprehension about their perception of the Missoula Farmers’ Market having grown little in comparison to the overall growth experienced in Missoula County. For instance, participants discussed how the farmers’ market’s restricted hours and the limited availability of vendor space pose significant barriers to Hmong growers’ ability to increase sales and reduce wasted produce. Participants indicated that a limited number of vendor spaces results in the exclusion of some farmers who arrive with produce to sell. Participants also noted that limited hours reduce their ability to sell all the produce they bring to market and can result in dissatisfied customers who arrive too late to purchase produce.

“A lot of customers complain, they complain, why you open for such a short time? Why do you not have enough space for people? A lot of people, not just people from here in Missoula, people on vacation from bigger states.”
~ Participant

Vendor competition may be viewed as that among the Hmong farmers and also between the Hmong and other local growers and regional producers. As one put it: “Competition with other vendors is because everybody’s selling the exact same produce. It’s just that everyone is selling the exact same produce – you are not just competing with your own people, you’re competing with Americans and everyone too. And you’re competing with local vendors and vendors from Hamilton and Ravalli County and from up north too.”

Participants seemed somewhat reticent to discuss perceptions of racial or cultural bias at the farmers’ market. However, a few comments that were later clarified by the translator reiterated observations made by Bradford⁴ regarding the subtle presence of racial or cultural tensions at the market. This highly sensitive, important topic is deserving of further investigation.

Considerations of the labor and time invested and their understandings of the value of organic produce cause Hmong farmers to feel that they are unable to charge prices that fully compensate them for their efforts. In

“The time is important. You have to pick every single radish, bundle them together and wash by hand. For myself, I’d sell it for ten dollars but at the farmers’ market I can get only a dollar, look at that.”
~ Participant

⁴ Bradford, Op. cit.

addition, they express concern that competing with the prices at businesses like WalMart seems futile. As the translator explained: “They don’t think the price is fair because it’s organic produce and its hand grown and its hand ploughed and everything...but the thing is... if you make the price any higher nobody’s going to buy it. And customers always compare to the store, oh like at WalMart, I can get this and this and this for this lower price.”

Besides the limits inherent in the Missoula Farmers’ Market, these local growers feel excluded by the purchasing practices of the larger retail food markets. Larger retail outlets’ need for a consistent year-round supply and large quantity of produce prohibits small Hmong producers from effectively establishing business relations and contracts with larger food outlets.

“[My aunt had a contract] with the Good Food Store, when it was still by Mazda dealership. She did, every summer she’d sell produce to them but it wasn’t enough. She’d make more off going to the farmers’ market. They wouldn’t pay her enough and she didn’t have enough produce to give to them, so it just stopped. We’ve tried and stuff but they want so much more than you can give them. When she did it, she had to call all of us, like all of her in-laws and stuff and help to actually get enough produce for what they were asking for...It just got hectic so she just stopped, we try to contact people but the only store that only does organic food is the Good Food Store...There is no other place that we could do it, plus there’s no other place except little market that you can sell your vegetables besides the farmers’ market.”

~ Participant

Use of Unsold Produce

Hmong growers identified unused or unsold produce as a problem. These producers find a number of ways to reduce waste, including donating the excess to the Missoula Food Bank, preserving food for their own use, composting, and feeding it to their chickens and farm animals.

“The [Food Bank] brings crates, and once their crates fill up then that’s it. And usually there is more produce left over than there are crates available. So a lot of the time we take the food and the vegetables and we just throw them away in the garden. Let them become our fertilizer.”

~ Participant

Gardening Operations

When asked how Missoula County’s population growth within the last decade has affected their farming, one participant expressed sorrow and frustration over the fact that so much of the County’s prime farming land is being developed. Another participant’s comments suggest that the small size of the Hmong’s garden plots in Missoula facilitates access to arable land and minimizes the negative repercussions of farmland development: “I would say that that question affects us a little bit but since we don’t farm on twenty or thirty acres, something like that, you can always find a friend or neighbor’s [property to farm on], so you can still have a small plot.”

We also asked participants about the potential of “severely” reduced access to land and the implications this would have for Missoula Hmong farmers in the future. Their response, combined with the history of the Hmong, would suggest a level of persistence and adaptation that allows them to continue farming under the most trying circumstances.

A number of farming strategies and practices were expressed during the focus group. These practices seemed to fall into three categories, including: land regime, garden planning and garden growing.

“They’d always find a way to farm. It’s not in them to just completely stop. That’s what they do, they garden.”

~ Participant

Land Regime. Local Hmong farmers own, rent, and/or borrow plots on which to market garden. The limitations and benefits of each have been discussed above.

Garden Planning. When planning cultivation, the Hmong have made use of conventional seed charts to adapt to the Missoula growing climate. They plant a variety of crops in hopes of attracting and increasing sales to customers. Further, they consider the previous year sales when planning a subsequent year’s garden, basing the proportions of a particular crop to be planted on how well it sold the preceding year. It is important to point out that there is typically little variation among the crops produced within the community Hmong of farmers we interviewed. The vegetables planted from year to year may vary but it seems that many Hmong producers grow the same variety of crops within a given year.

Season Extension. The Hmong interviewed expressed interest in gardening strategies that help extend the growing season. These include the use of small greenhouses for starter plants and small heaters to begin growing as early as possible. The use of family labor and composting of unused food were also noted.

SUMMARY

In Missoula County, Hmong producers play a vital role in local food production and are significant contributors of fresh, local produce to the Missoula Farmers’ Market and the Missoula Food Bank. A major objective of the Missoula County Community Food Assessment is to promote food security within the County through a better understanding of the challenges resident producers are facing. To help ensure that Hmong growers sustain current levels of food production and remain significant contributors to community food security, it is important to address the production, marketing, and, to some extent, farmland development issues identified in the focus group as affecting these market gardeners.

PART II FOOD CONSUMPTION: ISSUES AND ASSETS

OVERVIEW

Part II of *Food Matters: Farm Viability and Food Consumption in Missoula County* addresses food consumption issues and assets. To provide a backdrop for understanding food-related issues in the County, this section begins with a chapter that addresses why food security is important for all community members and not just for those labeled food insecure. The next two chapters describe how students and faculty developed and administered a survey and conducted focus groups to learn about Missoula County residents' food-related concerns (including quality, access and transportation to food outlets, cost, eating behaviors and choices) and what they perceived as the food-related assets in Missoula County. One of the study's primary goals was to investigate how food concerns and assets vary according to income level. Using two data collection methods (a survey and focus groups) allowed us to gather breadth, depth, and richness of information. Reliance on more than one data source also helps compensate for errors that may occur in each and allows for thematic comparisons across methods to check for data reliability.¹ Both methods gathered information on participants' income level; however, for the focus groups, we specifically recruited low-income individuals to investigate food consumption issues from their perspective.

Survey and focus group findings are presented in order of their importance to study participants. Pie charts and bar graphs are used to illustrate the most salient study findings. Tables included in the appendices of the report provide statistical information on each item assessed in the survey.

¹ Using more than one data source to gather information on the same topic is called triangulation. "Data from different sources can be used to corroborate, elaborate, or illuminate the research in question." (see Marshall, C. and Rossman, G. (1989). *Designing qualitative research*. Newbury Park, CA: Sage Publications, p. 146).

CHAPTER 5
SOWING THE SEEDS:
UNDERSTANDING COMMUNITY FOOD CONSUMPTION

MAXINE JACOBSON

For the earliest hunters and gatherers and cultivators of food, attending to issues of food consumption was a matter of survival. Clans, tribes, and communities mapped out territory dependent upon the availability of food. They developed informal and complex systems of marketing and exchange and they expended considerable time and energy daily in the pursuit of nourishment. Food shortages, a result of poor planning, weather conditions, pestilence and disease, poor hunting or soil conditions marked impending disaster for ancient societies.¹ Food security was a matter of life or death. But times have changed, or have they?

In a highly industrialized, technology-dependent society food security is still a life and death matter. In the United States, the wealthiest nation on earth with an overabundant food supply, 13 million children live in households with limited or uncertain access to a nutritionally adequate diet.² In 2000, Montana ranked 9th among all other states in the U.S. in both food insecurity and hunger. Thirteen percent of households (46,000) were defined as food insecure and 4% of households (14,000) were defined as food insecure with hunger.³ Montana is also among five other states whose relative hunger status has worsened since 1996.⁴

Food security is a complex issue. It is not simply a problem for those households living below the poverty line whose ability to purchase food is compromised by low wages, underemployment, unemployment, or poor physical and mental health. It has relevance for all food consumers. Food security includes having access to healthy, nutritional foods as an ever-increasing number of research studies provide evidence of the linkages between diet and health-related problems including some types of cancer, obesity, and food borne illnesses. It also includes having a voice in decisions affecting the types of foods made available to consumers, as the food industry spends billions of dollars yearly to promote highly processed and packaged foods while neglecting to advertise the benefits of fresh fruits and vegetables and other healthy food choices.

¹ Busch, L. and Lacy, W.B. (1984). *Food security in the United States*. Boulder, CO: Westview Press.

² Nord, M., Kabbani, N., Tiehen, L., Andres, M., Bickel, G., & Carlson, S. (2002). *Household food security in the United States, 2000*. Food Assistance and Nutrition Research Report Number 21. Washington, D.C.: Economic Research Service, U.S. Department of Agriculture. Available at: <http://www.ers.usde.gov/publication/fanrr21/>

³ Sullivan, A. and Choi, E. (2002). *Hunger and food insecurity in the fifty states: 1998-2000*. Waltham, MA: Center on Hunger and Poverty, Heller School for Social Policy and Management, Brandeis University.

⁴ Ibid.

In completing the first of the Community Food Assessment reports, *Our Foodshed in Focus: Missoula County Food and Agriculture by the Numbers*, we learned food-related trends and their possible impact at the local level. For example, between 1960 and 2000, Missoula County's population increased dramatically by 114%. The greatest percentage of growth occurred outside the city limits in rural sections of the county. Much of the development is taking place where farms and ranches once stood. What this means is more food consumers and fewer places to grow food, which translates into increased dependency on foods imported into the county. Also, in 1997, residents spent nearly 16% of their per capita income on food. In that same year, residents spent 36% more on food than the typical U.S. citizen.⁵

Hunger and food insecurity are largely a function of the ability to buy food. In 2000, nearly 15% of Missoula County residents and 9% of families lived below the poverty line. Strikingly, only about 30% of the students eligible to participate in the Free and Reduced School Lunch Program in the County actually do participate (based on data from 1999 through 2002). Many low-income people are apparently not participating in the Food Stamp Program. For instance, at the time of the last Census of Population in 2000, about 6% of the County's population received food stamps in an average month. But nearly 15% of the population lived below the poverty line.

Welfare reform policy instituted in 1996, the Personal Responsibility and Work Reconciliation Act (PRWORA), made substantial cuts to a number of social welfare programs and much of the policy's savings to taxpayers came from reduced expenditures for the Food Stamp Program.⁶ Since the inception of PRWORA, welfare caseloads have dropped significantly. While some interpret this as an incredible success, the introduction of more complex eligibility requirements and other barriers to receiving benefits have driven more families into deeper poverty.⁷ According to *Our Foodshed in Focus*, most of the emergency food providers in the County have witnessed an increased use of their services in recent years. Clients made nearly 31,300 visits to the Missoula Food Bank in 2002; that number was up 19% from four years prior (1998). The Poverello Center served about 300 meals a day in 2001 and 2002, while a fairly new agency, Missoula 3:16, served an average of 66 meals a day in 2002. The Seeley-Swan Food Pantry was the only rural agency for which statistics were available. They distributed 825 boxes of food in 2002, which was 77% higher than their figures for 1999, the year the pantry opened.

