

Young Manitoba farmer literacy for long term farm viability

by

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## ABSTRACT

The perceptions of young farmers about what is necessary for them to achieve farm business sustainability are explored using a phenomenological research design with an interview approach. Six young farmers suggest eight key themes as necessary for sustainability into the next generation: characteristics such as adaptability, passion, work-life balance and human resource skills and literacy strategies which include adult education, economic viability, environmental and socio-political literacy, and change management. Participants linked their farm business sustainability to the personal characteristics of lifespan learning, adaptability, and passion for farming. They seem to understand agricultural sustainability in the context of the economic, socio-political, and environmental aspects of their farm business. Their change management strategies account for their personal and their family needs as well as those required by regulatory bodies. Recommendations are offered in support of family farm business sustainability.

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## CHAPTER I

### Introduction

The focus of this study is to learn what young Manitoba farmers think will make their farm businesses viable, or sustainable, over the long term. This chapter begins with a description of change in western agriculture and young farmers as a demographic group in Manitoba. Parameters and terminology for what is understood as long term farm viability, farm sustainability, and life long learning are introduced and framed by research undertaken by academics, and government and non-government agency personnel. Much of the current research about farm viability has been completed with study respondents defined as *leading farmers* (AgCoach Insights, 2006; Best Practice Group, 2004). Other such descriptors used in research include terms such as *top producers, successful farmers, or good farm managers* (Bamberry et al., 1997; Williams et al., 2007). The link to the importance of life long learning and literacy for long term viability is established. This chapter also explores the common aspects of long term viability with the emerging discussion around farm sustainability. Further clarity is provided in the definitions of terms and concepts, a summary of the research framework used, and how the study is organized.

### Overview

The overview introduces four aspects in which this study is framed (a) the context of a changing agricultural sector, (b) the young farmer, (c) long term viability and sustainability, and (d) adult education and literacy.

## *Changing Agricultural Sector*

Traditionally, in Canada, young adult children of farming families have become the next generation of food producers (Maynard & Nault, 2005). However, the business of farming has not been a status quo experience as one generation passes the business to another. Currently, agriculture and the food industry are undergoing significant structural changes (Scott, 1998) with farming and food processing and distribution being much more global in nature, more consumer focused and consumer driven (AgCoach Insights, 2006; Best Practice Group, 2004; Harvey & Wiebe, 2002; Maynard & Nault, 2005). Such change, as described by Scott (1998) as transformational, occurs when (a) there is structural change, (b) there is a shift in knowledge, (c) the change is grounded in a future vision that includes freedom, democracy, and authenticity, and (d) change is triggered by conflict, not consensus, accommodation, or adaptation.

An overview of agricultural change in Canada suggests transformational change through succeeding decades of time (Best Practice Group, 2004; Maynard & Nault, 2005) that was similar in the United States (Saxowsky & Duncan, 1998). In addition, periods of change can be grouped within the context of the interdependent pillars of sustainability, economic development, environmental protection and socio-political development, concepts that will be explored in more detail later in this chapter.

Agriculture was historically considered a socio-cultural aspect of society as the frontier was settled with pioneers willing to inhabit new territories. Farm families existed in relative self-sustaining operations and supportive local communities developing the infrastructure across the country leading to the initial success of urban centres (Williams, Cross, Scholz, and Halpenny, 2007). This transformational change

(Scott, 1998), was grounded in a future vision of rural Canada based on freedom, democracy, and authenticity. This period continued from early colonization through the 1920's when there was massive immigration of people that brought new expertise, cultures, and enthusiasm to prairie agriculture (Best Practice Group, 2004).

Transformational structural change resulted within the make up of society (Scott, 1998). The introduction of the combustion engine during the 1930's and 1940's drove change in knowledge requirements as mechanization shifted from horses to tractors and larger equipment (Best Practice Group, 2004). The 1940's introduced the next period focused on economic development as the conflict of war stimulated an export market for agriculture as well as all other sectors.

The decades from the 1950's to the 1990's can be described (Best Practice Group, 2004; Maynard & Nault, 2005) as a focus on economic development in agriculture stimulated by the advent of synthetic fertilizers, crop protection materials, and the non-stop arrival of new technologies. The 1950's saw the increased use of heavy field equipment, new research in crops and livestock, and expanding farm size with transformational change, as described by Scott (1998), being driven by the requirements for new knowledge and skills. The decade of the 1960's reflects more structural change as rural modernization occurred with the widespread implementation of electric power, telephone communications, and community water initiatives (Best Practice Group, 2004). During the 1970's, farmers began to specialize in either crops or livestock as the market, driven by social changes such as the development of world markets, big box retail stores, and computerization of food product inventories, expanded for these commodities. Progressively through the 1980's and 1990's, farm production techniques responded to economic triggers that supported new production practices such as

continuous cropping, diversification of new crops and livestock, precision farming, and intensive livestock operations. It was also a time when computerization facilitated the development of system-based food production process and information-intensive food production systems (Best Practice Group, 2004). During these decades of time, transformational change took place based on a changing vision of the farming operation modeling a profitable enterprise run in a business-like manner.

Beginning at the turn of this century, the agriculture sector has begun responding with a greater focus on environmental issues, largely due to societal concerns related to food safety and the environment. As Scott (1998) predicts, this is an example of how conflict is the basis of transformational change. Like in all industrialized sectors, the 'footprint' that farming is leaving on the ecology is under scrutiny by society (Maynard & Nault, 2005). At the same time, demand for raw commodities is increasing while the market for processed foods from Canada increases.

Based on study of trends information, agricultural consultants speculate what changes the next decades will bring to agriculture. Consultants (Best Practice Group, 2004; Maynard & Nault, 2005; Williams et al., 2007) predict that the focus will shift again to emphasize the socio-political focus on issues such as climate change, the life science economy of food safety, food and health, and innovations in new production and marketing systems. Maynard and Nault (2005) and Saxowsky and Duncan (1998) add that human ecology is becoming a critically important issue as a result of the tremendous drop in farm numbers and on-going exodus from rural areas. In summary, the foundation for the transformational change in each decade, was laid in the prior decade and can be attributed to leading farmers, researchers, agrologists, entrepreneurs and academics (Best Practice Group, 2004).

Young farmers today, who will manage the production of our food into the future, must be well prepared to do so given this trend of transformational change. It is anticipated that they will also need attributes, skills, behaviours, and practices to meet the challenges of such change that may be quite different than former generations of farmers. “In a society that is becoming increasingly complex, and in an economy that is increasingly competitive, literacy skills are critical” (Government of Manitoba, 2010a). Literacy is both a technical capacity and a social act and is considered a lifelong learning process leading to creative expression and conceptual problem-solving (Fransman, 2005). In a knowledge based economy, literacy is the base for productivity, enables people to achieve their goals, and enables them to participate and adapt to change in the workplace, the home, and community life (Fransman, 2005; Government of Manitoba, 2010a). Literacy includes: (a) written communication skills including reading text, document use, and writing, (b) numeracy, (c) thinking skills to learn and solve problems, and (d) oral communication and interpersonal skills (Government of Manitoba, 2010a). This leads to the questions related to literacy being studied in this thesis:

1. What do young farmers perceive will make their farm business viable or sustainable over the long term?
2. Do young farmer learning efforts support their potential for farm business viability and sustainability?

### *The Young farmer*

The literature provides some insight, but it is not clearly understood what knowledge, experience, or attributes are needed by farmers for long term farm viability or sustainability. A description of young farmers is necessary in understanding the

context of this population group. Both the number of farms and number of farm operators is declining in Canada. Canadian Census figures show a 9.6% decline in the number of farms from 2001-2006 and in 2006, there were 26,620 Manitoba farm operators, a steady decline of 24% from 1971 (Government of Manitoba, 2010c).

The average age of Manitoba farmers has been increasing since 1981 with farmers in Manitoba now being an average of 51 years old (Government of Manitoba, 2010c). This greying of the farm population is largely due to the growing percentages in the 35-54 age category, an increase of 7 percentage points over the last 25 years. Over the same time there has been a dramatic decline of 13 percentage points in the less than 35 age group. In 2006, only 10% (2,850) of all operators fall in this young farmer demographic (Government of Manitoba 2010d). Interestingly, there seems to be a trend of increasing representation of female farm operators. In the 2006 Census 6,410 females identified themselves as farm operators while 20, 210 males did the same. This is an increase from 22.6% to 24.1% of total farm operators identified as female from 2001 – 2006 (Government of Manitoba 2010c). This trend is not unique to Canada. For example, farm women in Australia are becoming increasingly involved in the farm business, specifically in financial management, marketing, technical monitoring, and new enterprise development (Bamberry, Dunn, and Lamont, 1997).

Demographic trends in farm populations are of concern. In their report studying young farmers in Manitoba, Harvey and Wiebe expressed what many participants in the agricultural sector are afraid of, namely that “At the current rate of replacement, the number of farmers will shrink and could eventually disappear” (2002, p.4). A concern related to declining numbers of farmers is mentioned in numerous reports related to agriculture in Canada (Ag Coach Insights, 2006; Best Practice Group, 2004; Maynard &

Nault, 2005; Williams et al., 2007). Maynard and Nault (2005) illustrate this by identifying that the aging farm population and the exit rate from farming, left unchanged will reduce the number of Canadian farmers to an extremely low level of less than 150,000 farms by 2021.

With the young farmer group small and declining in number, one might argue there is little to gain in studying this segment of the population. On the contrary, organizations across the world view the decline in the agricultural demographic as being in a crisis that requires attention (European Parliament, 2000; Herreria et al., 2004; Government of Ireland, 2008; National Farmers Union of Scotland, 2007; Parliamentary Commissioner for the Environment, 2004). Farm numbers declined by 6.5% in Australia during the time period of 1996 – 2001. Farmers represented only 4% of the country's workforce (Herreria et al., 2004). Across Ireland's rural landscape, the numbers of farms as well as employment in the agricultural sector is declining and farmer age is increasing (Government of Ireland, 2008). A study of European Union countries shows that overall, the number of farmers in all age groups declined during the time period of 1990 – 1997 with a higher rate of loss (28%) in the under 35 age group (European Parliament, 2000).

