



UNIVERSITY OF ALBERTA
ALBERTA CENTRE FOR SUSTAINABLE
RURAL COMMUNITIES

Addressing Food Security in MacKenzie County, Northern Alberta

A COMMUNITY-BASED APPROACH TO POLICY DEVELOPMENT

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Table of Contents

- i. Executive Summary
- ii. Food Security in MacKenzie County: An Overview
 - ii.i MacKenzie County: An Introduction
 - ii.ii Defining Food Security
 - ii.iii Threats to Food Security
 - ii.iv The Northern Alberta Context
 - ii.v The Implications of Food Insecurity
- iii. The Existing Policy
 - iii.i Current Policy
 - iii.ii Shortcomings and Opportunities
- iv. The Next Step: Recommendations
- v. Conclusion
- vi. Recommended Readings
- vii. References
- viii. About ACSRC

Executive Summary

- Food security is the consistent access to sufficient and appropriate foods necessary to living a healthy lifestyle (World Food Summit, 1996).
- Rural Alberta, due to lower income levels, lack of processing infrastructure, high food prices and increasing land loss, among other factors, experiences high rates of food insecurity (“Food Sovereignty in Rural and Remote Communities” 2011, 2-3).
- As a rural and remote community, MacKenzie County in northern Alberta faces multiple and mounting challenges in ensuring the food security of its citizens (“Food Sovereignty in Rural and Remote Communities” 2011, 2-3).
- In order to properly address food insecurity in MacKenzie County cohesive, comprehensive, preventative and experience-generating policy measures are needed, grounded in community deliberation and collaboration.

Food Security in MacKenzie County: An Overview

MacKenzie County: An Introduction

MacKenzie County, situated in the northwest corner of the province and 800 kilometers from Edmonton, is Alberta’s largest municipal county (MacKenzie County, “About Us” 2010). The county has an abundance of natural resources, including arable land, forestry and oil and gas. Grain farming is its prominent agricultural industry (MacKenzie County under “About Us” 2010). Municipal government is keen to develop its value-added industries and places emphasis on assisting such new businesses in its vision of fostering a sustainable economic environment (MacKenzie County, “About Us” 2010).

Defining Food Security

Food security is present “when all people, at all times, have physical and economic access to sufficient, safe, and nutritious food to meet their dietary needs and food preferences for an active and healthy life” (World Food Summit, 1996). Definitions of food security also often include ideas of accessibility to culturally and personally appropriate foods (Douglas 2010, 197-199) and the ability to access resources around food nutrition, preparation and sanitation (World Food Summit, 1996).

Threats to Food Security

Global threats to food security include: loss and degradation of agricultural land (ex: to urban residential lands (Rayfuse and Weisfelt 2012, 220)) , decreasing biodiversity, industrial dependence on water resources, pollution, natural resource depletion, increases in meat and processed-food consumption, increased accessibility to unhealthy processed foods, food waste (Maggio et al. 2014, 179-180), projected increases in global food prices brought on by climate change (Abdelhamid et al 2012, 1525), and declining incomes of small-scale farmers resulting in an “erosion of rural livelihoods and loss of agricultural independence” (Slater 2007, 4).

In rural communities the burden is compounded. Store-bought food tends to be higher in cost and lower in nutritional value. The centralization of food processing means the infrastructure and facilities to process local foods no longer exist, and rates of poverty are higher, making access to nutritious food even more difficult (“Food Sovereignty in Rural and Remote Communities” 2011, 2-3).

The Northern Alberta Context

In recent decades in Alberta, rapid urbanization and a booming oil and gas industry have given way to the “significant loss of prime farmland to urban and industrial development” (Beckie et al. 2013, 15). The number of family farms in Canada has decreased by 11% between 1996 and 2001 (Slater 2007, 4). Farms tend to experience low incomes, which has led to rural depopulation (Epp 2009, 4). Remote and northern Canadian communities are further challenged by the highest food prices, most notably of perishable and high-nutrient foods (Epp 2009, 4). In Alberta, low income is a major predictor of food insecurity (“Cost of Eating in Alberta 2008” 2009, 2).

The Implications of Food Insecurity

Food insecurity presents a vast array of complex health, educational, socio-cultural and economic consequences.