Certainly, times have changed in many ways since the days of the hunters and gatherers, but food insecurity persists as a major problem confronting all of us today. This report puts a face on food consumption issues in Missoula County by presenting residents' food-related concerns as well as the assets they identify in our local food system. This

⁵ Note that tourists and the University of Montana student population may affect the accuracy of these estimates.

⁶ Allen, Patricia. (1999). Reweaving the food security safety net: Mediating entitlement and entrepreneurship. *Agriculture and Human Values*, 16, 117-129.

⁷ Working for Equality and Economic Liberation (WEEL). (2003). Missoula, Montana. *Welfare reform: A WEEL overview*. Retrieved October 8, 2003. www.weelempowers.org.

section of *Food Matters* provides ample food for thought and action as we explore local food consumption issues and recommend ways in which these can be addressed.

CHAPTER 6 FOOD CONSUMPTION: SURVEY RESULTS

MAXINE JACOBSON AND JEN VON SEHLEN

INTRODUCTION

This chapter reports on the development, data collection and data analysis strategies, and the major findings of the Missoula County Food Consumption Survey. During the spring of 2004, surveys were administered to 624 Missoula County residents to provide increased understanding of local food consumption issues. The survey was designed to respond to the following question developed by the Community Food Assessment Steering Committee: “What concerns do Missoula County residents of various income levels have about food (including quality, access and transportation to food outlets, cost, eating behaviors and choices), and what do they perceive as the County’s food-related assets?” Understanding food consumers’ concerns, food-related behaviors and food-related assets in Missoula County is a first step toward identifying and advocating for necessary changes in the local food system.

MISSOULA COUNTY FOOD CONSUMPTION SURVEY DESIGN AND ANALYSIS

Data Collection and Analysis

Students and faculty developed the Missoula County Food Consumption Survey based on a review of food consumer surveys used in other communities in the United States and through consultation with the Steering Committee and others informed about food-related issues in the county. The survey contained both open- and closed-ended items.¹ We pre-tested the survey by administering it to individuals with varying educational and income levels and made revisions based on their feedback.

We used three different methods to survey county residents about food consumption issues – mall intercept,² mail-in, and by locating surveys at various agencies and organizations (e.g., St. Patrick’s Hospital, Missoula Food Bank, YWCA, YMCA, several local churches, etc.). Survey administration was completed in March 2004. We conducted the mall intercept surveys two Saturday afternoons at Southgate Mall in Missoula. At each administration session, eight trained survey administrators located themselves at different high traffic areas in the mall, approached people and explained the purpose of the survey, and requested their participation.

¹ A copy of the four-page consumption survey is available from the authors.

² Mall intercept surveys are increasingly becoming a viable strategy for survey administration due to low costs and expediency of information gathering. See Hornik, J. and Ellis, S. (1988). Strategies to secure compliance for a mall intercept interview. *Public Opinion Quarterly*, 52, 539-551.

Initially, potential respondents were asked if they were at least 18 years old and if they were Missoula County residents. We established an age cut-off of 18 because parental consent is required for younger research participants. Moreover, we wanted to gather information from individuals with the most food consumption experience, especially those who were the primary purchasers of household food. Because the purpose of the food consumption research was to understand food-related issues in Missoula County only, we wanted to ensure that our sample consisted exclusively of Missoula County residents. Situating ourselves at the largest shopping area in the County also provided us with an opportunity to gather information from County residents living outside the city limits.

Depending upon reading level, the survey took approximately 5 to 15 minutes to complete. Potential respondents were also given the option of taking a survey with them and returning it to us in a stamped and addressed envelope if they felt limited time prevented them from completing the survey at the mall. Over five hundred surveys were administered at the mall including mailed-in surveys. Survey administrators kept a tally of survey completers and refusals.

While all survey methods have strengths and limitations regarding response rates, we estimate the mall intercept response rate at approximately 40%. This means that approximately 60% of the county residents we asked to take the survey refused. Although we can not claim a representative selection of respondents, we were able to obtain a sampling of Missoula County residents with income levels closely approximating the U.S. Census data statistics (2000) for income levels in the County. Our sample, however, was weighted heavier on the extremely low-income range (less than \$10,000 per year) than represented in the Census data (see following section and Table 1, Appendix). After eliminating 37 surveys mistakenly filled out by nonresidents and those containing at least one page of incomplete responses, 470 surveys were obtained through the mall intercept method.

Surveys were also administered at various agencies and organizations in Missoula County. Missoula Food Bank clients completed over 100 surveys. Agency staff incorporated the survey into their intake procedure. An additional 154 surveys were completed at other local organizations and churches that serve individuals with varying income levels. In total, 624 surveys were analyzed for the results contained in this report.

We analyzed the closed-ended survey items using statistical software. We performed frequencies and percentages on these items and used chi-square analyses, where appropriate, to determine whether significant differences in responses existed between individuals in different income categories. The open-ended items, some of which allowed respondents to further elaborate on the closed-ended items, were analyzed using content analysis, a technique used to identify themes and patterns in textual data.

About Survey Respondents

Table 1 in the Appendix contains demographic data on survey respondents. Two-thirds of the survey respondents were female (66.5%) and over three-quarters of respondents

identified themselves as non-students (76.8%). Most people completing the survey were the primary household food shopper or shared this responsibility with another person in the household (90.4%) and 88.1% had the primary responsibility for household food preparation or shared this duty with another family member. Educational levels ranged from those having less than a high school education to those with a graduate level degree; however, 69.6% of the sample had at least some college education. Yearly household incomes also varied across a wide range; 55.6% earned incomes less than \$30,000 per year compared to the U.S. Census statistics which indicate that 50% of households in Missoula County subsist on yearly incomes of \$34,454 or less.

Forty-three percent of respondents had children under the age of 18 residing in their households and almost 80% had at least two people residing in the household. Fourteen percent used food stamps in the past year and 9.3% participated in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) in the past year. Overall, the demographic data provide an interesting picture of the individuals who completed the survey. For example, one startling finding is the number of people who have a college education but whose income levels are far below or hover near the poverty line. The demographic data alone expose an issue intricately linked to food security, namely the ability to earn an income sufficient to purchase the necessary food items to sustain a family.

FINDINGS FROM THE MISSOULA COUNTY FOOD CONSUMPTION SURVEY

Food-Related Problems and Concerns

This section is organized according to the dominant themes most relevant to respondents. These are arranged in order of their importance. Note that broad categories are broken into smaller sub-themes and addressed depending upon their relevance to respondents.³ Those survey items of significant importance are represented in pie charts or bar charts. We ask our readers to refer to the tables provided in the Appendix of this report for the complete survey analysis. Table 3 lists the frequencies and percentages for survey items pertaining to problems and concerns (see Appendix). Table 4 lists the frequencies and percentages for survey items related to food consumer behaviors (see Appendix). The broad themes addressed in the following section include food quality, the price of food and other cost of living issues, local food, availability, and transportation.

Food Quality. In an effort to understand respondents' concerns regarding food quality, the survey included items that addressed issues such as the freshness of food, the nutritional value of food, food safety, and use of and access to organic foods. The survey contained four items that specifically addressed concerns regarding food safety, pesticide residues on foods, and eating organic foods. By far, total responses to these items indicate that food quality is the most important food issue for the Missoula County residents who completed the survey.

³ We remind our readers that although we report the findings in individual categories for ease of understanding, there is significant overlap among the categories.

Of the food quality items, respondents considered food safety their primary concern. This should not be surprising. In recent years, food safety issues are addressed almost daily in the mass media: mad cow disease, food additives and pesticide usage and their linkage to cancer, and other challenges to the current industrial food production model.⁴ Note that almost 82% of respondents perceived food safety as at least somewhat of a problem or concern for them (Figure 1). Likewise, response rates to an item addressing pesticide usage were similar (Figure 2) with almost 83% of respondents indicating this was at least somewhat of a problem or concern for them.

Taken together, these findings support the notion that respondents are quite concerned about the safety aspects of food quality. Numerous responses addressed linkages between food production methods and health-related illnesses. For example one respondent stated, “I think a lot of pesticides and preservatives cause a lot of our health problems today.” Closely linked to food safety is the use of and access to organic foods consisting of fruits, vegetables, dairy products, and meats.⁵ Findings illustrated in Figure 3 indicate that more than half

Figure 1: Food Safety

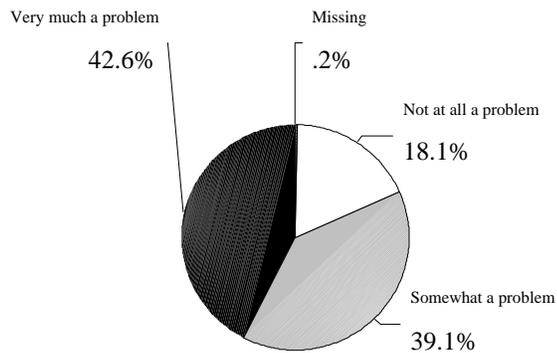


Figure 2: Pesticide Residues on Foods

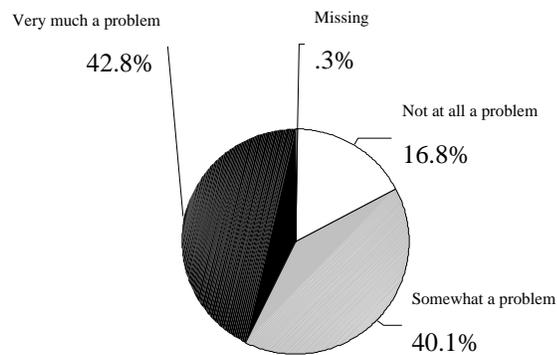
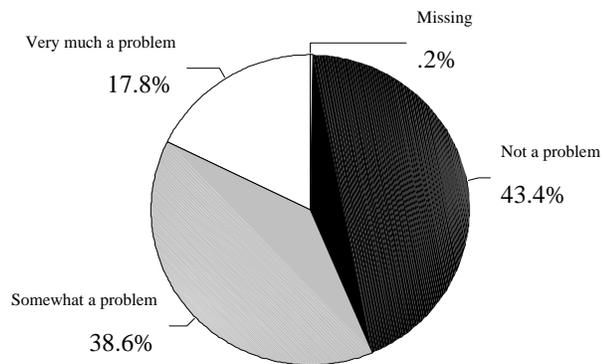


Figure 3: Whether the Food I Eat is Organic



⁴ For a discussion of the food safety issues linked to the contemporary, industrial agriculture, see: Kimbrell, A. (Ed.). (2002). *Fatal harvest: The tragedy of industrial agriculture*. Covelo, CA: Island Press

⁵ “Organic is a labeling term that denotes products produced under the authority of the Organic Foods Production Act. The principle guidelines for organic production are to use materials and the practices that enhance the ecological balance of natural systems and that integrate the parts of the farming system into an ecological whole.” Downloaded from: http://www.optco.com/usda_act.html

of the respondents (56.4%) viewed whether the food they ate was organic as at least somewhat of a problem or concern for them. In addition, approximately 51% of respondents indicated they buy organic food with some regularity (Figure 4) and 36% of those surveyed reported they would like to see more organic foods in local grocery stores. Judging from the open-ended responses concerning why people shop where they do, 5% of the responses indicated the availability of organic foods determined where some people choose to purchase food. However, a number of respondents identified cost as a major barrier to accessing organic foods. One respondent summed up this issue and addressed the conundrum many low income people find themselves in when it comes to eating healthy foods: “Vegetables, fruit or any other natural foods cost a lot more than junk food.”