In Australia, Scotland, Ireland, and the European Union more generally, the farmer is considered a vital contributor to society today and the future. The European Parliament expressed concern that the number of young farmers will become severely depleted in 30 year's time and that "it is clear that an analysis at this time of young farmers' potential for averting this eventuality is timely" (2002, p.2). The Australian Government acknowledges that the agricultural sector "plays an important role in creating wealth and prosperity for the nation, and particularly within rural and regional communities" (Herreria et al., 2004, p. iii). Scotland's leaders state that "securing the

next generation of farmers is essential if we are to retain a viable, well structured agricultural industry in Scotland” (National Farmers Union of Scotland, 2007, p.1). The Irish government continues to include agriculture in its overall vision and framework for rural development by committing to strategies that ensure support for the maximum number of family farms (Government of Ireland, 2008).

The agriculture and food sectors remain valued and important to the Canadian economy and society. In a report to the Agricultural Institute of Canada (AIC), Williams et al. (2007) write about the importance of agriculture to the development of the infrastructure across the country providing the early success of urban society. While contributing billions of dollars annually to the gross domestic product (GDP) of Canada, agriculture sets an essential platform for much of our food processing industries. In Canada, current challenges for farming families are identified (AgCoach Insights, 2006; Best Practice Group, 2004; Maynard & Nault, 2005; Williams et al., 2007). “Farmers across Canada are facing some of the most challenging times this industry has ever experienced. Those who can survive and prosper in times like these are truly exceptional professionals and worthy mentors” (AgCoach Insights, 2006, p.7). My study is concerned about these issues of survival and prosperity for farm businesses and seeks to approach these concepts in terms of literacy of the young farmer for long term viability and sustainability.

#### *Long term farm business viability and sustainability*

Literacy for long term viability and sustainability is expected to contribute to the young farmer’s capacity to achieve his or her goals for a long term career in farming (Fransman, 2005; Government of Manitoba, 2010a). For purposes of this study, long



term farm viability and sustainability in relation to young farm operators requires a working definition. As the review of literature will demonstrate, business success and viability are undefined and untested and the term sustainability is loaded with vagueness and ripe with contradictions. However, within the orientation of a qualitative researcher, I will accept the views of various users of the terms and will attempt to expand understanding of this terminology in my study. This approach is consistent with Bogdan and Biklen whereby “They [qualitative researchers] do not attempt to establish a standard definition. Rather, they seek to study the concept as it is understood in the context of all those who use it” (2003, p. 27).

Researchers in government and non-government agencies, who studied farmers, attempt to define the attributes and behaviour of farmers considered successful. The use of the term “success” is based on farmers who, by their own definition or as perceived by others, are ones who expect to achieve a successful farming career well into the future. In some studies, the phrase or term used is “leading farmers” or “top farmers” and in others it is “good farm managers” (AgCoach Insights, 2006; Bamberry et al., 1997; Best Practice Group, 2004; Scholz, 2002; Williams et al., 2007). A report analyzing the best practices of leading farmers identifies a challenge for young farmers facing ongoing transformational change, “Collectively, as a (prairie) region, we have a history of reacting defensively to change rather than embracing and encouraging change. This response is rooted in an agrarian tradition of the ‘independent farmer’ and ‘healthy scepticism’ towards new ideas” (Scholz, 2002, p.1). Scholz (2002) goes on to speculate that the consequence is often that the best and brightest rural people (often young farmers) leave in frustration and disappointment. However, he suggests that solutions to growing agriculture and rural economies are known and that leading farmers are already

practicing strategies that sustain profitability and a balanced family life despite “dramatic irregularities in weather, markets and global trade conflicts” (p.1).

Additionally, characteristics of the farm family in business may also contribute to farm business sustainability. Olson, Zuiker, Danes, Stafford, Heck, and Duncan offer research results that show “the success of the business depended on family processes and how the family responded to disruptions rather than simply how the owner managed the business alone” (2003, p. 640). In this study, I will bring together commonalities among the characteristics, attributes, behaviours, and skills identified as those of leading farmers and the stated perspectives and practices of sustainability.

The model of sustainability, as defined by agencies such as the United Nations General Assembly (1987), is yet to be tested through scientific research. As stated by Wilson and Tychniewicz, “Though both parties are interested in achieving sustainability, measurement of sustainability is rendered complex by the differences between the views of economists and ecologists” (1995, p.3). The term *sustainability* may trigger strong individual responses and is vague and includes contradictions. However, as Maynard and Nault (2005) indicate

Despite the muddy and swirling waters that surround the sustainability question, one thing is clear: if we are to continue to produce enough safe and nutritious food for 10 billion people without depleting the natural resources of this earth, then progress in terms of sustainability – however it is defined and applied – must be achieved, and quickly (p. 3).

Understanding how leading farmers conceive sustainability may provide further insight.

In current literature, many references emphasize agricultural sustainability in terms of the protection or degradation of the environment (Alberta Environmentally

Sustainable Agriculture, n.d.; Ecology Action, n.d.; Berry, 2002; MacRae, 1990). Focus on environmental concerns alone is a very limited perspective when applying sustainability to a family farming business. Farm business sustainability must be understood by focusing on the three components, including the environment, economy, and society (includes political). This is consistent with the model ascribed to by the United Nations General Assembly (1987) whereby the interdependence of these three components is mutually reinforcing. This concept is described by Wilson and Tyrchniewicz (1995) as concerned with “the need for agricultural practices to be economically viable, to meet human needs for food, to be environmentally positive, and to be concerned with the quality of life” (p.10). Figure 1 provides the visual representation of the ideal integration of the three components.

Hargroves and Smith (2005) suggest a number of common principles that are embedded in most action programs to achieve sustainable development. These can be applied to farm business sustainability and include

- dealing cautiously with risk, uncertainty and irreversibility;
- ensuring appropriate valuation, appreciation and restoration of nature;
- integration of environmental, social and economic goals in policies and activities;
- equal opportunity and community participation;
- conservation of biodiversity and ecological integrity;
- ensuring intergenerational equity;
- recognizing the global dimension;
- a commitment to best practice;

- no net loss of human or natural capital;
- the principle of continuous improvement; and
- the need for good governance (p. 46).

Some of these principles of sustainable development may be part of the conversation of young farmers as they look to their viability in the long term. Given these discussion points, this study explores the concept of farm sustainability as it refers to: (a) the long term viability of the farm business, (b) the capacity for the farming family to learn about and practice their career within the framework of economic, environmental, and social-political responsibilities, and (c) the ability to leave the farming enterprise and its assets in a sustainable form for future generations. The challenge then for young farm operators may be to manage ongoing transformational change with the goal of having the farm survive as a result of acquiring the necessary attributes, behaviours, and skills, and by following sustainable principles. Literacy (Fransman, 2005) around long term farm business viability and sustainability includes the awareness, understanding, internalization, and ability to apply sustainable practices.

#### *Literacy and adult education*

The term literacy is described and used in a variety of ways (Fransman, 2005) but generally stretches beyond reading, writing, and numeracy to include dynamics of problem solving for change, achieving personal growth and goals, and the ability to contribute to society. Literacy is a lifelong learning process (Fransman, 2005; Government of Manitoba, 2010a). In practical terms, the Government of Manitoba (2010a) describes literacy as

the skill base that enables people to participate and adapt to change in the workplace, the home and community life. It provides a foundation for further learning and includes the following:

- written communication skills; reading text, document use, writing
- numeracy
- thinking skills to learn and to solve problems
- oral communication and interpersonal skills (p. 1).

The concept of literacy is supported in Extension literature. Extension methods are those employed by educators providing nonformal adult learning opportunities with mandates to assist farm and rural family members adapt to changing socio-political, economic, and ecological milieu. John Peters writes about change as the nature of adulthood and therefore change is the hallmark of adult educational programming which is a tool to help adults cope with transformational change, "...it is important to recognize the power of education to influence the direction of developmental changes in adults' lives" (1989, p. 86). .UNESCO (2003) literature speaks to issues of literacy for sustainability as the process of learning how to anticipate the consequences of our actions, envision a sustainable future, and create steps to achieve the vision. The power of young farmers choosing to participate in life long learning can be expected to contribute to a greater chance of farm business viability and sustainability over their life time.

### Problem Statement

The focus of this study is to learn what young Manitoba farmers think will make their farm business viable or sustainable over the long term. This study also seeks to

understand how the young farmer pursues informal, nonformal, and formal learning opportunities to support this concept. Although, recent studies have begun to describe and investigate sustainable agriculture (Maynard & Nault, 2005) in the context of an international food sector or in terms of farm profitability (Williams et al., 2007), these studies are limited to the macro-framework of agricultural policy or programming rather than the individual farmer, farm family, or farm operation. Studies which focus on the individual farmer explore characteristics, attributes, and practices that arise from such labels as being a successful farmer (AgCoach Insights, 2006), top producer (Best Practice Group, 2004), successful farm manager (Bamberry et al., 1997), or leading farmer (Williams et al., 2007) rather than an orientation of farm sustainability. Research directed at young farmers specifically, such as that of Harvey and Wiebe (2002), seems generally absent in the literature. A combination of such knowledge would seem to be necessary to provide sector support to young farmers during times requiring transformational change.

Consequently, this study explores the literacy of young farmers about long term farm viability and sustainability. The goal is to understand their personal perspectives on the topic, the content of their knowledge, and their strategies for learning. The study questions are:

1. What do young Manitoba farmers perceive will make their farm business viable, or sustainable, over the long term?
2. Do young farmer learning efforts support their potential for farm business viability and sustainability?

Themes are derived from interviews based on the personal perspective of young farmers as well as literature related to leading farmers, agricultural sustainability, and adult learning.

#### Definition of terminology and concepts

The following terminology and concepts arise from the review of literature but are not standardized across the field of study of farming, agriculture, or sustainability. For the purposes of this study the following definitions aid the reader in understanding their use in data analysis, implications, conclusions, and recommendations.