In Canada, food insecurity is associated with poor self-rated health, poor mental and physical health, and the onset of multiple chronic conditions such as diabetes, heart disease and depression (McIntyre et al. 2013, 1785). Certain populations experience increased vulnerability with regard to food security. In terms of maternal and infant health, inadequate nutrient intake in pregnant women contributes to low birth weights and increased birth risks (“Cost of Eating in Alberta 2008” 2009, 5). Aboriginal peoples are some of the most food insecure groups in Canada (Brown et al. 2012, 1-2). Food security for populations in Northern Canada is considered a “dire public health emergency” (Food Banks Canada 2013, 21).

In households that experience food insecurity, children are more likely to be at risk of impaired cognitive, social and emotional development ("Cost of Eating in Alberta 2008" 2009, 5). This, in turn, harbours serious concerns in terms of child education and development; negatively impacting child learning ability, physical development and mental health ("Cost of Eating in Alberta 2008" 2009, 5).

Food insecurity is also problematic in terms of maintaining and building a sense of cultural identity and fulfillment. Being able to prepare traditional or culturally-acceptable meals is an important part of daily life, in preserving customs and re-creating a sense of home. Food as a manifestation of cultural identity is a source of enjoyment contributing to positive mental health (Cristabel 2012, 55-58).

Given the implications, food insecurity also comes with great economic costs. Chronic disease, for example, brings a large economic challenge to the health care system in Alberta (Insitute of Health Economics Working Paper 2004, 1). Despite the lack of exact numbers, it is clear that these implications carry with them a significant economic burden.

The Existing Policy

Current Policy

Nationally, Alberta is seen as a leader in addressing issues of food security, being one of the few provinces with a larger diversity of programs that support and promote local foods (Epp 2009, 21). School food policy has been of particular focus in Alberta and has been addressed through the Healthy U and Healthy Schools program (Epp 2009, 21). One such initiative is the Earthbox project, which aims to teach children about the origins of food while providing necessary gardening skills. This particular program has been received enthusiastically by participants and their families in Fort Vermillion, MacKenzie County (Growing Food Security in Alberta, "Earthbox Kids in Fort Vermillion!" 2010).

On the municipal level, MacKenzie County, in partnership with the towns of High Level and Rainbow Lake, is developing a Regional Sustainability Study, which was set to be completed in May/June 2014 (MacKenzie County, "Regional Sustainability Study Information and Background" 2010). The focus of the study is to identify the best way to utilize collective resources in addressing "challenges of future growth facing the region and to achieve long term sustainability" (MacKenzie County, "Regional Sustainability Study Information and Background" 2010). A round of community open houses were held in November and December 2013 and January 2014 to collect citizen input on governance

models, service accessibility, and access to Council and municipal administration. A second round was also planned for May and June 2014 (MacKenzie County, "Regional Sustainability Study Information and Background" 2010). Fort Vermillion, MacKenzie County is also one of 12 rural Alberta communities connected to Growing Food Security in Alberta's "Community Building for Food Security" program (Growing Food Security in Alberta, "Earthbox Kids in Fort Vermillion!" 2010).

Shortcomings and Opportunities

The existing policies concerning food security in MacKenzie County do not address the current and future county-wide food security needs. While independent initiatives have been successful and can be drawn upon, a comprehensive, holistic and over-arching food security policy is missing.

MacKenzie County has many promising and advantageous resources and conditions upon which to draw, such as their abundance of natural resources, strong community organizations and municipal governments, and robust economy. Despite the current lack of updated information, the development of MacKenzie County's "Regional Sustainability Study" provides groundwork for future development strategies and, perhaps most importantly, indicates the community's willingness to engage in participatory deliberation around sustainability, which necessarily includes issues of food security.

Economically, there will be benefits to addressing food security in a preventative manner. Provincially, for example, policies in place to ensure food security, and therefore adequate nutrition, will relieve the health system of the significant costs from dealing with chronic disease and mental health. Being able to eat healthfully is one of the most important factors associated with chronic disease (Cristabel 2012, 15).

Appropriate and timely use of these opportunities will be integral to the implementation of a successful food security policy.