Food Freshness and Nutritional Quality. Approximately 68% of respondents indicated that food freshness was at least somewhat of a problem or concern, with 28% reporting it was very much a problem or concern for them (Figure 5). A similar response pattern was noted concerning the nutritional quality of food.

The Price of Food and Other Cost-of-Living Concerns. Any discussion of hunger or food insecurity must address the ability to purchase food. While per capita income in Missoula County is higher than in other counties in the state, it is still below the national average. The survey contained seven items addressing food costs and other cost-of-living issues that have a direct effect on people’s ability to eat well.

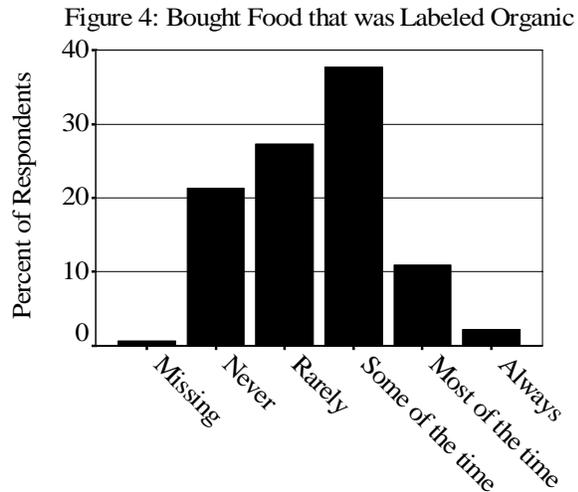


Figure 5: The Freshness of Food I Like to Eat

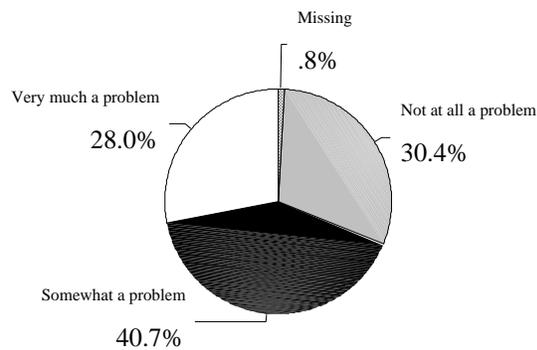
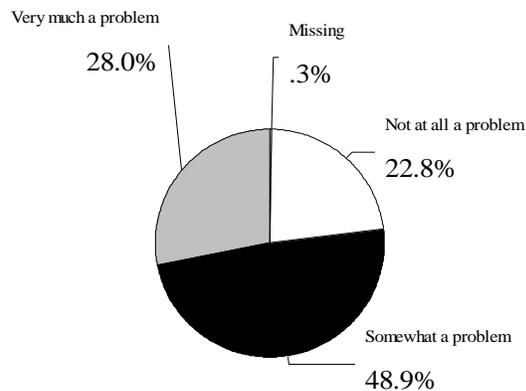


Figure 6: The Price of Food I Like to Eat



Responses indicated that food costs and other cost-of-living issues are major concerns for many of the county residents who completed the survey.

Food Costs. Approximately 77% of respondents identified that the price of food they like to eat is “somewhat” (49%) or “very much” (28%) of a problem or concern (Figure 6). Thirty-six responses to the open-ended question asking respondents to comment on additional concerns reiterated that the cost of food, in general, is too high. Most of these addressed the high cost of “healthy” foods. Concerning food-related behavior, 424 or 67.9% of respondents at least some of the time shopped for the least expensive food available (Figure 7).

Assessing Food Insecurity. Cost-of-living expenses are directly connected to issues of food insecurity. Five survey items addressed the issue of food insecurity. Respondents were asked if they had enough money to buy the food they needed, limited the size of meals, skipped meals, worried about having enough to eat for themselves or their families, or went to a food pantry or soup kitchen to acquire food. Respondents identified that having enough money to buy the food they needed for themselves and their families was a major concern (Figure 8). Sixty-five percent reported this as at least somewhat of a problem or concern for them.

Figure 7: Shopped for the Least Expensive

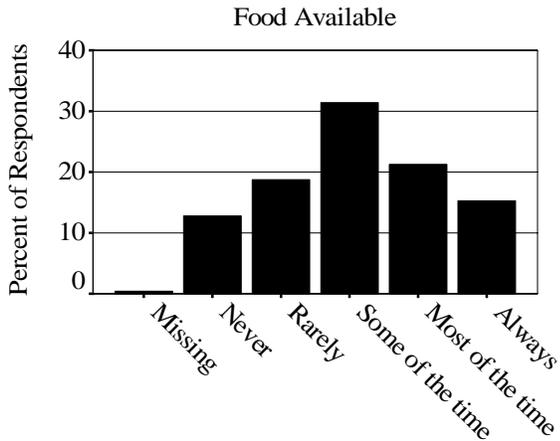


Figure 8: Having Enough Money to Buy the

Food I Need for Myself/Family

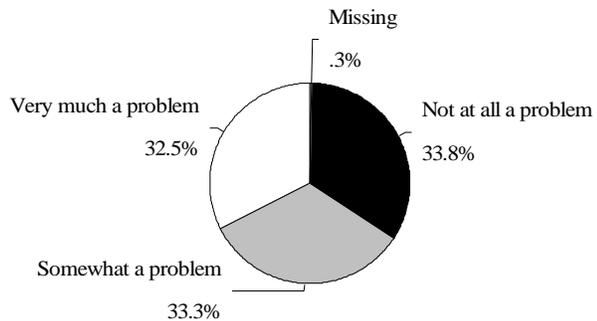
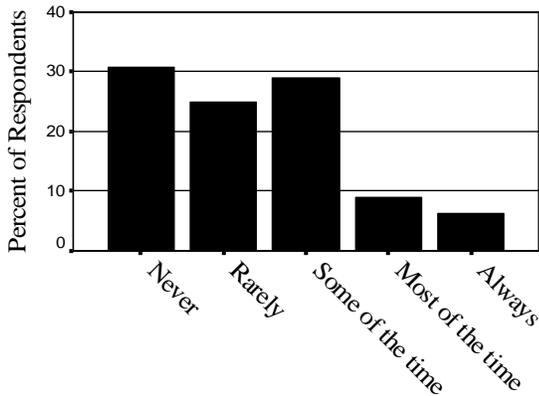


Figure 9: Limited the Size of Meals Due to

a Lack of Money



Forty-three percent of respondents indicated that they limit the size of meals at least some of the time because they lack sufficient funds to purchase food (Figure 9). Approximately 35% skipped a meal at least some of the time due to lack of money.

Two survey items in this category were developed to assess the most serious food security issues, namely whether people worried about having enough food to feed themselves and their families and if they had to access local food resources in order to get enough food to survive. Thirty-one percent of respondents worried at least some of the time about having enough food to eat, while 13.6% found it necessary to go to food pantries or soup kitchens for food to feed themselves and their families.

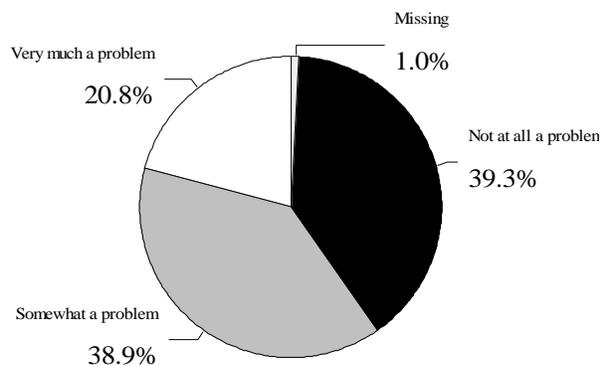
Other Cost-of-Living Issues. Wages have not kept up to cost of living increases in Missoula County. Utility rates have almost doubled in the past two years and rents and the cost of purchasing a home have skyrocketed. To understand what other issues besides the price of food might be affecting peoples’ ability to eat well, one survey item asked respondents to respond to the categories outlined in Table 5 of the Appendix. We rank ordered responses to determine respondents’ most pressing concerns. The top four categories were personal income too low (46.7%), high fuel/heating costs (39.9%), high rent (36.3%), and health/medical costs (27.8%). Responses to the open-ended question asking if respondents had additional concerns or problems provided further support for the importance of cost of living as a major food-related concern.

“The Montana income is too low!! Some things are just as expensive here as in California where the minimum wage is \$6.75. Even working full time at minimum wage is not enough to live on.”

“Purchasing food would not be as much of a problem if working wages were higher and health insurance and dental were available.”

Local Food. Survey respondents were concerned with the distance their food travels, which we hypothesize correlates with an expressed desire for access to more locally grown and produced foods. Sixty percent of the responses indicated that “how far away the food I eat/buy comes from” is “somewhat (39%) or “very much (21%) of a problem or concern” (Figure 10). The need for more and access to locally produced foods was the highest-ranking response to the open-ended question where we asked respondents for additional comments on food-related concerns or problems. Moreover, 55% of respondents indicated they would like to see more local foods in grocery stores. Another indicator in support of

Figure: 10: How Far Away the Food I Eat/Buy Comes From



respondents' concern regarding local food was their response to the survey item asking them the frequency at which they bought food that was grown or produced in Montana. Almost 80% of the total sample reported they bought Montana-grown or produced food items at least some of the time (Figure 11).

Similar to the results from the preceding questions concerning local foods, 51% of the Missoula County residents who completed the survey shopped at the Farmers' Market. Twenty-four respondents also listed "store offers local food options" as the main reason for where they buy their groceries. A number of responses also indicated that many residents choose where they do their grocery shopping based on whether the business is locally owned.

Availability. Another food-related issue that survey respondents voiced concern about was the availability of the kinds of foods they like to eat, the variety of food to choose from in local food outlets, and being able to find culturally appropriate foods. Fifty-three percent of respondents indicated the availability of foods they like to eat is at least somewhat of a concern for them (Figure 12) and 51% reported having at least somewhat of a problem with the variety of foods available in local stores. A lesser concern was finding access to culturally appropriate foods. Thirty percent of respondents expressed at least somewhat of a concern in this regard.

Open-ended responses to the question, "What foods are you unable to find in Missoula County?" indicated difficulties finding Asian, Indian, Middle Eastern, Mexican, Latin American, and Kosher foods. Almost one half of the responses in this category addressed the issue of culturally appropriate foods. In addition, Table 6 illustrates the particular kinds of foods consumers would like to see more of in the grocery stores where they shop (see Appendix). Note that most of these items have already been addressed elsewhere in

Figure 11: Bought Food that was Grown or Produced in Montana

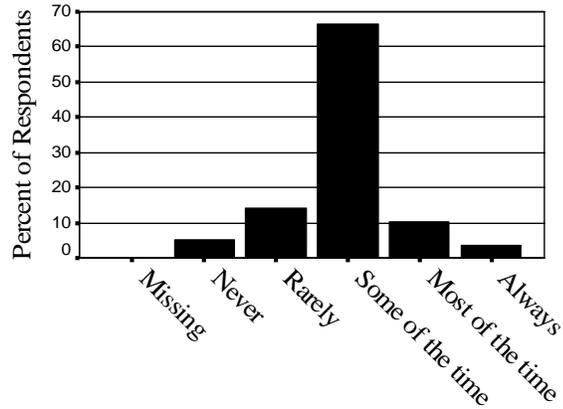
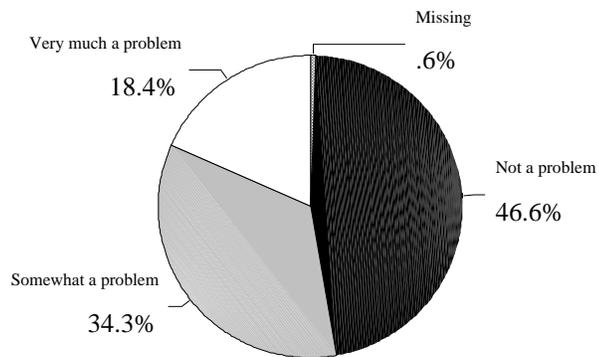


Figure 12: Availability of the Foods I Like to Eat



this report but almost 26% of respondents wanted grocery stores to increase the availability of ethnic foods.