- **Farmer** – “Producer of small grain crops, oilseeds and special crops, range and confined livestock, orchard, nursery, greenhouse and vegetable operators” (Best Practice Group, 2004, p. iv).
- **Young Farmer** – A farmer as per above definition who falls into the Statistics Canada population category of 35 years of age or younger. This group is showing dramatic decline in numbers over the last two Census periods (Government of Manitoba, 2010c).
- **Leading farmers, top producers, top farmers, successful farmers** – Found in the literature, these terms are used interchangeably in this study. Farmers who exhibit characteristics such as: recognition as top farmers by industry, recognition for achievement in farm business management, full time farm manager, access to internet, use of good farm management practices, tenure in farming of at least 10 years, adequate gross farm income (\$250,000/year), primary source of income from the farm, higher than industry average growth rate (AgCoach Insights, 2006; Bamberry et al., 1997: Best Practice Group,

2004). “Leading farmers include those that are nimble in their management and shift among opportunities in anticipation of changes in market and societal values. They are profitable and function more as [Chief Executive Officers] CEO’s than simply farm business managers” (Williams et al., 2007, p. 3).

- **Sustainable development** – The United Nations General Assembly defines sustainable development as the capacity to meet the needs of the present without compromising the ability of future generations to meet their needs. The scope of sustainable development includes the integration of three components of environment, economy, and society as interdependent and mutually reinforcing pillars. The meaning ascribed to the three components as it pertains to the United Nations General Assembly (2005) describes its perspective of sustainability as  
  
Society – an understanding of social institutions and their role in change and development, as well as the democratic and participatory systems which give opportunity for the expression of opinion, the selection of governments, the forging of consensus and the resolution of differences. Environment – an awareness of the resources and fragility of the physical environment and the affects on it of human activity and decisions, with commitment to factoring environmental concerns into social and economic policy development.  
  
Economy – a sensitivity to the limits and potential of economic growth and their impact on society and on the environment, with a commitment to assess personal and societal levels of consumption out of the concern for the environment and social justice (p. 12).



- **Farm sustainability** – Drawing from the literature, this study’s working description of farm sustainability refers to (a) the long term viability of the farm business; (b) the capacity for the farming family to practice their career within the framework of economic, environmental, and social responsibilities; and (c) the ability to leave the farming enterprise and its assets in a sustainable form for future generations. This description of farm sustainability attempts to integrate the three components of sustainable development - environmental protection, economic development, and socio-political needs.
- **Sustainable agriculture** – Maynard and Nault (2005) provide the working definition to be used, “the application of husbandry experience and scientific knowledge of natural processes to create agriculture and agri-food systems that are economically viable and meet society’s need for safe and nutritious food and vibrant rural communities, while conserving or enhancing natural resources and the environment” (p.8).
- **Sustainable practices** – described by Hargroves and Smith (2005) sustainable practices include: (a) dealing cautiously with risk, uncertainty and irreversibility; (b) ensuring appropriate valuation, appreciation and restoration of nature; (c) integration of environmental, social, and economic goals in policies and activities; (d) equal opportunity and community participation; (e) conservation of biodiversity and ecological integrity; (f) ensuring intergenerational equity; (g) recognizing the global dimension; (h) a commitment to best practice; (i) no net loss of human or natural capital; (j) the principle of continuous improvement; and (k) the need for good governance.

- **Transformative learning** – occurs when people systematically revise their beliefs and perspectives as a result of experiencing changes in their lives, find themselves in a dilemma, or encounter new information that contradicts what they have believed (Cranton, 1998).
- **Literacy** – Jude Fransman (2005) provides a definition that incorporates a number of conceptualizations of literacy:

“Literacy is a technical capacity and a social act whose principal focus is reading, writing and numeracy as a step in a lifelong learning process that can lead to creative expression and conceptual problem-solving skills. Its principal objective is to enable the individual to achieve his goals and to contribute to the welfare of his community” (p. 23).

Manitoba Advanced Education and Literacy’s working definition of literacy includes “the skill base that enables people to participate and adapt to change in the workplace, the home and community life” (Government of Manitoba, 2010a, p.1) and “in a knowledge-based economy, literacy is the skill base for labour productivity” (Government of Manitoba, 2010a, p.4).

- **Life long learning** – encompasses all types of learning and includes the formal education achieved in formal school systems, nonformal education systematically organized outside the formal school institutions, and informal education which includes all other types of learning. As described by Paulston and Leroy (1975), life long learning assumes that learning is a life long process by which every person acquires and accumulates knowledge, skills, attitudes, and insights.

## The Study

### *Importance of study*

This study adds to the body of research focused on young farmers as individuals within the farm demographic group. While the literature approaches the concept of sustainability within the context of the agricultural sector (Maynard & Nault, 2005; Williams et al., 2007), this research seeks to understand it by exploring the thinking and learning strategies of individual young farmers. Although most recent studies of farmer business success has been undertaken or sponsored by government or industry, this exploratory study adds to the academic record. The study of farm business success has been largely limited to the field of farm business management practice (Garvin and Associates, 1999; AgCoach Insights, 2006; Harvey & Wiebe, 2002; Best Practice Group, 2004; Bamberry et al., 1997). While some researchers look beyond this view and identify issues related to environmental practices and social-political influences as important to business success, none of the studies identified long term farm business success in relation to the integration of all three components of (economic, environment, and socio-political) sustainability. This study draws parallels to what are currently considered elements of farm business success to the elements of sustainability that are emerging globally. Outcomes of this research offer government and industry stakeholders interested in providing educational programs, services, or products to young farmers an opportunity to consider new approaches to help achieve long term viability with farm business success.

### *Limitations and delimitations of the study*

This study focuses on perceptions of young farmers in Manitoba. Limiting the study group to the province of Manitoba with which I am familiar both with the agricultural organizations and agencies, enhanced my ability to complete in-depth interviews. As a novice researcher with limited human and financial resources, my sample size is small and consists of a purposive sample of six interviews which included one couple or seven participants. The purposive recruitment strategy yielded eleven responses of which six participants were willing to follow through. Thus the outcomes of this study cannot be used to correlate with, compare, or generalize to other populations of young farmers. The outcomes of this study cannot be used to infer a cause-and-effect relationship between participant perceptions and their learning strategies. In addition, the definitions of long term farm business viability and sustainability used in this study have not been tested.

However, Guest et al. (2006) referring to the work of Romeny, Batchelder, and Weller suggest that small samples can be quite sufficient in providing complete and accurate information when the participant “possess a high degree of competence for the domain of inquiry” (p. 74). Since my strategy was to discover broad themes based on questions derived from the literature and my objective was to give a voice to young Manitoba farmers, the smaller number of interviews may contribute to “a solid understanding of a given phenomenon” (p. 77). Each participant in this study, given his or her personal attributes and circumstances in relation to family, community, geography, and political jurisdiction, expressed his or her unique perceptions. This research can add to the conceptualization of agricultural viability and sustainability by

providing a voice for some young farmers to contribute their understanding of the issues. Perceptions from both young farm men and women were sought since the literature suggests long term farm viability is likely dependent on more than one family member and/or business partner (Bamberry et al., 1997; Garvin and Associates, 1999; Harvey & Wiebe, 2002). The findings of this study also point to this connection. The findings may also provide another researcher a base on which to conduct additional interviews that may have the potential to reveal clearer descriptions or demonstrate more consistencies on the topic.

#### *Researcher experiential frame of reference*

My frame of reference as a former young farmer with an extensive career in agricultural extension and as a professional home economist informed the objectives and direction of this exploratory research. At the beginning of my career, I worked as an extension home economist with the Provincial Department of Agriculture and was also actively farming. Within the Extension model (McCreary, 1989), my role as an extension worker was to identify, design, and deliver client-identified programming and services to the local area. During this time with the department, I had many opportunities to work with and/or deliver a variety of nonformal adult learning opportunities for farm families and farm women. As an example, the Manitoba Farm Women's Conference (MFWC), an annual provincial event, is designed, planned, and delivered by farm women, with the support and assistance from department staff such as myself. For over ten of the twenty plus years that the MFWC has operated I was the department lead providing organizational support and have attended most of the annual conferences. This interface with farm women has allowed me to be immersed in

nonformal and informal learning about the issues and needs of farm women and their families and communities. While early in my career, my husband at the time and I were actively engaged in farm business start up and management, along side his farming parents. However as many farm families do, when assessing long term viability and sustainability we came to a decision point for major change in our farming business. Our decision was to exit farming and focus on other career opportunities in which we had also been engaged. These experiences left me with a passion to stay connected to farming friends and to remain involved in options and solutions that will support the continued viability and sustainability of Manitoba farming families and rural communities.

To participate supportively, I chose career options that led to the bureaucratic environment within government that farmers may know little about and to which they may have little access but on which they may depend. For example, in 2003-2005 I was the representative and lead negotiator of the provincial department of agriculture in negotiations with the Federal Department of Agriculture and Agri-Food for the design of a farmer training program called the Canadian Agricultural Skills Service (CASS). My experience of direct service to farmers and of central government policy and program development in home economics, marketing, and farm business management were central in developing this program. Recently the provincial department of agriculture has targeted learning programs to the young or beginning farmer employing a variety of approaches (<https://www.gov.mb.ca/agriculture/financial/youngfarmers/>).

Based on my professional and personal experience, I would suggest that young farming families in Manitoba could be oriented to and assisted in employing strategies that will carry them into long term farm viability and a sustainable agricultural future,

the kind of supports that may have facilitated my own continued participation in a viable farm business. My undergraduate degree in home economics and my life long interaction with the home economics profession shape my perspective in how I approach work, learning, and research. The philosophy of home economics is “to help families live successfully and happily and to accept their social and civic responsibilities” (Wilson, 1969, abstract). These basic premises of family, community, economical use of resources, and individual decision-making shape my perspective and professional contributions.