The Next Step: Recommendations

Immediate action is recommended in forming appropriate local solutions to issues of food security. This will require local decision-making characterized by the comprehensive knowledge and participation of the people these decisions affect (Beckie et al. 2013, 27).

The first step in addressing food security in MacKenzie County would be to engage citizens, local government, businesses and organizations in a

community-wide consultative process. Addressing food security requires “partnerships across and between multiple levels of government, individuals, farmers...traditional harvesters, service providers, the corporate sector...community organizations etc.” (Epp 2009, 4). Any successful policy implementation will necessitate the collaboration of multiple actors to ensure a diversity of approaches and assets that spans across the community and has ties that transcend geography and demographics. For MacKenzie County this could include: the citizens and the municipal governing bodies of MacKenzie County; Alberta Agriculture and Rural Development; Fort Vermillion School Division; University of Alberta (including the Alberta Centre for Sustainable Rural Communities and the Centre For Public Involvement); Northern Lakes College; Grand Prairie Regional College; Growing Food Security in Alberta; Farm Credit Canada; 4-H Clubs; Community/Collective Kitchens; United Farmers of Alberta; local community, cultural and religious organizations/centres; local and external businesses; etc. Many of these organizations are already engaged in ensuring food security for the citizens of MacKenzie County. These initial consultations are the recommended path of action and will be of vital importance in determining best next steps.

The lack of consistent, localized research and the abundance of academic literature on food security necessitates collaboration with research-based institutions such as the University of Alberta. To address this gap, The Centre for Public Involvement's Citizen Planning Circle Project stands as a useful starting point in formulating these initial consultations. These circles consist of groups of citizens representative of their community who convene in generating learning and discourse in consultation among each other and topic experts (Centre for Public Involvement under “Citizen Planning Circle Project 2014). Their recent project unfolded in a rural community on a topic of interest to that community - in that case, of Olds and the effective use of broadband Internet, and ended with the careful compilation of the participants' recommendations in a public report by researchers with the Centre for Public Involvement (Centre for Public Involvement under “Citizen Planning Circle Project 2014). Their experience can be used to develop a similar process on food security in MacKenzie County.

In order to generate localized knowledge and practice around food security over time, a system in which learning continuously develops through community-based reflection will be necessary. There have been numerous initiatives to engage citizens, in a rural setting, in policy development that can be used as models for a community-developed food strategy in MacKenzie County on an on-going basis. One such option is a traditional Swedish model of adult education, study circles, in which citizens, guided by a facilitator, engage in analytic discussion and action that addresses a specific community problem (Stombeck 1991, 9). Further research into other models will be necessary.



Possible outcomes may include the formation of food collectives, non-profit-corporate partnerships, inter-generational food knowledge sharing initiatives, local food campaigns, aquaponics, increase in community gardening, etc. The nature and the priorities of the outcomes will be dependent upon the needs, resources and vision of MacKenzie County.

Conclusion

Food insecurity, especially in rural Alberta, is and will continue to be a major concern for citizens and governments. In order to address the needs and concerns of the citizens of MacKenzie County, and of all of rural Alberta, cohesive, participatory and preventative policy in goal of sustainable food security must be developed. MacKenzie County can and should serve as one of many learning-sites in developing a food secure Alberta.



Recommended Readings

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About ACSRC

The ACSRC fills the gap for research and policy in rural areas by fostering constructive dialogue, promoting interdisciplinary and collaborative research, and developing partnerships between the University of Alberta and rural communities.

Mission

The mission of the ACSRC is to link the research, outreach and educational capacity of the University of Alberta with students, researchers, rural communities, rural community organizations and policy makers at multiple levels across the province, nationally, and internationally in order to support the improved sustainability of rural communities and populations.

General information

The vision of the ACSRC is of resilient rural communities across Canada linked closely to the discovery, dissemination, and application of new knowledge at the University of Alberta through teaching and learning, research and creative activity, community involvement, and partnerships. Such resilient rural communities will hinge on informed citizens actively participating in community governance and development in order to support and sustain the people, livelihoods, regional and local capital, economic development and long-term social viability of rural communities as a key element of the Canadian economy, the natural environment and as home to many Canadians.

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