Transportation and Access to Food Outlets. The importance of transportation as a food-related issue often falls beneath the radar screen. More populated communities around the country, especially those in urban areas, are discovering that access to food outlets is an especially significant issue for low-income community residents.⁶ As community development increases, larger food outlets move to suburban areas leaving neighborhood residents with limited access to grocery stores. Low-income residents with inadequate transportation or those who are transit dependent must purchase food for higher cost at convenience stores in their neighborhoods. Transportation to food outlets is an emergent issue for Missoula County as population increases rapidly and development follows to meet housing needs.

Six survey items related directly to transportation issues; two related to transportation concerns and four asked respondents to identify modes of transportation used when traveling back and forth to food outlets. Almost 22% of respondents felt transportation was at least somewhat of a problem or concern for them. Thirty-three percent of the responses indicated that being within walking/biking distance to a food store was at least somewhat of a problem or concern for them. As for how the Missoula County residents who filled out the survey traveled to food outlets, the majority reported they usually drove their cars (85.7%). Only 9% of respondents indicate using a public form of transportation at least some of the time. Thirty-seven percent of respondents reported they walked or rode their bicycles to a food store at least some of the time.

Why Respondents Shop Where They Do

Knowing why people shop where they do provides information about what motivates people to buy food at certain places and not others. It also indirectly tells us about food-related concerns such as transportation, cost, and food quality. We asked respondents to fill in the following open-ended statement: *I shop most often where I do because. . .* Some respondents provided multiple reasons and some responses could not be coded.⁷ The list below presents the content analysis derived from 440 responses to this survey item and the frequency of response categories.

❖ Prices/Affordability	159
❖ Location of store: Total	144
❖ Convenience Total	84
Convenience in general	48
Convenience because of one-stop shopping	14

⁶ See Pothukachi, K. Joseph, H., Burton, H., and Fisher, A. (2002). *What's cooking in your food system? A guide to community food assessment*. Venice, CA: Community Food Security Coalition. pp. 30-31 for the Milwaukee Food System Assessment Study addressing food-related transportation issues in low-income neighborhoods.

⁷ Some respondents wrote additional concerns and others made general comments that did not necessarily relate to the reasons why they shop where they do.

Convenience because store sells everything needed/wanted	14
Convenience because of location	8
❖ Store(s) offers a variety of food	50
❖ Store(s) offers local food options	24
❖ Store(s) offers organic food options	22
❖ Good sales, discounts and rewards	22
❖ Store is locally owned	22
❖ Good quality and freshness of food	21
❖ Good service, friendly and helpful staff	19
❖ Familiar with store/habit	18
❖ Store(s) offers specialty or special diet foods	10
❖ Size/layout of store	9
❖ Special privileges/employee discount	8

The most important factor in determining where respondents shopped for food was price and affordability. Out of 696 reasons for why people shop where they do, 159 or approximately 23% addressed the issue of price. The second highest ranking reason was the location of the food outlet. Twenty-one percent of responses or 144 responses fell in this category which supports the importance of easy access as a factor in consumer decision-making about where to shop. Convenience was the third highest-ranking reason for why people shop where they do with 84 or 12% of responses in this category.

Comparison of Responses Based on Income Level

One purpose of the Missoula County Food Assessment was to investigate whether food-related concerns, problems, or behaviors varied according to respondents' income level. In other words, are there differences between low-, middle-, and high-income food consumer groups who participated in the survey and how might these differences help us better understand the impact of income level on residents' food concerns and behaviors?

To compare differences in responses based on income level, we used a nonparametric statistical analysis called chi-square to analyze the relationship among income groups and their responses to the survey items.⁸ For example, it helped us answer the question, "Are there differences between how low-income residents responded to survey items pertaining to food safety when compared to those with higher incomes?" To conduct the chi-square analysis the *yearly household income* item was collapsed into three categories. Low-income was designated as \$29,999 and below; middle-income was between \$30,000 and \$59,999; and high-income was \$60,000 and above. In addition, we collapsed value labels for the items we wanted to explore for relationships, so for example, "somewhat a problem or concern" and "very much a problem or concern" were coded as a "yes"

⁸ Chi-square analysis is a test of association. It is probably the most used statistical tool to explore differences between groups. For further information refer to Weinbach, R. and Grinnell, R. (2001). *Statistics for social workers*. Needham Heights, MA: Allyn and Bacon. (pp. 187-214).

response. “Not a problem or concern” was coded as a “no” response. Table 7, in the Appendix, lists those items found to vary significantly based on income.⁹

The chi-square analyses pinpoint survey items where significant relationships exist between income level and responses given to the item. Low-income respondents are more likely to be concerned about transportation to and from food outlets than middle- or high-income residents. However both low- and middle-income residents are more concerned than high-income residents about the price of food. Concerns about having enough money to buy the food they need decreased steadily and significantly from low-, to middle-, to high-income. Pesticide residues on foods and food safety issues appear to be very important to respondents regardless of income level.

Concerning food-related behaviors, middle- and high-income respondents are more likely to drive their cars to food outlets than those individuals in the low-income group. Low income respondents are more likely to walk or ride their bicycles than respondents in the higher income groups. While these differences are certainly not surprising when we consider the high cost of maintaining personal transportation, they do help us understand who is affected most by food-related transportation issues. This knowledge can help inform future decision making that addresses how low-income families gain access to food outlets and the proximity of competitively-priced food outlets to low-income neighborhoods and rural areas in Missoula County. Food-related behaviors such as buying food labeled organic and food produced or grown in Montana appear to be very important to respondents regardless of income level.

The chi-square analyses on food security items such as “skipped a meal due to lack of money” and “limited the size of meals due to lack of money” also point out expected differences among income groups. Low-income respondents are more likely to engage in these behaviors than middle- and high-income respondents. This group also differs from the higher income groups because they shop more often for the least expensive foods. Again, as would be expected cost-of-living issues such as high rent, low personal income, and high fuel/heating cost have a far greater impact on low-income respondents. High mortgage payments, however, seem to most affect middle-income respondents. Common sense would suggest that low-income respondents are less likely to own their own homes, and therefore mortgages would be less of a concern for this group; high-income respondents are more likely to have fewer difficulties affording their mortgage payments than middle-income respondents. Health and medical costs appear to be very important to respondents regardless of income level.

⁹ When chi-square analyses are conducted on more than one survey item, the probability of achieving a significant result is increased just by chance. To adjust for this, a statistical procedure called the Bonferroni correction was used which raises the bar for determining significance. Given that 35 chi-square analyses were performed, the cutoff point to determine significant differences between income groups was adjusted from $p < .05$ to $p < .0014$. See Newton, R.R. and Rudestam, K.E. (1999). *Your statistical consultant*. Thousand Oaks, CA: Sage Publications.

MISSOULA COUNTY FOOD-RELATED ASSETS

When conducting a community food assessment, it is as important to gather information about what consumers perceive to be the food-related assets in the community as it is to gather information about concerns and problems. Knowing what works well provides a base upon which to enhance existing assets and recognize and support the community for its accomplishments. We asked respondents the following open-ended question: “*What are the food-related assets or strengths you have noticed in Missoula County?*” Responses to this question are listed below in order of those reported most frequently:¹⁰

❖ Farmers’ Market	39
❖ Good Food Store	30
❖ Availability of organic foods	27
❖ Availability of local foods	21
❖ Availability of alternative food sources	21
❖ Variety of food	18
❖ Community Gardens/Garden City Harvest	10
❖ Availability of specific foods (e.g., for diet)	9
❖ Availability of fresh foods	9
❖ Variety & amount of food stores/outlets	9
❖ Local farms	7
❖ Government Food Assistance Programs	7
❖ Community is concerned about food issues	5
❖ Other/miscellaneous	27

The majority of responses related to healthy food resources available to consumers in Missoula County such as the Farmers’ Market, the Good Food Store, the community gardens and other Garden City Harvest programs, and government food assistance programs. A second theme concerned the availability of specific types of food in Missoula County. Respondents were pleased about having access to organic foods, locally grown and produced foods, local farms, and having access to a wide variety of foods. A number of respondents praised the community for its high level of food consciousness. Some examples are listed below:

- ❖ A great variety of locally raised foods. Yeah, Lifeline; now we have dairy, too!
- ❖ Availability of Good Food Store, large garden projects/groups.
- ❖ Availability of organic food, farmers' market.

¹⁰ Some respondents provided multiple strengths or assets, some did not respond, and some wrote in concerns and problems instead of assets. In total, 178 or approximately 29% of the sample responded to this question.

- ❖ Expansion of GFS [Good Food Store], better public transportation, and the different agencies that feed the hungry.
- ❖ Farmers' Market - reasonable and fresh. Good system - food bank, many food opportunities for the less fortunate.
- ❖ Farmers' Market is great - Good Food Store is wonderful - great variety, local wineries and Bayern Brewing superb! Flathead cherries/honey & locally grown flowers and Benson's Farm as two thumbs up!
- ❖ Getting better at supporting local growers, fresh produce at stores in town.
- ❖ Good network of agencies that assist those with food insecurity issues in locating resources; emphasis on organically grown/raised products seems to be gaining mainstream respect due to the GFS [Good Food Store] and programs like GCH [Garden City Harvest].
- ❖ Good quality in stores; food stamp program; WIC (Special Supplemental Nutrition Program for Women, Infants and Children) and Missoula Food Bank are great resources.
- ❖ I believe that Missoula has a pretty good variety of food though it's the same in every store. We have quite a few options for fruit (some better than others) but there is always the farmers' market which is great.
- ❖ I think this community is really pulling together and people are helping each other out. We're starting to support each other!
- ❖ I try to buy all my food within a 350-mile radius. Lot of gardening here. Lot of concern.
- ❖ It's possible to find almost any type of food here with such a wide variety of grocery stores.
- ❖ PEAS [Program in Ecological Agriculture and Society] and other organic farms are great. Good Food Store is great but we need more neighborhood markets with whole foods. The family farms and Saturday Farmers' Market are great.
- ❖ Thank God for the Food Bank! At one time in my life I was hungry - no longer a problem.
- ❖ The Food Bank plays a valuable role in the community. I appreciate the awareness in the community about food-related issues.

- ❖ The push toward more local foods and made in Montana products and the availability of fresh produce.

SUMMARY OF MISSOULA COUNTY FOOD CONSUMPTION SURVEY RESULTS

The Missoula County Food Consumption Survey provides a snapshot of food-related problems or concerns, food-related behaviors, and food assets in Missoula County as perceived by survey respondents. Food quality issues (food safety and access to fresh, nutritious foods) were by far the most important concerns voiced by survey respondents. The price of food and other cost-of-living issues such as low wages, rent, utilities, and health care costs, which compromise one's ability to purchase foods, were the second most important concerns. These issues were particularly salient for low-income respondents.