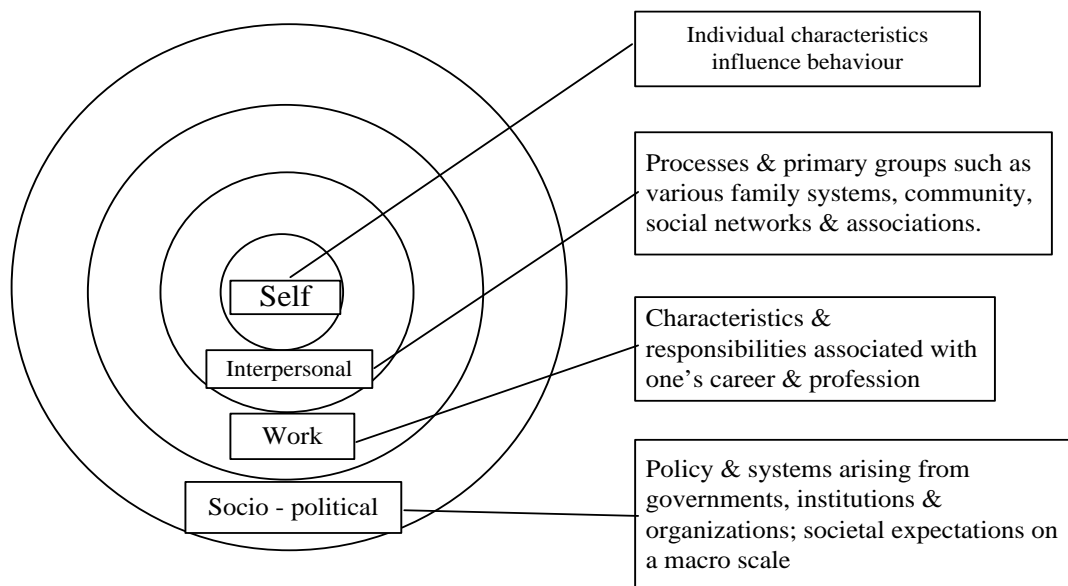
My professional practice framework is influenced by theorists of adult learning and development (Blackburn & Flaherty, 1994; Foley, 2004; Selman, 1998). Foremost is the model based on the work of Barbara Okun where adult development arises out of interacting systems (Peters, 1989). The framework is articulated by three interacting systems of *self*, *work*, and *others*. The self includes the biological, psychological, and social aspects of an individual. Work includes the broad range of job-related activities a person might engage in to earn income. Others include the influences of the various family relational systems (husband-wife, siblings, and parent-child) as well as friends and social acquaintances from the community. Based on my professional experiences as a home economist within agricultural extension, I would add a fourth system of interaction, *socio-political*. Socio-political includes the influences of social structure and politics. An example of a socio-political trend that has significantly influenced agriculture during my career is the shift to a largely urbanized population with majority voting power which influences farm policy and programming.

In recent literature, such an interacting systems framework is further developed and described as a social-ecological framework (Gibson et al., 2001). It is a nested

social-ecological conceptual framework that permits description of individual change within the context of social change. This framework permits the conceptualization of the social world in five spheres, or levels, of influence. “These levels of influence are 1) social structure, policy, and systems; 2) community; 3) institutional/organizational; 4) interpersonal; and 5) individual” (Gibson et al., 2001, p. S4).

A blending of these two complimentary frameworks describes best my professional practice framework of interacting systems as shown in Figure 1 below.

**Figure 1 – A professional practice framework**



Each of these systems guide thinking about how choices in adult life are influenced by, and in turn, influence internal and external forces. This system of interaction then, results in the development of life structures within which tasks can be accomplished and goals achieved: “The construction of new life structures is assumed to be the essence of development” (Peters, 1989, p. 86).



Together, these experiences shaped my professional practice framework by which I constructed and interpreted my research: that family, community, economical use of resources and individual decision-making are the critical forces that shape a person's satisfaction and success and these forces can be influenced by adult learning opportunities. At the start of my research, I expected that life long learning experiences and influences arising out of each of these factors would have an impact on long term viability and sustainability of the family farm business.

A reflection on my practices leads me to conclude that a phenomenological approach to understand the issues of farm business viability from the personal perspective of young farmers was warranted: to understand how young farmers see themselves within the context of their farming career, their relationships and the complex socio-political environment in which they do business. Within a phenomenological perspective, my long term experience in the agricultural sector has included experience in a farm business, delivering nonformal educational programming to farmers, developing local, provincial and national agricultural programs and providing leadership and management within various segments of agriculture. This integrated experience was a strength because I spent years immersed in the field which I studied, learning more of the hidden dimension of what young farmers need to know but to which they may not have ready access. My decision to exit farming becomes a weakness because I have limited personal experience with the changes in the sector over the past twenty years. However, having begun as a young farmer I am can more easily re-enter the conceptual world of young farmers of today for a better understanding of their thinking about farm viability and sustainability (Bogdan & Biklen, 2003).

### *Organization of the study*

This study was designed to contribute to the body of knowledge on young farmers about their literacy related to long term farm viability. By asking young Manitoba farmers about the learning strategies they have or may employ to gain further knowledge and skill in this area, I anticipated that such data may be useful for various stakeholders (farmers, government, non-government, and academia) who have an interest in farmer educational programming. To this end, this study is organized into five chapters (a) introduction, (b) literature review, (c) methodology, (d) findings, and (e) discussion, implications, and recommendations.

The first chapter delineates the nature of the problem, provides the purpose of the study, justifies the significance of the study, and identifies its limitations. The first chapter also provides an overview and context for the area of study, defines terms and concepts, describes the researcher's experiential framework of reference, and describes how the study is organized.

In Chapter Two, an interdisciplinary literature review from various fields are presented with a focus on characteristics of successful farmers, farm business viability, and adult education and literacy. More specifically, these include (a) agricultural research of the leading farmer, (b) research that studies farm business viability and sustainability, and (c) adult education research on literacy and adult learning. This chapter describes agricultural studies in which researchers' findings help to identify the characteristics of farmers, their attributes, and practices that appear to be contributing to long term farm business viability. The emergent discourse of a sustainable development model of integrated responses to economics, environment, and socio-political

components is described. Literature related to adult education explains learning strategies that young farmers may pursue to improve their literacy about the long term viability and sustainability of their farm family business.

The phenomenological qualitative methodology aimed at understanding the perceptions of six young farmers about their literacy related to long term farm viability and sustainability is described in Chapter Three. The design of the study explaining the rationale for the questions to be asked during an in-depth interview with each participant is described in this chapter. Participant recruitment and selection strategies are described as well as an inductive approach to data analysis.

Chapter four includes participant profiles and my findings. Chapter five consists of analysis, implications and recommendations arising from the findings.

### Chapter summary

In this chapter, the population group of young Manitoba farmers to be studied has been described and the problem statement for this exploratory study is: What do young farmers perceive will make their farm business viable and sustainable over the long term and what learning efforts might they choose to take to support their potential for farm business viability and sustainability?

This overview acknowledges the context of constant change within agriculture in which increasingly smaller numbers of young farmers are operating. Definitions and parameters for the use of terms such as long term farm viability and sustainability as well as literacy and adult education were described. The situation of the researcher, the limitations and delimitations of the research, and the organization of the study provide the framework within which this study took place. The next chapter includes a review of

literature framed around the areas of interest: (a) successful farmer characteristics, (b) farm business viability and sustainability, and (c) adult education and literacy.

## CHAPTER II- LITERATURE REVIEW

### Introduction

An interdisciplinary literature review of studies related to four areas (a) identification of personal characteristics of leading farm operators, (b) description of farm business viability and sustainability, (c) description of literacy and adult education as it relates to farmers, and (d) description of the ecological paradigm makes up this chapter. Agricultural studies are used to identify personal characteristics and attributes that are related to a farmer's success in his/her business. The possibility that certain personal characteristics and attributes may be linked to the long term viability and sustainability of young farmers is explored. In addition, recent studies that show an emerging link between long term farm business viability and economic, socio-political, and environmental sustainability are explored. Life long learning strategies that may be employed by farmers to achieve literacy around farm business viability and sustainability are reviewed. The ecological paradigm is described as a model of understanding the human experience and how this model applies to young farmer literacy strategies.

### Overview

There are few studies on young farmers as a population group. Much of the literature refers to farmers in general and only occasionally segregates research results by age or sex. Additionally, academic research in agriculture is largely focused on issues of production, business economics, environmental stewardship, markets, or support programs. This is reflected in how faculties of agriculture are structured, as is

demonstrated by the organizational framework of the Faculty of Agriculture and Food Science, University of Manitoba. Research and teaching are reflected in departments of agri-business, animal, plant and food sciences, biosystems, entomology, and a school of agriculture. With respect to the socio-political themes related to farmers, research stakeholders are more commonly found in governments, agricultural non-government agencies, industry, or agricultural consulting. Perhaps because they are interested in a better understanding of their farmer customer or client, they offer adult learning programs and services. Thus, they invest in studies and research more focused on the themes of farmer knowledge, skills, attributes, or practices to better understand how to reach farmers with their product, program, or service. This holds true in the field of study related to sustainable development as well. Global, national, and regional policies and programs have been established and are currently guiding definitions and thinking related to what is termed sustainability. Literature related to literacy and adult education is readily available from both academic research and farmer-targeted non-peer reviewed studies.

Within each type of research (peer review, government or non-government sponsored, and industry sponsored), I looked for data that would inform the three areas of interest in my study: (a) characteristics of leading farmers, (b) long term farm business viability and sustainability, and (c) adult education and literacy strategies. Figure 2 shows the matrix of types of research in which the areas of interest are investigated.

**Figure 2 – Literature types and areas of interest**

Types of research	Areas of interest		
	Characteristics of leading farmers	Farm business viability and sustainability	Adult education and literacy strategies
Peer review			√
Government/NGO sponsored	√	√	√
Industry Sponsored	√		

The remaining sections of this chapter delve into various research studies and reports on these three areas of interest.

*Characteristics of leading farmers*

As noted in Chapter 1 of this study, the definition of farm business success or of a successful farmer is subjective, there being no standard set of factors or methods found in the literature to define such success. Thus, a number of descriptive terms are used such as leading farmers, top producers, or successful farmers (AgCoach Insights, 2006; Best Practice Group, 2004; Williams et al., 2007) as well as good farm managers (Bamerry et al., 1997). Best Practice Group (2004) and AgCoach Insights (2006) conducted phases one (Western Canada) and two (Eastern Canada) of the “Best Practice of Leading Farmers” studies. These studies were administered by the Saskatchewan Agrivision Corporation Inc., an independent non-partisan entity funded by public and private investors. The website, [www.agrivation.usask.ca](http://www.agrivation.usask.ca), is hosted by the University of Saskatchewan. The Best Practice Group and AgCoach Insights were consortia of agricultural consulting agencies. International researcher advisors from colleges and

universities in Australia, United Kingdom, and United States supported the project. The first stage of the project was a review of the literature which is available as Appendix B of the report (Best Practice Group, 2004). A questionnaire was developed and distributed to a random sample of farmers in the provinces. Three hundred and fifteen (315) farmers from across Canada completed the survey. Forty leading farmers were chosen to participate in an in-depth interview, based on rankings given by the researchers to their survey responses. Case studies were developed and Phase 1 findings were tested through focus sessions at three international conferences held in Manitoba, Saskatchewan, and Alberta. The sessions were facilitated by leading farmers, consultants and the international advisors.

Leading farmers identified to participate in these studies met the criteria of (a) being a full time farm business manager, (b) having farmed for at least ten years, (c) having the primary source of income coming from the farm business, (d) having a gross farm income exceeding \$250,000, (e) having a farm business growth rate significantly higher than industry average, (f) having access to the internet, (g) being recognized as top farmers by industry, or (h) being recognized for achievement in farm business management by such organizations as Outstanding Young Farmers, Chambers of Commerce, producer organizations, provincial departments of agriculture, Nuffield Scholars, University Extension, or marketing clubs.

Bamberry et al. (1997) focus on good farm management and describe it in terms of broad competencies and attributes which lead to farm viability. For purposes of this study, these competencies and attributes are grouped into the three components of sustainability. Economic competencies include: (a) management of technical aspects of farming, (b) financial management, (c) risk management, and (d) marketing



management. The largest group of good farm management competencies fall within the socio-political component of sustainability and include: (a) decision-making, problem solving and planning, (b) human resource management, (c) managing family relationships, (d) integrative skills, (e) personal attributes such as a positive approach to life-long learning, (f) local knowledge, (g) external knowledge, (h) ability to experiment and pursue opportunities, (i) life long learning skills, and (j) managing change. Only one competency mentioned in this 1997 study correlates with the environmental component of sustainability: that of physical resource management.

Studies (Ag Coach Insights, 2000; Best Practice Group, 2004; Garvin & Associates, 1999) show a consistent theme of linking farm business success with specific characteristics of individual farmers who have sustained long term success in business despite the ever changing and volatile agricultural environment. These studies identified personal characteristics, attributes, and types of knowledge and skills that seem to be linked to farm success. Success is described as a profitable farm as well as success in areas such as personal achievement and recognition, community leadership, environmental stewardship, and quality of family life. In fact the hypothesis stated in the best practices of leading farmers project is that “management solutions to the challenges farmers face already exist among ‘leading farmers’” (Best Practice Group, 2004, p. iii). Case studies describe examples of individual farmers “who have sustained farm business profitability despite the challenges of global competitiveness, food safety issues, droughts, and declining commodity prices” (Best Practice Group, 2004, p. 1-5).

One of the few Manitoba studies focused on young farmers as a population group (Harvey & Wiebe, 2002) introduced the characteristic of having and maintaining good family and community support systems. These researchers characterized their typical

respondent as having been raised on a farm, as having farming parents, as married with the spouse working off farm, and as having assistance purchasing farm assets with the help of a parent or spouse. Related to this characteristic is the type and amount of encouragement coming from parents. In a study of Australian farm families, Bamberry et al. (1997) point to the importance of the farm woman's role in nurturing and encouraging the family and in influencing the direction of the farm business. As an example, this influence can have a direct impact as to whether a child will choose farming as a career or whether the family will remain farming during times of serious financial or other crisis. This is also reflected in the Western Canadian benchmark survey (Garvin & Associates, 1999) where parental encouragement for children to farm is considered an indicator of optimism for the future of farming. As examples of this optimism, leading farmers interviewed in the best practices of leading farmers research project are quoted. Pete Rowntree of Hill and Hill Farms in Ontario said "I would encourage my children to farm" he says 'A farm business offers a good quality of life'" (AgCoach Insights, 2006, p. 52). Claire Schlegel, also from Ontario states

I grew up on a farm and it is my way of life. I would love to see my children farm. I'm proud to see and build a successful home and enterprise and take a lot of ownership in it, he explains. One could not do that working for someone else or in a business that is passing. Farming, in one way or another, will always be here (AgCoach Insights, 2006, p. 44).

Another aspect of family support is the level of participation of a spouse. "Spousal involvement on either a part time or full time basis and in ownership capacity is common" (Best Practice Group, 2004, p.2-33) among respondents from the best practices of leading farmers survey. In this study, 43.1% indicated their spouse was

involved part time while 41.8% indicated their spouse was involved full time. Of those operations where the spouse was involved, 76.9% indicated their spouse was an owner or shareholder. Thirty per cent were managers and 30.8% were labourers on the farm. The positive impact of having a supportive spouse may also be related to the spouse's level of education. "On half the farms in the survey [Australian Bureau of Agricultural and Resource Economics, 1994] there was a spouse or partner with a tertiary qualification [university or college education]. Some 41 per cent of the non-tertiary educated young farmer group indicated that there was a partner or spouse with a tertiary qualification" (Bamerry et al., 1997, p. 24). Further, Olson et al. reference the work of Fransis, Cole and Dumas who make strong arguments that "women can contribute and lead both in the family and the business. They further argue that not recognizing this fact hinders family businesses" (2003, p. 643).

In their study of family businesses, Olson et al. conclude that "Contrary to the assumptions of business theories, the effect of the family on business ventures is significant" (2003, p. 659). The sustainable family business model referenced by Olson et al. (2003) looks at the entrepreneurship within a business within the social context of the family. I am not aware of research in which the sustainable family business model has been used within the context of a farm business. However, Olson et al. (2003) offer strategies for families to increase the success of family businesses that may be applicable to the farming family and business. These include: (a) utilizing and paying family members in the business; (b) in busy times, hire temporary help; (c) orient and train family members (as well as non-family employees) on issues of the role structure within the business, affiliation with the family business, and shared meanings within the business; (d) develop strong personnel management skills for use in both the business

and family settings; and (e) during hectic and/or challenging times, reallocate time from sleep rather than from family to meet the business demands. Olson et al. conclude that the success of the family business largely depends on “how the family manages the overlap between the family and the business” (2003, p. 662).

Successful adaptation to rapid change and crisis situations is a capacity that farmers need to have and to develop. In a report related to the changing farm and rural environment in the United States, Saxowsky and Duncan emphasize that “in such an environment, it is important to remember the need to think and talk about change, understand it, and look for ways to influence both the direction and pace of change” (1998, p. 3). Leading farmers are quick to adopt new methods and technology but carefully analyze the value of change to the farm operation before making the decision. “Leading farmers are successful largely due to their ability to understand and anticipate future market trends and to adjust or ‘re-invent’ their business to capture future opportunities. While leading farmers are successful today, they are already anticipating and planning for changes in the next five to ten years” (Best Practice Group, 2004, p.1-6). This attribute of being willing to adapt to change is also referenced by Harvey and Wiebe in their study of young Manitoba farmers, “these farmers felt they had the advantage over other farmers in their quick adoption of technological change” (2002, p. 28). The Best Practice Group (2004) believe that the future of the entire agricultural industry is dependent on farmers being able to anticipate, predict, and adapt to change the implication being that farmers will have to adapt and improve through learning, unlearning, and relearning.

Leading farmers have a high degree of motivation. They express the importance of having a sense of satisfaction and personal investment for farming as a business and

lifestyle. “These farmers liked their place in a global society” (Harvey & Wiebe, 2002, p.24). Garvin and Associates (1999) suggest that optimism for a business or career can be gauged by a number of factors such as an attitude toward farming in the future that encourages children to farm, which was mentioned above, as well as “whether major investments are being made [in the farm business]” (p. C-14). Investment in the farm business was demonstrated by 69% of the Manitoba farmers in the survey and was also cross referenced with a number of demographic indicators. High proportions of farmers in the 31 – 35 age category made investments. In part, this is to be expected as young farmers are starting up in business (Harvey & Wiebe, 2002). This expression of optimism through business investment was also linked to farms operating within a corporate business structure as well as with farmers “that are more technology literate... [and] ...had taken some action to improve their knowledge/skill” (Garvin & Associates, 1999, p. C-15, C-16).

Bamberry et al. cite a study by Buggie which suggests that the attributes of a farmer’s intelligence, knowledge, and self-awareness “significantly affect their management performance” (1997, p. 23). These attributes are described in other research as having an ‘enquiring mind’ or ‘helicopter vision’ or ‘mental connectedness’ and relate directly to skills for information handling. “Top producers are very inquisitive” (AgCoach Insights, 2006, p. 24). As a management practice they (a) constantly search for new methods to improve their business, (b) evaluate new technologies, (c) experiment, (d) follow consumer and social trends and issues, (e) think about and seek emerging opportunities, (f) read broadly and seek information from a variety of sources, (g) talk widely and enjoy interactions with other people, especially those outside the regular sector and with networks that provide innovative ideas and opportunities, (h)

admit ignorance and ask for help from experts, and (i) embrace lifelong learning.

(AgCoach Insights, 2006; Bamberry et al., 1997; Best Practice Group, 2004; Williams et al., 2007). Bamberry et al. (1997) finds support for this concept from Candy's work who suggests that six main qualities of attributes and skills are required to cope with challenges and change. These include (a) an enquiring mind, (b) 'helicopter vision', (c) information literacy, (d) self-direction in learning, (e) a repertoire of learning skills, and (f) interpersonal skills and group membership.

A key attribute and related practice is identified in the best practices of leading farmers project: the importance of mental and physical wellness. "Top producers avoid burn-out" (AgCoach Insights, 2006, p. 5). Top producers in the study took time away from the business as holiday time and sometimes as a mix of family and business time. "Top producers see the importance of investing in themselves. They understand the long-term benefits of taking time to think, on both a personal and business level" (AgCoach Insights, 2006, p. 18). Leading farmers from these studies state that time away allows them to gain new perspectives, to examine both challenges and opportunities from a different angle, to re-energize as a leader, and experience a renewal of positive thinking.