Access to local foods, availability of the kinds of foods people like to eat, and transportation and access to food outlets were noteworthy areas as well. One-fifth of respondents were very concerned about how far away the food they ate came from and more than half of respondents indicated they would like to see more local foods in grocery stores. Issues concerning the availability of certain kinds of foods primarily addressed access to culturally appropriate or ethnic foods. Transportation to and from food outlets appears to be an emerging issue as the county continues its pattern of rapid growth and development and transportation needs increase, especially for low-income individuals and households. Furthermore, price and location were respondents' most important reasons for why they shop where they do and both of these issues link to transportation concerns. As communities experience growth, grocery stores often relocate from low-income neighborhoods to areas of new development creating access problems for individuals who are transit dependent. Convenience stores remaining in these neighborhoods charge higher prices than grocery stores.

Despite the challenges noted, survey participants also indicated that Missoula County is rich in food-related resources. Respondents praised the County's civic-mindedness, increased access to locally-produced food (e.g., at the Good Food Store), and the various organizations that work to address and create awareness about food-related problems (e.g., the Missoula Food Bank, WIC, Garden City Harvest/PEAS).

CHAPTER 7 TOUGH CHOICES FOR LOW-INCOME RESIDENTS

MAXINE JACOBSON, BRENDA ERDELYI, CRYSTAL FOSTER,
LARA MATTSON, AND TIM RADLE

INTRODUCTION

This chapter reports on the results of two focus groups conducted with Missoula County residents in the spring of 2004. Similar to the Missoula County Food Consumption Survey, the primary goal of the focus groups was to increase understanding of local food consumption issues. However, another intention of the focus groups was to gather information specifically from low-income people in order to more fully explore how food-related concerns and assets are perceived by County residents most likely to experience food insecurity. Focus group participants were asked questions about how they cope with running out of food or worrying about running out of food, where they go for food when they run short of money, the food-related assets in Missoula County, and any recommendations they might have to improve the local food system and specifically, what could be done to improve access to food.¹

DATA COLLECTION AND ANALYSIS

Focus groups provided us with the opportunity to hone in specifically on the food-related concerns of low-income county residents. Focus groups are a data collection procedure whose primary purpose is to gather information about participants' attitudes, perceptions, and opinions through the use of a group format.² They help create an environment where people can build on others' thoughts and impressions and learn from others' experiences in the process. We facilitated two pilot focus groups to assess the appropriateness of questions and then made adjustments based on participants' feedback.

Through collaboration with the Missoula Food Bank (MFB) and the North Missoula Community Development Corporation (NMCDC), we recruited 19 people for two separate focus groups conducted in March of 2004.³ The MFB is a nonprofit organization that provides food via donations and a small operating budget to low-income individuals and families up to twelve times per year. The NMCDC is a nonprofit organization whose programs address land preservation, low-income housing, and community building on Missoula's Northside. Both organizations provided us with a list of potential participants

¹ The focus group protocol, which contains procedural information as well as the questions asked of participants, is available from the authors.

² Krueger, R. (1994). *Focus groups: A practical guide for applied research*. Thousand Oaks, CA: Sage Publications.

³ We developed a telephone screening questionnaire that each organization used to recruit focus group participants. A copy of the questionnaire is available from the authors.

they had recruited for the focus groups. We contacted everyone several days prior to the focus group to remind them to attend.

Six people attended the MFB focus group, which took place at the Missoula Public Library, and 13 attended the focus group hosted by the NMCDC. Participants were provided with a meal and given a twenty-dollar stipend in appreciation for their time. Each participant completed a demographic survey before the discussion. Volunteers offered childcare services on-site for the duration of the group to enable participation by people who might not otherwise attend due to child care responsibilities.

Two members of the research team facilitated each focus group, which lasted approximately two hours. We audiotaped each focus group and transcribed the taped material verbatim. We hoped that focus groups consisting of people connected to the MFB and the NMCDC would provide us with useful information from county residents most likely to experience challenges with food security.⁴

We used content analysis to organize and code focus group data. To ensure reliability and trustworthiness of the process, several teams of researchers coded the transcripts from each focus group and then cross-checked the major themes identified and made adjustments accordingly. Researchers coded manifest and latent content to arrive at the most significant themes and patterns.⁵

Focus Group Participants

We combined the demographic data from both focus groups to provide an overall picture of the people who participated in this component of the study. Table 2, in the Appendix, presents the aggregated demographic data for the two focus groups. Note that two participants did not fill out the demographic questionnaire. Almost 60% were women. Only 10.5% of participants were currently enrolled in post-secondary education. Almost fifty-three percent were the primary food buyers in their families while approximately 32% shared these duties with other family members. Similar percentages were noted, as might be expected, concerning those who assumed primary responsibility for household food preparation.

Participants' education levels ranged from those having less than a high school education to those having achieved a four-year college degree. Almost 58% had some college education, which given the low-income levels reported, raises concerns regarding unemployment and underemployment in Missoula County and sustainable wages. For the entire group of participants, no one reported earning more than \$30,000 a year; in fact, almost 37% reported earning less than \$10,000 per year. Only four participants had no

⁴ Both MFB and NMCDC are located within the city limits and therefore, may not reflect the concerns of non-city residents.

⁵ "Manifest content refers to the visible surface content, such as frequency of words or phrases. . . Latent content refers to the underlying meaning or context of the entire text" (p. 95). See National Service Center for Environmental Publications. (2002). *Community culture and the environment: A guide to understanding a sense of place*. Cincinnati, OH: U.S. EPA Publication Clearinghouse.

children living in the home and most households consisted of at least two people. In the past year, 47% used food stamps and almost 37% participated in the WIC program.

Information from the Missoula Food Bank and the North Missoula Community Development Corporation focus groups were combined to arrive at the findings reported below. While there were demographic differences between the two groups of low-income Missoula County residents, income levels for both groups were extremely low.

Assessing Food Insecurity

The first three focus group questions were directed at finding out how many people ran out of or worried about running out of food during the past year, the frequency at which this occurred, and what events triggered these circumstances. Nine of the 19 participants, or almost half replied in the affirmative and reported running out of food on a monthly basis. Those relying on food stamp benefits commented on running out before the end of the month and others reported having to make “tough choices” about whether to pay bills or buy food. One participant described this as “sinking in quicksand and there’s no getting out.” Medical bills, rising utility rates, high rents, underemployment, job loss, and transportation costs were other common themes addressed by participants. Several participants also stated that they tended to eat more during winter, and therefore ran out of food more frequently during the winter months.

“Which is more important, having my house warm or having food in my belly and having food in my daughter’s belly?”

“I have to choose between either paying the medical bills to make sure I still have a place to live or food on the table or whatever so I just choose to have bad credit, because I try to live for today or what’s going on today. I don’t look down the road.”

Some comments made by participants included:

- ❖ I only get \$100 in Food Stamps a month to feed me and my daughter and I live on disability, so that’s not a lot of money.
- ❖ It’s just medical bills. You pay the rent. You pay the heat. You wind up eating macaroni with vinaigrette oil for dinner, because you can’t afford to exist.
- ❖ I get \$269 a month and before I used to not eat to make the dollars stretch and I still find myself skipping meals just to make it.
- ❖ Well do I put gas in the car or do I buy a gallon of milk?
- ❖ I’ve had two part time jobs in the past couple of years so I tend to run out [of food] twice a month because I get paid every two weeks, but I have a lot of bills and not a lot of income so...

- ❖ I was hit by a car and my income dropped from \$60,000 to \$14,000.
- ❖ Rent, the high rent, the cost of living here period. I mean I live in low-income housing. It's \$575 a month and that's low-income and that doesn't make any sense. I only get \$552 from my disability check every month, so my disability check doesn't even cover paying my rent. . .And the cost of like keeping your house warm and heating costs. I mean I live in a small apartment and it's still \$100 a month, even if I shut all of lights off and turn off the heat when I leave the house and everything.
- ❖ Prices on everything... Most people have to work two or three jobs to stay afloat.

Other participants reported that although running out of food rarely occurred, due to cost-of-living expenses they ran out of particular foods before the end of the month such as fresh produce, meats, and cheeses. They discussed having to make choices between various types of food (i.e., organic versus non-organic, produce versus “staples”) and paying bills or other cost-of-living expenses. In order to keep food on the table, they purchased less expensive food items, bought food in bulk, and tightly managed their budgets.

“I have to eat foods that are very cheap like potatoes, breads...a lot of that type of stuff.”

“I worry about running out of money to buy the kind of foods I want to eat [healthy, organic foods].”

Coping with Not Having Enough Food

In general, participants' comments concerning food shortage emphasized their abilities to be creative and resourceful. They made use of community resources such as food banks and soup kitchens. They diluted some food items and added fillers to others, reconstituted leftovers, and substituted ingredients. They ate filling foods such as potatoes and bread to sustain themselves longer between meals. Many expressed concerns that while not as nutritious, starchy foods are less costly and easier to ration and stretch. Freezers played an important role in addressing food security. Participants mentioned various foods they froze in order to ensure future availability such as casseroles, large batches of soup, and food sale items such as bread and milk. Other ways of coping included purchasing foods in bulk, buying larger quantities and then dividing them and splitting the costs with a friend, volunteering at the community gardens, and relying on family and friends.

“If you don't have enough hamburger to go with the Hamburger Helper, so you end up eating just Helper...which I've done before because I don't have anything else to eat.”

Their comments below provide insight into the ways in which they stretched limited food dollars:

- ❖ I like to water down juice.

- ❖ If I'm trying to make gravy and I'm out of flour, well I have these instant mashed potatoes...I might try them to see how they work.
- ❖ You can freeze milk. You can freeze cheese.
- ❖ Take a quarter pound of hamburger and throw in some oatmeal and make it a pound.
- ❖ We eat a lot of starch, fillers and that's basically what we're filling up on.
- ❖ I make a lot of soup because you can throw almost anything into soup.

Those participants who lived as they described, "right on the edge" due to unforeseen life circumstances such as job loss, illness, and other medical issues discussed going without food so children in the family could eat, skipping meals, "dumpster diving," stealing food, and dealing with the humiliation and frustration of having to access community food resources to survive. Some of their comments get at the heart of food insecurity issues:

"I actually went to the Providence Center because I knew I would get fed really well there. I was really depressed and I didn't have hardly anything to eat. I think I was about four or five months pregnant and I was looking for a way to feed myself enough because I knew I wasn't getting nutrients for my daughter. And I figured, well I might as well. . . It's almost set up where you have to lie or stretch the truth. It puts you in a position where you have to do that [lie] to just make ends meet."

- ❖ When I run out of milk, I give her [daughter] formula even though she is too old for it because I don't have the money to buy milk.
- ❖ I would go without breakfast and lunch sometimes so everyone else [in the family] could eat.
- ❖ The couple of churches I've gone into....they want to save me and it's like, you know and yes I appreciate your effort, but no, I'm not the one. It's not that I'm not religious. I have my own spirituality. I like my spirituality and I'm comfortable with my spirituality but why should I have to convert to get food. . . I'd rather skip a week's worth of meals to not have to deal with that.
- ❖ I'll admit there's been times when I actually went and stole food to survive. I went without but I stole for the kids.
- ❖ It isn't my common practice but I mean I have had roommates and you have friends who, you know, run out of food stamps, run out of, you know, times at the Food Bank. You know, they would start hitting dumpsters behind grocery stores.