The importance of technical and academic education related to farming is an important foundation for farming. Statistics Canada (2010) shows that 10% of all Manitoba farmers had attained a university degree in 2006. Just over nine percent of male farm operators attained a university degree while 12.1% of all female farm operators had attained a university degree. In comparison to the Canadian statistic, studies in which farmer's are interviewed show that the educational level of achievement tends to be higher. The young Manitoba farmers in Harvey and Wiebe's study were "a

highly educated group” (2002, p. 14). Forty-five percent held university degrees and another 21% had vocational or technical training. Many had education specifically in agriculture (47%). In the benchmark survey of Western Canadian farmers (Garvin & Associates, 1999), Manitoba farm respondents represented farmers in all age ranges of which 40% were under the age of forty. In this study, 73% of the respondents had a minimum of high school education. Thirty-eight percent had more than high school education of which 26% had a diploma, degree or post-graduate degree. In Manitoba, there was a statistically significant relationship between age and education where “generally the higher the age category the lower the overall level of education” (Garvin & Associates, 1999, C-8). The indication that younger farmers achieve higher levels of education than older farmers was identified in an Australian study as well where “half the farmers younger than 36 years of age held tertiary qualifications [college or university level] compared with only 35 per cent of farmers over 50 years of age” (Bamberry et al., 1997, p. 24). The group of western Canadian respondents in the best practices of leading farmers survey had also achieved formal academic standing. Over 81% had formal education beyond high school with 32% holding a degree, 20.9% holding a university diploma, 17.6% holding a non-trades diploma, 3.3% holding a university certificate above a Bachelor’s degree and 2.6% holding a trades certificate or diploma (Best Practice Group, 2004).

Bamberry et al. completed an in-depth analysis of research of farmer education as it related to good farm management. While the link between agricultural productivity or economic development and vocational agricultural training was considered weak, especially in developed countries, other aspects of formal education were considered

important. Formal education that “encourages flexibility and the development of lifelong learning skills in the graduate” (1997, p. 30-31) was identified as important. In a survey of graduates, the most important factor arising from a formal education is that of a “climate of intellectual inquiry” (1997, p. 31) which leads to a broad vision and positive attitude for lifelong learning. Garvin and Associates (1999) identified a link between formal education and further learning and skill building activity. “Education is the only demographic factor that is statistically related to whether or not a Manitoba farmer has taken some action to improve his/her skills or knowledge” (p. C-26). Generally, the more education an individual had (and these tended to be younger farmers) the more likely for them to have taken some action to further improve their knowledge or skills.

Bamberry et al. (1997) also implied that formal agricultural education should have more “emphasis on such competencies as integrative skills and ability to learn and adapt to changing circumstances” (p. 23) and needs to address the “interdependence of the farming resource base (a biological system) and the business environment” (p. 26). Referencing the 1991 McColl Report, Bamberry et al. (1997) noted that agricultural education needed increased emphasis in a number of areas. These learning areas can be grouped into the three components of sustainability. Within the economic component, increased emphasis should be placed on technical management, business management, and marketing (particularly international). Within the socio-political component of sustainability, increased emphasis should be placed on economics and policy, student-centred learning and problem-solving skills, teamwork, and communication skills. Within the component of environmental sustainability, topics such as materials integration and environment and resource management should be studied. In addition,



agricultural education should include increased content from the social sciences that can reveal “the complex interactions between people on and off the farm – forces which provide the farming enterprise with its purpose and goals” (Bamberry et al., 1997, p. xi).

Studies also describe the critical nature of life long learning, participating in formal, nonformal, and informal learning activities throughout a lifetime. As quoted by one young Manitoban farmer, “Get some information: your mistakes can be costly” (Harvey & Wiebe, 2002, p. 24). Farmer respondents in the best practices of leading farmers study value education and were continually searching for knowledge. They had “accepted the culture of lifelong learning and continuous improvement” (Best Practice Group, 2004, p.1-6). “Learning or skill building is a common activity among leading farmers” (Best Practice Group, 2004, p.2-31) and was undertaken locally by 75.8% of the respondents, at a provincial level (79.1%), nationally (38.6%), and internationally (16.3%). Types of learning and skill building that are suggested in a variety of literature includes areas of production, marketing, technology, general business, succession planning, research and development, information management, strategy development, financial management, environmental, food safety, risk management, business planning, change management, decision-making process, human resources and information about agricultural programs (Best Practice Group, 2004; Garvin & Associates, 1999; Harvey & Wiebe, 2002).

#### *Long term farm business viability and sustainability*

In the literature, farm business viability tends to focus on the management of the farm operation with the goal of farm profitability. The literatures is not always clear if this profitability is intended just for the short term or can be interpreted for the long-term

future of the farming operation. By examining studies and reports that use a broad framework for farm viability and sustainability, the socio-political and environmental aspects of viability are brought forward as equal in importance to the economics of the business. One such report completed by agricultural consultants, Maynard and Nault (2005) was commissioned by the Agricultural Institute of Canada (AIC). The “Big Farms, Small Farms: Strategies in sustainable agriculture to fit all sizes” discussion paper was intended to inform the debate and discussion on the issue of sustaining agriculture in Canada. Oversight of the study was provided by a former Principal of the Nova Scotia Agricultural College. The AIC, an organization of professionals in existence since the 1920’s, publishes three international peer-reviewed journals, the Canadian Journals of Plant Science, Soil Science, and Animal Science providing ample readership for the dissemination of relevant sector research findings.

Maynard and Nault (2005) acknowledge that terminology related to agricultural sustainability is not an easy concept: “Sustainability with regards to agriculture is even more complex because of its cultural connection to food, the socio-political dynamic of rural decline and the double duty of feeding the world while conserving the environment” (2005, p. 13). These researchers provide a definition of agricultural viability and sustainability that was used in this study, “the application of husbandry experience and scientific knowledge of natural processes to create agriculture and agri-food systems that are economically viable and meet society’s needs for safe and nutritious food and vibrant rural communities, while conserving or enhancing natural resources and the environment” (Maynard and Nault, 2005, p. 8). Although worded differently, this definition is consistent to the one provided by Wilson and Tyrchniewicz: “one that over the long term, enhances environmental quality and the resource base on

which agriculture depends, provides for basic human food and fibre needs, is economically viable and enhances the quality of life for farmers and society as a whole” (1995, p.3).

This section of the literature review provides an overview of the factors that may lead to farm business viability and sustainability as described by these definitions. Research attempts to explain principles or practical applications of each of the three components of sustainability (Hargroves and Smith, 2005; United Nations General Assembly, 1987; Wilson and Tyrchniewicz, 1995). Maynard and Nault (2005) and the Parliamentary Commission for the Environment (2004) in New Zealand offer more clarity to the meaning and principles of sustainability as it applies to agriculture. Hargroves and Smith (2005) and Maynard and Nault (2005) offer statements of practice which can be applied to agriculture that are considered necessary to achieve sustainability. There is consistency amongst these stated principles and practices, which provide a useful guide to farmers who are looking for long term viability and sustainability for their farm business.

Environmental sustainability includes the terms ecological and agronomic sustainability. Maynard and Nault (2005) and the Parliamentary Commission for the Environment (2004) describe this as the ability of life support systems to maintain the quality of the environment while contributing to other sustainability objectives. It also includes the ability to maintain the natural capital on which farming depends as well as other ecosystems influenced by farming. In practice, farmers need to “ensure appropriate valuation, appreciation and restoration of nature ... [and the] integration of environmental, social and economic goals and policies and activities ...[and] conservation of biodiversity and ecological integrity” (Hargroves & Smith, 2005, p.46).

Maynard and Nault (2005) translates this into a number of production practices including: (a) using appropriate levels of fertilizers or manure, control of disease causing pathogens and pesticides, and conservation of water; (b) management of dust, odour, and green house emissions; (c) minimizing soil erosion and maximizing soil organic matter; (d) managing environmental issues related to intensive livestock operations, animal welfare, and the use of grains to produce animal protein; (e) reduction in the use of fossil fuels used to produce food; and (f) contributing to biodiversity by conserving wildlife habitat and helping to protect endangered species.

Economic sustainability includes the terms micro and macro economic sustainability. Maynard and Nault (2005) and the Parliamentary Commission for the Environment (2004) describe this as ensuring farmers have a secure and rewarding livelihood and that farms remain economically viable and as the basic economic and social production unit. It also includes the ability of national production systems to supply domestic markets and to compete in foreign markets. In practice farmers need to deal “cautiously with risk, uncertainty and irreversibility ... [have] a commitment to best practice... [and follow] the principle of continuous improvement” (Hargroves & Smith, 2005, p. 46). Maynard and Nault (2005) suggest farmers need to be aware and manage income risks that are associated with forces of nature, the politics of international trade, and market price variations. Farmers must also understand how to differentiate and best manage their farm business based on its farm size, type, opportunities, and challenges.

Socio-political sustainability includes the terms socially beneficial and social sustainability. Maynard and Nault (2005) and the Parliamentary Commission for the Environment (2004) describe this as the ability of rural communities to retain or enhance their demographic and social-economic functions while addressing wider social and

cultural concerns. Practices promoted by Hargroves and Smith (2005) suggest that farmers need to recognize the global dimension, consider community participation, opportunity for others, and contribute to good governance of issues. Overall, there should be “no net loss of human or natural capital” (p. 46). Maynard and Nault (2005) suggest farmers must ensure they provide a safe food supply, need to respond to rapidly evolving consumer preferences, and have the ability to reduce and/or mitigate harm from exotic pests or fast moving diseases. Farmers also need to respond to rural community viability by providing employment opportunities, contributing to the social infrastructure, maintaining a family-based farming system, and manage urban encroachment and the associated discontent to farm-related impacts on the lives of non-farming neighbours.

In addition to these overall principles and practices, a number of studies identified specific aspects of farm business viability that may be germane to the topic for young farmers. The importance of technology was mentioned by a number of researchers. Garvin and Associates (1999) found approximately two-thirds of Manitoba Farmers had a computer in 1998. These researchers predicted that by 2000, 80% of Manitoba farms would own a computer and 40% would be connected to the internet. The young farmers in Harvey and Wiebe’s 2002 study, having adapted to new technologies such as cell phones and computers, indicated these tools can be used to their advantage to increase profitability. Leading farmers participating in the best practices for leading farmers project all accessed the internet (AgCoach Insights, 2006; Best Practice Group, 2004). Large percentages of respondents also utilized computer technology for email communications, financial and account management, market research, marketing information, inventory management, production management, and

for marketing products via a website. For these leading farmers, technology extends beyond the simple use of computers. “The majority of respondents in the sample are innovators or early majority adopters of technology.... No one in the sample described himself or herself as ‘Among the last to try something new’” (Best Practice Group, 2004, p. 2-15). Examples of technology that had been adopted by study participants include zero/minimum tillage, identity-preserved seed, global positioning systems, genetic engineering, participation in test plots, integrated pest management, bio-fuels, organic farming, and robotics. In addition, 71.9 % of the respondents spent at least 1-5% of their operating budget on research and development.

Good farm management practices are also deemed essential to farm business viability. Earlier in this paper, a comprehensive description of what farm business management entails was provided and thus will not be repeated in this section. However, a key point from the Bamberry et al. (1997) emphasizes that good farm management focuses on “the need to take a long-term approach, the need to make allowances for different categories of farms (e.g. size, full or part-time operation, etc) and the need to identify critical areas for success” (1997, p. xv). This reference to differentiating farms was found by Maynard and Nault (2005) as well.

Many of the practices identified by the Best Practice Group (2004) and AgCoach Insights (2006) relate to financial management where emphasis is placed on issues such as cost management, enterprise growth, and marketing excellence. These activities are part of the business planning process, emphasized in a number of the studies and which have developed over time. In the 1998 Western Canadian benchmark survey, approximately 61% of Manitoba producers had a business plan Garvin & Associates, 1999). The most common components of the business plan included budgets, production

plans, financial statements, and marketing plans. In the more recent study, the Best Practice Group (2004) found that 73.9% had written business plans. A wider variety of areas were covered in these business plans. “Of those respondents with a business plan, production (96.5%), financial (93.8%), and marketing (85%) were most frequently cited areas covered. Other areas included risk management (61.9%), strategic planning (54.9%), human resources (54%), off-farm investment (44.2%), technology (37.2%), environmental plan (26.5%), research and development (21.2%), and food safety and quality plan (20.4%)” (p.2-25).

Studies indicate that farm profitability also depends on farmers having knowledge and skills in the technical aspects of food production. It is suggested that this knowledge and skill must lead to above average production levels and profitability. “In all types of farming enterprises, top farmers produce more from their asset base than the average producer” (AgCoach insights, 2006, p. 10). Top producers say they accomplish this by using quality assets. They do not skimp on inputs to gain greater output from assets. And they are very inquisitive: “They are always searching for new and innovative methods to improve their operation” (AgCoach Insights, 2006, p. 10). Leading farmers in the 2004 study by the Best Practice Group, achieve this by including learning and skill building in the area of production. Ninety percent of respondents participated in learning activity related to production. Over the many years that farmers have been studied, they report a component of education and learning related to production techniques and technologies (Bamberry et al., 1997; Garvin and Associates, 1999; Harvey & Wiebe, 2002, Williams et al., 2007).

Financial strategies such as adding value, innovation and diversification are considered important to long term farm business profitability. This is the focus of

Williams et al. (2007) in their report to the Agricultural Institute of Canada although definitions for these concepts are variable, unproven, and contradictory. In general terms, Williams et al. (2007) suggest that innovation implies continuous improvement and is a function of attitude more than anything else. Diversification and adding value are often used interchangeably but in the view of these writers means “to add new systems or practices in a horizontal manner through the food production system or vertically toward the consumer market in order to improve sale ability, profitability and become a price-maker rather than a price-taker” (Williams et al., 2007, p.4). Evidence that this strategy is being used by farmers is found in the best practices of leading farmers project. Over half the respondents in the sample add value to their products and of these, over 94% indicated “their value-added activities positively contribute to the bottom line over and above the basic product price” (Best Practice Group, 2004, p.2-20).

Good farm management includes good human resource management and relationship building as well (AgCoach Insights, 2006; Bamberry et. al, 1997; Best Practice Group, 2004; Garvin & Associates, 1999; Maynard & Nault, 2005). Specific practices that relate to the human element of a farm business include activities such as: (a) holding team meetings, (b) clearly defining roles and responsibilities for each farm participant, (c) learning and practicing good communications and planning skills, (d) information gathering and making informed decisions, (e) facilitating team building, (f) using good time management, and (g) building relationships with expert advisors, networks and local, national, and global organizations.

Another practice studied is the incidence of off-farm work. In the Western Canadian benchmark survey (Garvin & Associates, 1997), 44% of respondents had at least one member of the family working off the farm and 16% had both members



generating family income from sources other than farming. Almost 20% of respondents earned one-third of their gross family income from off-farm employment. The young farmers studied by Harvey and Wiebe (2002) also had off-farm employment. Sixty percent of the women and 40% of the men worked off-farm. Even though one of the criteria for participation in the study by the Best Practice Group (2004) was that only those with farm income were to be included, nearly all respondents reported some non-farm income. This study suggested that “respondents in the lower gross farm receipts categories indicate high non-farm receipts” (Best Practice Group, 2004, p. 2-43). Statistics Canada records that 59.2% of female farm operators and 44.1% of male farm operators reported that their main occupation as being non-agricultural (Statistics Canada, 2010). None of the studies discuss whether working off the farm contributes positively or negatively to farm business viability and sustainability.

#### *Adult education and literacy strategies*

This section related to adult education and literacy strategies provides an overview of adult education and what some of the literature reveals about adult education as a learning strategy for farmers in achieving long term farm business viability and sustainability. The concept of literacy is described as well as some of the literacy strategies utilized by farmers in relation to their farm business viability and sustainability.

It is common for young farmers of today to have access to a plethora of learning experiences ranging from university education to educational conferences to farmer mentors and a variety of other types of learning (Bamberry et al., 1997; Best Practice Group, 2004; Garvin & Associates, 1999; Statistics Canada, 2010). Education achieved

by adults can be categorized into three different forms of learning; formal, nonformal, and informal. Paulston and Leroy (1975) work with definitions developed by Philip Coombs. Formal education is achieved through the “highly institutionalized, chronologically graded and hierarchically structured ‘education system’ spanning lower primary school and the upper reaches of university” (p.1). Nonformal education is “any organized, systematic educational activity outside the framework of the formal [school] system [designed] to provide selective types of learning to particular sub-groups in the population” (Paulston & Leroy, 1975, p.1). Extension education is a type of nonformal education sponsored by governments, non-government agencies, universities, and industry with the goal of teaching families current technologies and methods for adaptation to changing agricultural environments. This form of nonformal learning has a long history in reaching farm families (Selman, 1998) and was utilized in Canada’s early agricultural settlement and development. The practice of public sector extension education targeted specifically for farm families emerged as a department of agriculture in the Manitoba government in 1915 (Blackburn & Vist, 1984). Government’s interest in agricultural education continues to the present day adding greatly to the many of learning experiences available to farmers. This is evident in the websites of the Government of Canada (<http://www.agr.gc.ca/>) and the Province of Manitoba (<http://www.gov.mb.ca/agriculture>). In fact, a number of internet sites (<http://agriculturetoday.com>; <http://.www.agri-links.com>; <http://www.farmwebsites.ca>) provide a list serve for numerous government, industry, and educational groups extending their information, programs and services to farmers. These sites offer a number of agricultural topics and by drilling down, farmers learn about a broad range of

educational programs, a vast array of publications, and an extensive amount of services targeted at helping farmers succeed in the business of agriculture.

Informal education includes all learning not associated with the other types of educational activity. It is “the lifelong process by which every person acquires and accumulates knowledge, skills, attitudes, and insights from daily experiences and exposure to the environment... Generally, informal education is unorganized and unsystematic; yet it accounts for the bulk of any person’s lifetime learning” (Paulston & Leroy, 1975, p.1). It is evident in the study of farmers as a population group, that all three forms of education are part of the approach this group uses to attain knowledge, skills, and expertise (Bamberry et al., 1997; Best Practice Group, 2004; Garvin & Associates, 1999). In their study, Garvin and Associates (1999) asked who or which agency farmers looked to for information. Manitoba farmers’ first identified source of information was with staff from the department of agriculture (68%). Other sources included other professionals such as lawyers, accountants, and lenders (10%), other farmers (6%), and printed materials such as newspapers, journals, and books (6%). In addition farm product suppliers, educational institutions, TV, radio, agricultural consultants, farm shows, associations, or clubs were also identified as sources of information and learning. Other informational sources as reported by Bamberry et al. (1997), Garvin and Associates (1999) and Harvey and Wiebe (2002) included family members, friends in other businesses, visits to other farms, organized field days, agricultural suppliers and service providers, seminars and conferences, farmer associations, farmer-directed groups, and websites.

Literacy places learning in a broader context to include the dynamics of problem solving for change, achieving personal growth and goals, and the ability to contribute to

society. Studies with farmers show that the broader concept of literacy about farm business success is important. As an example, leading farmers interviewed by AgCoach Insights (2006) study stated that participation in educational conferences and seminars contributed to more than just their learning. They also felt these forums helped them capitalize on new opportunities such as participation in research trials leading to early production or market advantages. Learning events also helped them know and interact with key influencers in the sector. Leading farmers in both the AgCoach Insights (2006) and Best Practice Group (2004) studies identified value in *benchmarking* their farm business against others as a tool to evaluate their own progress. They use benchmarking “to measure performance and set goals” (AgCoach Insights, 2006, p. 4).

Literacy is considered to be a life long process (Fransman, 2005; Government of Manitoba, 2010a). Farmers interviewed by Bamberry et al. (1997) saw education as a life-long process of information gathering, sorting, analyzing, and evaluation. Saxowsky and Duncan (1998) also describe the importance of informed decision-making. These writers suggest that individuals need to (a) understand the current trend, its underlying causes and its implications; (b) identify opportunities and assess their consequences; (c) become an active participant in the decision-making process; and (d) be able to use the information to adapt their farm business to an ever changing environment.