Other Food-related Concerns

All of the focus group participants voiced considerable frustration about their inability to purchase healthy foods because of the expense. This was especially true for organic foods, fresh fruits and vegetables, and meats. They felt compromised and had to resort to packaged foods (if that's what was offered at the food bank) or non-organic fruits, vegetables and meats laden with harmful pesticides and additives. Other concerns mentioned were lack of adequate transportation to food stores and bewilderment about the amount of food wasted while families and their children are going without. Comments included:

“It’s frustrating how food...survival has become a money thing. If you can’t afford it, sorry. . . It’s all money, money, money, money, money, and the ones that have the money can afford food.”

“Yeah, you know when I was a kid my parents and I we used to grow our own corn. The biggest thing was getting past the little bugs when it comes to shucking the corn. I got corn seeds [recently] and grew corn and it got all the way up and there was not a bug in it. I was like, ‘Why is there no bugs in it?’ and someone goes, ‘They genetically altered the seeds.’ I was like, ‘No way, I want the bugs in my corn’.”

- ❖ Conventional food is like poison.
- ❖ I would love to buy all organic food, but it’s just so expensive...It’s too bad we have to make a choice.
- ❖ It’s definitely hard to go grocery shopping on the bus or being forced to shop once a month because you only want to pay for the cab once a month. . . and if you have your child with you, that’s an extra \$4.00 just for the ride to go four blocks.
- ❖ I’m forced to shop at Wal-Mart [cost] and that’s way on the other side of town and half the time I don’t have the gas to get all the way down there and all the way back.
- ❖ Healthy, organic food is really expensive in Missoula and um, I hardly make any money. . . we’re not going to have the money to buy the food we want to eat. Healthy food is a luxury item.

The impact of food insecurity on children was also addressed as a major concern. Going hungry and dealing with the short- and long-term physical and emotional impacts of malnutrition provide only a partial picture of children’s experiences.

“Sometimes I go to the Poverello. I don’t have a problem going in there but my kids do. You know it’s not that they wouldn’t get caught dead in there, it’s just like, ‘Mom, we’re really not that bad off.’ They feel ashamed.”

Participants discussed the shame and humiliation their preteen and teenage children experience when having to access food resources for survival and the ways in which they tried to “help” to make an inadequate food supply last longer.

“My daughter was the type that if she didn’t eat breakfast in the morning, she would start getting sick at school. Now all of a sudden she doesn’t eat breakfast and I say, ‘Susie, you tell me your stomach hurts if you don’t eat breakfast.’ And she says, ‘But I just drink water.’ She will sacrifice herself to help make the food stretch. . . I see my daughter cutting her food in half and saving it for another day or giving it to her brother.”

Food Resources

Focus group participants discussed the food resources they tapped into in Missoula County when money for food was running short. They tended to go to family or friends first before relying on community resources. They praised the Missoula Food Bank, local churches, and other food programs, as well as the community gardens, for their contributions. They also addressed the importance of social support networks such as family and friends. Some comments included:

- ❖ I’ve been to the Food Bank. Thank God they’re there!
- ❖ I go to a lot of extremes to get food. I’ll tell my friends how hungry I am so I can get them to take me out to eat something. I beg and beg my mom for money for food, yet again, I’m kind of ashamed about having to ask her.
- ❖ My brother, dad and I hunt and when we get something, we just all throw it in this communal freezer and whoever needs it, just grabs it.

FOOD-RELATED ASSETS IN MISSOULA COUNTY

Participants praised the community for its awareness and conscientiousness regarding local food issues as well as the number of available food resources in the county. They discussed the

“I think that the Food Bank and the Poverello are great! There’s somewhere you can go. You don’t have to starve and be hungry and mad.”

community gardens, including the Community Supported Agricultural program offered through Garden City Harvest, the Farmer’s Market, the Missoula Food Bank, the Poverello Center, and the WIC program. Other community assets mentioned were the food-buying club on Missoula’s Northside, the availability of hunting and fishing, diversity of food sources (i.e., restaurants), generosity of local businesses, and the University of Montana as a magnet for consciousness raising and social activism around food issues. Participants’ comments included:

- ❖ A strength in Missoula County is that there’s an interest in making sure that there aren’t a lot of hungry people.

- ❖ They're all community minded [Missoulians]. They're all behind us. Look at all the food drives they have.
- ❖ It's a strength [Farmers' Market] but they're way too expensive.
- ❖ Le Petit and the Good Food Store are really conscious. They don't waste and they donate all their extra stuff.

BRAINSTORMING SOLUTIONS AND RECOMMENDATIONS

Toward the end of the focus group discussion, participants were asked what the community could do to make it easier for people to get enough food and to address other concerns they had mentioned.

"If everybody had a reasonable, decent, priced market in your neighborhood and they don't have to truck it once a month to the store and pay for a cab or rely on other people for a ride...that kind of thing."

Participants actively engaged in a brainstorming process, which provided them with the opportunity to make suggestions on how to improve the county's food system and build upon its strengths (see Appendix: Table 8). They strongly voiced the need for more public awareness/education regarding food issues despite the fact that many felt a high level of consciousness regarding food issues locally. They discussed changing welfare policies, establishing a living wage, addressing transportation as a barrier to food access, and creating government subsidies at local grocery stores for individuals receiving public assistance.

"I believe it should be more socialized. I know that's a nasty word to a lot of people... Socialized medicine would be great, socialized food banks would be a great idea too... Make it less embarrassing for people. Nobody in America should go hungry and nobody should go without health care."

Other suggestions included promoting more volunteerism, conducting more food drives, offering free cooking classes, increasing the demand for organic food, allocating space for freezers and other methods of food storage and preservation, developing a program to assist individuals with transportation to and from food outlets, increasing voter registration and getting out the vote on important food-related issues, establishing a food co-op and putting more pressure on government programs to assist with issues of food insecurity.

The following quotes from participants illustrate ways they sought to address the food concerns and issues they identified:

"Just increasing the wages that they pay people in this area... Establish a living wage."

- ❖ I think it would probably help if people were more educated about organic and conventional food and demand more organic food then more grocery stores would start carrying it...
- ❖ Putting money in the hands of the people that are addressing the problems and letting them work toward a solution. I'd like to see that start back up again.
- ❖ The community van would be a good idea because I could afford a dollar to go, you know, one way to the store and a dollar on the way back.
- ❖ The whole co-op idea, because I think that would really work.

SUMMARY OF KEY FOCUS GROUP THEMES

The web of interrelated themes discussed by focus group participants creates an illustrative picture of county food issues for low-income residents. Participants highlighted the challenges posed by the cost-of-living in Missoula County given low wages, and high food, rent, and utility costs. Their words spoke to leading lives of conflicting choices. They expressed the desire to eat healthy foods; however, food prices, especially for fresh produce, meats and dairy products, made it extremely difficult, if not impossible, to live out their values. During hard times, bread, pastas, potatoes, and other inexpensive fillers became their daily staples. Choosing healthy foods meant skipping bill payments.

Despite such challenges, many participants expressed pride regarding their ability to creatively address their dietary needs and cope with food insecurity issues when they arose. Fishing, hunting, the community gardens, and a variety of feeding programs offered alternatives to hunger. However, those participants with few resources, those most stressed for money to make ends meet, experienced considerable conflict and competing demands related to food. Many made choices that, under “normal” circumstances, they would not make such as stealing food so their children could eat, selling plasma, skipping meals, and feeding their children less nutritious food fillers.

Focus group participants addressed the psychological, emotional, social and academic impacts of food insecurity on their children. Their children ate less healthy food, decreased their food intake and suffered from the social degradation that accompanies having to ask for hand-outs in a society where food resources are abundant. Participants’ comments gave new meaning to federal policies such as No Child Left Behind, which focuses exclusively on raising children’s academic performance but ignores one of the primary reasons why children struggle academically. Adequate nutrition plays an essential role in children’s physical and intellectual development.⁶ Research studies also indicate that children from food insecure homes have higher rates of illness when

⁶ Children’s Defense Fund. (1997). *Poverty matters: The cost of child poverty in American*. Washington, DC: Children’s Defense Fund.

compared to children who do not have to worry about where their next meal is coming from.⁷

Focus group participants eagerly provided recommendations to improve the county's food system. They offered both short- and long-term solutions. They suggested agency policy changes to increase food bank hours and distribute food stamp allotments on a bi-monthly basis. They recommended using advertising to inform county residents about the available food resources in the county. Long-term solutions addressed enacting a living wage, increasing local food production, and changing the current tax structure so it was more equitable for the working poor and others struggling to make ends meet in low-income households.

LINKING SURVEY AND FOCUS GROUP FINDINGS: SUMMARY AND DISCUSSION

Using two data collection methods for exploring local food consumption issues and assets creates the opportunity to check and verify important issues across methods. By far, the most important food-related concern for both survey respondents and focus group participants was food quality, which included issues concerning food safety, pesticide residues on food, and eating healthy foods. Low-income residents were frustrated with their lack of access to high quality foods such as those produced organically or non-organic foods such as fruits, vegetables, and meats that are more nutritious than packaged and processed foods. Both the survey and focus group findings provide support for increasing access to and creating more markets for locally produced foods.

The price of food and other cost-of-living issues was the second most important area of concern for both survey respondents and focus group participants. The ability to eat well and have access to a healthy diet is directly tied to the ability to purchase high quality, nutritious foods. Comments made by focus group participants shed light on the tough choices low-income individuals and families face when having to decide, for example, whether to "heat or eat." As would be expected, cost-of-living issues had a far greater impact on low-income respondents than on those in the middle- and high-income categories, although health and medical costs appear to be important to respondents regardless of income level. Transportation to and from food outlets emerged as an issue for both survey respondents and focus group participants, especially those in the low-income category.

⁷ Center on Hunger and Poverty. (2002). *The consequences of hunger and food insecurity for children: Evidence from recent scientific studies*. Retrieved September 4, 2004 from <http://www.centeronhunger.org/pdf/consequencesofhunger.pdf>

PART III FOOD FOR THOUGHT AND ACTION

INTRODUCTION

The aim of *Food Matters* is to increase understanding of the key challenges Missoula County faces with respect to agriculture and food consumption, as well as the resources we have to draw upon in meeting those challenges. The issues documented here and in our earlier report, *Our Foodshed in Focus*, are integrated. Therefore, solutions require a comprehensive and systematic approach that addresses the entire food system – from agricultural production, to food distribution, to consumption, to waste. Fortunately, many organizations and agencies are contributing a great deal toward strengthening various parts of the food system.

While individual organizations and agencies fruitfully address aspects of the larger goal of community food security, the food assessment process suggests that there is also great utility in taking an integrated and systemic view. Clearly, documenting what our food system looks like now is only a first step, and there are many more steps we need to take to make our local food system more secure. A community is said to be food secure if its residents obtain a safe, culturally acceptable, nutritionally adequate diet through a sustainable food system that maximizes community self-reliance and social justice.

Some ideas for moving toward the long-term goal of community food security are suggested below. Before turning to recommendations, we briefly summarize the most salient findings from the report and identify points of intersection between the interests of agricultural producers and consumers.

DIGESTING *FOOD MATTERS*

Despite a long history of farming and ranching in Missoula County, many producers report that agriculture is struggling today primarily because of two interrelated problems: low economic returns and growth-related development pressures. For many farmers and ranchers, low prices for their products and increasing costs of production are major threats to their operations. While most producers we spoke with see development and increasing land values as problematic, they often find themselves in a bind because their equity is tied up in their land and other farm-related assets. Producers are also concerned that the high land values associated with development are limiting access to cropland and pasture, and making it harder for new farmers to get started or existing farmers to expand. It seems that a major conclusion we can draw is that farm and land economics are integrally tied to perceptions of and decisions related to farm viability.

Despite the economic and land use pressures, a variety of factors facilitate or contribute to farmers' and ranchers' ability to keep their farms going. Two important factors are the amount and quality of their land, suggesting that these are assets worth maintaining if we are to keep agriculture viable here. Other key contributors to farm viability are working off-farm, selling into local markets, reducing production costs, and employing water and soil conservation practices. Perhaps most important of all is simply a deep attachment that many farmers and ranchers have to their way of life and their land.

For many farmers and ranchers, however, attachment to the land will not be enough to stem the tide of farmland loss if current economic and development trends continue. Agriculture provides multiple benefits – including food and fiber, wildlife habitat, scenic beauty, and other public goods. Although our farmer survey and interviews only touched briefly on various farmland protection strategies, the most support was voiced for using tax dollars, such as a bond, to create a farmland protection program, as well as using voluntary approaches, such as conservation easements. Regardless of which farmland protection programs might be put into place, farmers and ranchers need to make a living from the land. One way to improve the economic viability of agriculture appears to be the development of more local markets and the infrastructure to support such markets.

Our research indicates that there is strong interest among producers in marketing more of their produce and livestock locally; fortunately, many consumers also want to eat local food. Farmers and ranchers see advantages in terms of profits, as well as strengthening connections with those who eat the foods they grow. Producers also see barriers, however, in terms of difficult access to some local markets and limited infrastructure for food processing. At the other end of the food chain, some 60% of the consumers we surveyed expressed concern about how far away the food they eat comes from, and 55% would like to see more local foods in grocery stores. Thus, a major area of convergence between producers and consumers is around the value of local food.

Consumers' interest in local food is perhaps not surprising given the importance they place on food quality. In the food consumption survey, the most frequently cited concerns related to food quality issues, including food safety, pesticide residues on food, whether food is raised organically, food freshness and nutritional value. Of all these issues, food safety is paramount in eaters' minds. Almost 82% of survey respondents perceived food safety as a concern for them. More opportunities to access local food could increase people's knowledge about and trust in what they eat by shortening the physical and social distance between producers and consumers.

Many of the consumers who participated in the food assessment report that they must balance their desire to eat quality, nutritious foods with their ability to purchase or access such foods. Close to 77% of the survey respondents reported that the price of food they like to eat is at least somewhat of a problem for them. Not surprisingly, low-income participants were most likely to consider the price of food too high, typically citing low wages and competing needs, such as housing, medical costs, and utilities. Of particular concern were the impacts of household food insecurity on children and their development.

Focus group participants described a variety of creative and resourceful ways they try to fill in the gaps in monthly food budgets, including fishing, hunting, and community gardening. Other strategies are not particularly nutritious (e.g., eating more starchy foods) or can be humiliating (e.g., dumpster diving). Emergency food providers, like the Missoula Food Bank and the Poverello Center, provide help that low-income residents use and greatly appreciate; however, reliance on those services can sometimes be disempowering. Thus, while governmental and non-governmental programs continue to provide vital emergency services, there appears to be a need for additional, creative approaches that emphasize empowerment and self-reliance.

An important area of convergence between the interests of agriculturalists and consumers is in the perceived value of local food; however, a major challenge is to devise strategies that meet the economic needs of both farmers and consumers. Obviously, some consumers can afford to purchase high quality, local foods; and many of those consumers are making that choice, as evidenced by the success of the Missoula Farmers' Market and the grocery stores that sell local food. For some consumers, however, the cost of food will continue to be a problem, regardless of where that food was grown. Opportunities for farmers and ranchers could potentially be expanded, particularly by developing institutional markets at the University of Montana, area schools, and more. Such expansion requires new distribution networks and more processing facilities, especially for livestock, both of which are challenging tasks. In addition, there appear to be opportunities to make more local foods available through nutrition and other food programs. Some of the specific recommendations below begin to identify ideas for addressing these challenges and opportunities.

If nothing else, the Missoula County Community Food Assessment suggests that we need more public dialogue about how best to protect working farms and ranches and how best to meet citizens' needs for quality, nutritious food. In recent years, a number of North American cities, counties and state governments have established "food policy councils" to develop solutions to local food problems, considering the whole food system. Often, local governments sanction food policy councils, which make recommendations on the food- and agriculture-related needs of a community. Food policy councils ideally include people who represent a wide range of perspectives. In the farmer and rancher survey, about two-thirds of the respondents approved of the idea of establishing an agricultural task force that would promote agricultural markets and preserve agricultural production in the County. A food policy council could add to the idea of an agricultural task force and include addressing consumers' interests in food quality, local food, and access to a nutritionally adequate diet in a self-respecting way. As discussed below, the establishment of a food policy coalition is recommended as a first step toward creating a more permanent council.

RECOMMENDATIONS

We offer the following recommendations with the hope of generating a community dialogue about the future of food and farming in Missoula County. The recommendations emerged from a series of conversations among Steering Committee members and University of Montana partners engaged in the CFA. These recommendations are based on our review of the research findings presented here in *Food Matters*, as well as *Our Foodshed in Focus* and *Grow, Eat, and Know*. The first recommendation describes how the specific policies and activities in the other recommendations could be brought about.

Recommendation 1: Create a multi-stakeholder, food policy coalition that addresses community needs related to food and agriculture in a comprehensive, systematic, and creative way. There is no existing entity that takes an integrated, approach to solving the food and farming problems identified in the CFA. The coalition could advise City and County government, as well as work with relevant non-governmental agencies to make our food system more secure.

Progress toward achieving this recommendation can be accomplished by:

- a. Providing an opportunity for dialogue and creative problem solving that does not currently exist by including a wide array of food system stakeholders. Include representatives from a variety of food and agriculture related perspectives, such as: farmers, food processors, wholesalers, distributors, grocers, restaurateurs, anti-hunger advocates, conservationists, community leaders, agricultural service providers, land use planners, health officials, universities, and other citizens as food consumers.
- b. Exploring various organizational options for constituting the food policy coalition (e.g., as a coalition, non-profit group, advisory board to local government).
- c. Reviewing and prioritizing the recommendations from the Community Food Assessment presented below. Focus on solutions that meet the particular needs of our community and build on our assets.
- d. Identifying organizations, public agencies, or other entities that might work to implement specific projects to carry out the recommendations.
- e. Exploring and pursuing funding opportunities, as well as establishing partnerships between public and non-profit sector organizations.

Recommendation 2: Improve food quality and access to healthy foods at emergency food services and elsewhere in the County. Consumers in our CFA research identified food quality as their primary food-related concern (e.g., food safety, pesticide residues on food, use of organic and local foods, etc.).

Progress toward achieving this recommendation can be accomplished by:

- a. Strengthening the ties between emergency food services and local markets for the production and distribution of fresh and healthy foods to low-income individuals and their families.
- b. Informing low-income residents who use emergency food services of the options available for accessing healthy foods through participation in the Community Supported Agriculture program and the community gardens.
- c. Establishing a program to facilitate gleaning on farms and residential orchards.
- d. Encouraging farming and ranching practices that maximize food safety and quality and that minimize the use of pesticides.

Recommendation 3: Work with relevant advocacy organizations to create public education campaigns around the human right to food, and expand the current dialogue around cost-of-living concerns to include food issues. The CFA research found that cost of living issues, specifically low wages, pose significant barriers to accessing healthy, nutritious foods for low-income individuals and their families. In addition, government nutrition programs are underutilized.

Progress toward achieving this recommendation can be accomplished by:

- a. Creating and supporting community-based infrastructure that can promote food self-reliance: community kitchens, cooperative buying clubs, community freezers, food preservation programs, increase community gardens.
- b. Creating opportunities for the development of micro-enterprises and food-related businesses.
- c. Creating and supporting programs that move beyond providing emergency food toward increasing resources that build a sustainable, self-reliant community food system.
- d. Promoting participation in nutrition programs, including those at farmers' markets, and strengthening public education programs about available food resources.

Recommendation 4: Develop a strong community-based food system that supports local farmers and ranchers, and meets consumers' interest in access to locally grown food. In rebuilding our local food system, a major challenge is to devise strategies that will address the need for farmers and ranchers to earn a fair price for their products and the need for consumer affordability.

Progress toward achieving this recommendation can be accomplished by:

- a. Investigating how we can build on existing resources and develop more and expanded markets for local foods.
- b. Creating institutional markets for local foods (e.g., at schools, hospitals), and expanding the University of Montana's Farm to College Program.
- c. Addressing the need to rebuild infrastructure for food processing (particularly for livestock) and for local food distribution (particularly to meet the needs of institutional and other local markets that require larger deliveries).

- d. Eliminating barriers preventing low-income residents from gaining access to fresh, healthy, locally-grown foods, through such mechanisms as nutrition programs and community-based infrastructure promoting self-reliance.
- e. Expanding programs to promote local food purchases, such as coupons for WIC clients and seniors so they can get produce at farmers' markets.

Recommendation 5: Identify and assess strategies for protecting and assisting working farms and ranches, and for keeping agricultural land affordable for farming and ranching. Agriculture is a valuable part of our cultural heritage. It contributes to open space, wildlife habitat, and other public benefits. A healthy agricultural system is also integral to the long-term security of our food system.

Progress toward achieving this recommendation can be accomplished by:

- a. Developing relevant criteria for prioritizing the protection of agricultural land, including factors such as: importance to local food production; economic viability; farm/ranch scale; historical and/or cultural significance; soil and land capability; and other conservation benefits.
- b. Educating farmers, ranchers and the general public about (1) the context within which land use planning and decision making currently take place, and (2) various strategies for protecting agricultural land.
- c. Exploring the potential for a countywide bond that would provide funding for farmland protection.
- d. Supporting efforts that would amend the current tax structure to provide relief for agricultural producers, perhaps providing tax incentives for those who produce foods for local markets and emergency food providers.
- e. Exploring ways to facilitate entry into farming to make it feasible for young farmers to get started.
- f. Organizing a grazing and agriculture land stewardship cooperative in the County, connecting pasture landowners with livestock producers and providing technical support on weed and grazing management. Agriculture service providers (Extension and NRCS) can help with implementation of this idea.
- f. Creating educational programs for Hmong and other market gardeners wanting information about season extending strategies.
- g. Initiating dialogue with farmers/ranchers about their technical assistance needs regarding methods to reduce costs of production, so as to improve the returns.

Recommendation 6: Investigate further the extent to which transportation to food outlets (both grocery stores and food pantries) is a concern for low-income residents throughout the County and develop appropriate recommendations for change. The CFA indicates that transportation to food outlets is an emerging issue for low-income individuals in Missoula County as population increases and as supermarkets are located further from neighborhoods.

Progress toward achieving this recommendation can be accomplished by:

- a. Assessing the current mode of transportation of food pantry clients.
- b. Mapping the relationship between supermarket locations, bus routes, safe walking and biking routes, and various residential neighborhoods.
- c. Researching ways that other communities have successfully addressed inadequate transportation to and from food outlets.

APPENDIX

Table 1: Consumption Survey Demographics (N = 624)

Demographic Variables		Frequency	Percentage
Site			
	Mall	470	75.3
	Other	154	24.7
Gender			
	Male	206	33.0
	Female	415	66.5
	Missing	3	.5
Full or Part-time Student			
	Yes	142	22.8
	No	479	76.8
	Missing	3	.5
Household Shopper			
	Yes	439	70.4
	No	58	9.3
	Shared	125	20.0
	Missing	2	.3
Food Prep/Cook			
	Yes	407	65.2
	No	71	11.4
	Shared	143	22.9
	Missing	3	.5
Level of Schooling			
	<High School	16	2.6
	HS/GED	125	20.0
	Tech/Voc	47	7.5
	Some College	224	35.9
	4yr. College	146	23.4
	Grad Degree	64	10.3
	Missing	2	.3
Yearly Income ¹			
	<\$10,000	140	22.4
	10,000-19,999	99	15.9
	20,000-29,999	108	17.3
	30,000-39,999	50	8.0
	40,000-49,999	53	8.5
	50,000-59,999	48	7.7
	60,000-69,999	30	4.8
	70,000-79,999	19	3.0
	80,000 or >	54	8.7
	Missing	23	3.7

¹ U.S. Census Data (2000) for income levels in Missoula County – 11.67% less than \$10,000; 24.6% between \$10,000 and \$24,999; 31.2% between \$25,000 and \$49,999; 18.8% between \$50,000 and \$74,999; and 7.5% between \$75,000 and \$99,000.

Food Stamp (past year)		
Yes	87	13.9
No	531	85.1
Missing	6	1.0
WIC Program (past year)		
Yes	58	9.3
No	558	89.4
Missing	8	1.3

Table 2: Focus Group Demographics (N = 19)

Demographic Items		Frequency	Percentage
Age	Range: 21-58 Average = 34.2		
Gender			
	Female	11	57.9
	Male	6	31.6
	Missing	2	10.5
Student Status			
	Yes	2	10.5
	No	15	79.0
	Missing	2	10.5
Food Shopper			
	Yes	10	52.6
	No	1	5.3
	Shared	6	31.6
	Missing	2	10.5
Food Prep/Cook			
	Yes	10	52.6
	No	3	15.8
	Shared	4	21.1
	Missing	2	10.5
Education Level			
	Less than high school	2	10.5
	High school/GED	4	21.1
	Some college	5	26.3
	4-year college degree	6	31.6
	Missing	2	10.5
Yearly Household Income			
	Less than \$10,000	7	36.9
	10,000-19,999	5	26.3
	20,000-29,999	5	26.3
	Missing	2	10.5
Children in Household (under 18)			
	0	4	21.1
	1-2	11	57.8
	3-4	1	5.3
	5 or more	1	5.3
	Missing	2	10.5
Total People in Household			
	1	1	5.3
	2-3	9	47.4
	4-5	2	10.5
	more than 5	5	26.3
	Missing	2	10.5
Food Stamps in Past Year			
	Yes	9	47.4
	No	8	42.1
	Missing	2	10.5

WIC in Past Year		
Yes	7	36.9
No	10	52.6
Missing	2	10.5

Table 3: Food Consumer Food-Related Problems or Concerns (N=624)

Problems or Concerns	Frequency	Percentage
Pesticide residues on foods:		
Very much a problem or concern	267	42.8
Somewhat a problem or concern	250	40.1
Not a problem or concern	105	16.8
Missing	2	.3
Food safety:		
Very much a problem or concern	266	42.6
Somewhat a problem or concern	244	39.1
Not a problem or concern	113	18.1
Missing	1	.2
Having enough money to buy the food I need for myself/family:		
Very much a problem or concern	203	32.5
Somewhat a problem or concern	208	33.3
Not a problem or concern	211	33.8
Missing	2	.3
The nutritional quality of food:		
Very much a problem or concern	199	31.9
Somewhat a problem or concern	207	33.2
Not a problem or concern	212	34.0
Missing	6	1.0
The price of food I like to eat:		
Very much a problem or concern	175	28.0
Somewhat a problem or concern	305	48.9
Not a problem or concern	142	22.8
Missing	2	.3
The freshness of food I like to eat:		
Very much a problem or concern	175	28.0
Somewhat a problem or concern	254	40.7
Not a problem or concern	190	30.4
Missing	5	.8
How far away the food I eat/buy comes from:		
Very much a problem or concern	130	20.8
Somewhat a problem or concern	243	38.9
Not a problem or concern	245	39.3
Missing	6	1.0
Availability of the foods I like to eat:		
Very much a problem or concern	115	18.4
Somewhat a problem or concern	214	34.3
Not a problem or concern	291	46.6
Missing	4	.6
Whether the food I eat is organic:		
Very much a problem or concern	111	17.8
Somewhat a problem or concern	241	38.6
Not a problem or concern	271	43.4
Missing	1	.2

The amount of time it takes to prepare/cook meals:	81	13.0
Very much a problem or concern	237	38.0
Somewhat a problem or concern	304	48.7
Not a problem or concern	2	.3
Missing		
The variety of food to choose from in food stores:		
Very much a problem or concern	80	12.8
Somewhat a problem or concern	238	38.1
Not a problem or concern	306	49.0
Missing	0	.0
Being within walking/biking distance to a food store:		
Very much a problem or concern	65	10.4
Somewhat a problem or concern	141	22.6
Not a problem or concern	416	66.7
Missing	2	.3
Finding culturally appropriate foods:		
Very much a problem or concern	47	7.5
Somewhat a problem or concern	139	22.3
Not a problem or concern	434	69.6
Missing	4	.6
Transportation to and from food stores:		
Very much a problem or concern	26	4.2
Somewhat a problem or concern	108	17.3
Not a problem or concern	487	78.0
Missing	3	.5

Table 4: Food Consumer Behaviors (N=624)

Food Consumer Behaviors	Frequency	Percentage
Used a public form of transportation to get to a food store:		
Never	489	78.4
Rarely	78	12.5
Some of the time	37	5.9
Most of the time	13	2.1
Always	6	1.0
Missing	1	.2
Walked or rode my bike to a food store:		
Never	259	41.5
Rarely	131	21.0
Some of the time	163	26.1
Most of the time	45	7.2
Always	23	3.7
Missing	3	.5
Drove my car to a food store:		
Never	48	7.7
Rarely	19	3.0
Some of the time	63	10.1
Most of the time	204	32.7
Always	288	46.2
Missing	2	.3
Limited the size of meals due to a lack of money:		
Never	191	30.6
Rarely	157	25.2
Some of the time	174	27.9
Most of the time	54	8.7
Always	40	6.4
Missing	8	1.3
Skipped a meal due to lack of money:		
Never	322	51.6
Rarely	140	22.4
Some of the time	110	17.6
Most of the time	24	3.8
Always	24	3.8
Missing	4	.6
Worried about having enough to eat for me or my family:		
Never	298	47.8
Rarely	128	20.5
Some of the time	117	18.8
Most of the time	46	7.4
Always	32	5.1
Missing	3	.5

Went to a food pantry or soup kitchen to get/eat food:		
Never	480	76.9
Rarely	56	9.0
Some of the time	62	9.9
Most of the time	15	2.4
Always	8	1.3
Missing	3	.5
Shopped for the least expensive food available:		
Never	80	12.8
Rarely	117	18.8
Some of the time	196	31.4
Most of the time	133	21.3
Always	95	15.2
Missing	3	.5
Bought food that was labeled organic:		
Never	133	21.3
Rarely	170	27.2
Some of the time	235	37.7
Most of the time	68	10.9
Always	14	2.2
Missing	4	.6
Bought food that was grown or produced in Montana:		
Never	31	5.0
Rarely	85	13.6
Some of the time	412	66.0
Most of the time	63	10.1
Always	23	3.7
Missing	10	1.6
Usual transportation to and from grocery store:		
My car	535	85.7
Ride with someone else in their car	31	5.0
Public bus	11	1.8
Bicycle	22	3.5
Walking	20	3.2
Taxi	1	.2
Other	2	.3
Missing	2	.3

Table 5: Cost-of -Living Issues Most Affecting Ability to Eat Well (N=624)

Cost-of-Living Issue	Frequency	Percentage
Personal income too low		
Yes	292	46.7
No	335	53.1
Missing	1	.2
High fuel/heating cost		
Yes	249	39.9
No	376	59.9
Missing	1	.2
High rent		
Yes	227	36.3
No	397	63.5
Missing	1	.2
Health/medical costs		
Yes	174	27.8
No	450	72.0
Missing	1	.2
High mortgage payment		
Yes	87	13.9
No	536	85.9
Missing	1	.2
Transportation		
Yes	71	11.3
No	553	88.5
Missing	1	.2
Other		
Yes	66	10.6
No	557	89.3
Missing	1	.2
Other child-related expenses		
Yes	53	8.5
No	570	91.3
Missing	1	.2
High childcare costs		
Yes	47	7.5
No	576	92.3
Missing	1	.2

**Table 6: Foods Consumers Would Like to See More of in Local Grocery Stores
(N=624)**

Types of Food		Frequency	Percentage
Locally grown foods	Yes	342	54.8
	No	281	45.0
	Missing	1	.2
Fresh fruits and vegetables	Yes	307	49.2
	No	316	50.6
	Missing	1	.2
Healthy foods	Yes	266	42.6
	No	357	57.2
	Missing	1	.2
Organic foods	Yes	222	35.6
	No	401	64.3
	Missing	1	.2
Bulk foods	Yes	167	26.8
	No	456	73.1
	Missing	1	.2
Ethnic foods	Yes	159	25.5
	No	464	74.4
	Missing	1	.2
Instant foods	Yes	42	6.7
	No	581	93.1
	Missing	1	.2
Other	Yes	27	4.3
	No	596	95.5
	Missing	1	.2

Table 7: Survey Items on Which Responses Differed Significantly by Income Level

Survey Items	Low-Income Respondents	Middle-Income Respondents	High-Income Respondents	Significance Level
FOOD-RELATED PROBLEMS OR CONCERNS				
Transportation to and from food outlets	28.0 ²	14.7	11.8	.000***
The price of food I like to eat	82.9	78.1	61.8	.000***
Having enough money to buy the food I need for myself/family	79.8	60.3	35.0	.000***
FOOD-RELATED BEHAVIORS				
Walked or rode my bike to a food store	17.4	2.7	2.9	.000***
Drove my car to a food store	70.4	88.7	93.2	.000***
Limited the size of meals due to lack of money	24.5	4.7	2.0	.000***
Skipped a meal due to lack of money	11.9	3.3	1.0	.000***
Worried about having enough to eat for me or my family	20.0	4.0	1.9	.000***
Shopped for the least expensive food available	48.6	28.5	12.7	.000***
COST-OF-LIVING ISSUES				
High rent	81.0	16.3	2.7	.000***
High mortgage payment	30.6	49.4	20.0	.000***
Personal income too low	78.9	17.5	3.5	.000***
High fuel/heating cost	59.9	29.8	10.3	.001**

² For ease of readability, table contains only the percentages for yes responses.

*p<.05, **p<.01, ***p<.001, using Bonferroni correction where number of significance tests = 35

Table 8: Focus Group Participants' Suggestions and Solutions

- Better advertising for food banks
- More hours at food bank and more varied distribution
- More meat and vegetables at the food bank
- Subsidized discounts on food purchased with food stamps
- Make food stamp allotment bi-monthly
- Transportation program for grocery shopping
- Government agencies take on a more active role in ensuring residents do not go without food
- Make utilizing resources less embarrassing
- More local production
- Create a food co-op
- Address high cost of medical care in U.S. that compromises residents' ability to buy quality food
- Continue community education that raises awareness of food issues
- Create more demand for healthy, organic food
- Reform welfare reform
- Establish a living wage
- Put pressure on government programs to address food issues
- Cut taxes proportionally
- Offer cooking classes
- More food drives
- Make food more accessible
- More volunteerism