An overarching theme arising from the studies on farm viability and sustainability is one of ongoing and transformational change. In their extensive review of agricultural education, Bamberry et al. (1997) referenced Candy’s (1995) observations from farmers. Their ability to learn and change was continually cited as “the most important generic competency for farmers to possess in today’s farming environment” (p. 31-32). A number of literacy strategies that speak to this capacity to

learn and change are found in the literature. Saxowsky and Duncan (1998) suggest that farmers need to acquire “the critical skills for collecting data from numerous sources, analyzing it and using the information” (p.9). Understanding and developing strategies to shift from a position of producing and selling a commodity in the marketplace to one of producing and selling a product where price and other information may not be readily available was identified in a number of studies (AgCoach Insights, 2006; Bamberry et al., 1997; Best Practice Group, 2004; Saxowsky & Duncan 1998).

Williams et al. (2007) take this strategy further to suggest that farm profitability will depend on farmers looking for ways to diversify the farm business into ventures that reach along the value chain, increasing their ability to capture additional profits.

Farmers interviewed for this report, Mylles Wildeman and Keith Rueve, are quoted as an example: “The impact of becoming a shareholder in a farmer-owned, integrated ethanol-feedlot enterprise has allowed the two family farms to grow in size and equity over the last twenty years. Plus attract family members back to the farm enterprise” (p. 38).

Saxowsky and Duncan (1998) suggest that farmers need to anticipate and understand new levels and exposure to risks that are considerably different from the past and to make increased use of new technologies to ensure competitiveness. They stress the importance for farmers to understand, anticipate, and respond to “the **expectations** of various groups of people. These groups include consumers, taxpayers, rural residents, other farmers, agri-business people, and rural business people” (p. 13). An example of this strategy is more strongly stated in the New Zealand report from the Parliamentary Commissioner for the Environment, “if the wider community thinks that the environmental damage from farming is unacceptable, farmers risk losing their ‘licence to operate’ in society” (2004, p. 4).

Literacy strategies will be unique to individuals depending on a number of variables. Bamberry et al. (1997), Garvin and Associates (1999), and Harvey and Wiebe (2002) identified some of the factors that may affect a farmer's decision to pursue a learning opportunity. Some of these factors were identified as: personal needs such as time commitment or the time of day a program is offered; distance from home; costs to participate; access to childcare; the anticipated impact of the program on farm profitability; credibility of the instructor or delivery agent; the potential to include other members of the management team; certification or accreditation; and a sense of optimism and pride in the business. The literature draws some attention to the participation of women in agriculture. Consistent with Canadian Census data with increasing numbers of female operators, the Bamberry et al. (1997) study noted increased female participation in the management of Australian farms. For women interviewed in this study, learning needs for farm sustainability related strongly to topics such as the relationship between the economy and the environment, moving away from a paradigm of consumption and ownership, participatory decision-making, and the importance of networking.

Making the best use of human resources available to the farm business is a strong theme arising from leading farmers studied by AgCoach Insights (2006), Bamberry et al. (1997), and Best Practice Group (2004). In these studies, successful farmers believe that effective management includes building an efficient team that works together. The team is considered to be all members of the farming family including spouses, children, and extended family members as well as employees and business partners. "Each staff or family member is apprised of the farm's goals. Management roles and responsibilities are clearly defined in order for staff and family members to capitalize on the

competencies within the team. Top producers improve communication on farm through formal and informal meetings” (AgCoach Insights, 2006, p. 4). Maintaining long-term business and networking relationships was also identified as important. They regard their strong relationships with bankers, accountants, lawyers, and other advisors as sources of information that can expand their knowledge. Networks are developed with organizations at the local, national, and global levels.

A common theme throughout the research and study of farmers is the strong support for education and life long learning. They tend to look beyond the immediate farm environment for information, advice, experiences, and vision for farm profitability and business success. However, the salient theme arising from these studies is belief that the future of the industry is dependent on farmers being able to anticipate, predict and adapt to change.

### *The ecological paradigm*

Marion Terry utilizes the ecological paradigm, initially theorized by Bronfenbrenner, as an “apt model for understanding stakeholder experiences” (2006, ¶ 6). Terry applied the ecological model to a study of community-based adult literacy programs. She described how the ecological paradigm “celebrates the individuality of human understandings of self and others” within what Bronfenbrenner described as *nested systems* of physical, interpersonal, and environmental contexts. In her review, Terry (2006) showed how Bronfenbrenner’s ecological paradigm can describe human development as a function of nested systems of interpersonal relationships that occur within physical settings. The model can be visualized as a concentric system of progressively more distant environmental relationships from micro- to meso- to exo- to

macro-system levels. Note that the following examples used to further illustrate the ecological paradigm are applied to a young farmer context. The individual's micro-system level is made up of single interactions with two or three people in face-to-face interactions (e.g. spouse, partner, children, friends, mentors, and teachers). The meso-system of settings includes the interconnections among these face-to-face settings through various locations in the person's life (e.g. home, community, school, farm business locations). Beyond the meso-system is an exo-system of settings that have an indirect influence on the person (e.g. political decision-making, societal expressions related to food production, interests of other businesses and farm operations, and extension education systems). The outer macro-system level consists of the individual's ethnicity and culture: their larger social and political context, belief system, and lifestyle (e.g. paradigm of independence verses interdependence in business and community, family values for risk taking, innovation, desired income level, and work-life balance).

Another aspect of the ecological model is the importance of roles in the macro- and micro-systems. Roles dictate expectations for individual behaviours in interpersonal interactions (e.g. young farmer roles in relation to farming parents, partners, or farming neighbours). These roles predict the degrees of superordination verses subordination, competition verses cooperation, and empowerment verses disempowerment that characterize different relationships along each of the systems of the ecological model. Roles define interpersonal settings and transitions between settings and thus outline the environmental forces that influence a person's realization of their potential. An important ecological focus may be how the roles that young farmers assume impact on their learning strategies.



The cognitive literacy theory (Gibson, 2001) also helps to explain individual development and change. In her exploration of Feuerstein's theories on cognitive modifiability and mediated learning experience, Gibson describes cognitive literacy as "designed to yield a continuing deepening of understanding of self and the social process" (Gibson, 2001, p.11) and is "delineated as a spiralling, cyclic process of four emergent phases: 1) awareness; 2) internalization; 3) realization; and 4) application" (Gibson, 2001, p. 10). Within the ecological paradigm, individuals would cycle through these phases at each level of the experience as they move towards adaptation and behaviour change. Information found in the study of farmers, profitability and sustainability (Williams et al., 2007) seems to relate to literacy being achieved within these contexts. It appears that an individual farmer's development is influenced by his or her experiences at various nested systems, identified in the ecological model, from self to a global marketplace and from the different role he or she might play with a variety of different stakeholders.

### Chapter summary

In this chapter literature from agricultural research and reports that describe characteristics of successful farmers, descriptions of farm business viability and sustainability, and adult learning and literacy strategies related to farm viability and sustainability has been summarized. Two themes common across these studies include the importance of adult education and life long learning, and the critical nature of learning and adapting to change. A number of other characteristics, practices, and strategies are also identified as contributing to long term farm viability and sustainability. It is through the insight gained from the literature that interview questions

were formulated for my field research. The interview questions were used to guide the interview participants in describing their perspective on their own long term farm viability and the learning strategies they chose in order to achieve farm sustainability. Chapter three describes in detail the methodology used in my field research.

## CHAPTER III - METHODOLOGY

### Introduction

In this chapter details my research methodology is articulated. This articulation provides the rationale for utilizing a qualitative phenomenological research approach and an interview method. The participants are described as well as the procedures by which they were recruited, selected, and interviewed. An interview guide provides the questions that were used to facilitate participant responses about their thoughts and perceptions of their long term farm business viability and sustainability. My role as researcher, the manner in which the data were managed, and the procedures related to ethics approval are described. My use of an inductive data analysis technique is explained.

### Qualitative Research

Qualitative research is described by Bogdan and Biklen (2003) as an umbrella term referring to several research strategies that share certain common characteristics. In a qualitative approach, research questions are formulated to investigate topics in all their complexity, in context and concerned with understanding behaviour from the subject's own frame of reference. "The researcher enters the world of the people he or she plans to study, gets to know them and earns their trust, and systematically keeps a detailed written record of what is heard and observed" (p. 2). Because of the detail in meaning and participant perspective sought, a small sample size is typical. As with quantitative research methodology, discipline and accurate data collection is required.

Five features of qualitative research (Bogdan & Biklen, 2003) are: (a) naturalistic – has actual settings as the direct source of data and the researcher is the key instrument; (b) descriptive data – written results are important both in the recording of data and disseminating the findings, often containing quotations from the data to illustrate and substantiate. This research approach “demands that the world be examined with the assumption that nothing is trivial, that everything has the potential of being a clue that might unlock a more comprehensive understanding of what is being studied” (Bogdan & Biklen, 2003, p. 5); (c) concern with process – rather than simply with outcomes or products; (d) inductive – theory is grounded in the data emerging from the bottom up, from the variety of pieces collected as evidence; and (e) meaning – is of essential concern as researchers are interested in how different people make sense of their lives or what is known as the research construct, *participant perspective*. “Qualitative researchers believe that approaching people with a goal of trying to understand their point of view, while not perfect, distorts the informants’ experience the least” (Bogdan & Biklen, 2003, p. 23).

Qualitative research methodology, therefore is the most appropriate approach for this study because I sought to understand what young farmers perceive will make their own farm businesses viable or sustainable over the long term: making meaning from the participant perspective. The knowledge to be gained through the use of descriptive data respected the assumption that the reality for each participant is subjective and depends on their particular context. Meaning emerged from data gathered through in-depth interviews with young farmers and from studies cited in the literature review.

### *Phenomenological Research Approach*

Most qualitative research also reflects a phenomenological perspective in which researchers attempt to understand the meaning of events and interactions to ordinary people in particular situations (Bogdan & Biklen, 2003). Bogdan and Biklen (2003) describe this perspective as the interpretive understanding of human interaction with emphasis on the subjective aspects of people's behaviour. In their attempt to gain entry into the conceptual world of their study participants, researchers try to understand how and what meaning the participants construct around events in their daily lives. In doing so, the researcher is prepared for unpredictability and can "expect the unexpected" (Nagy Hesse-Biber & Leavy, 2006, p. 253). Bogdan and Biklen (2003) cite theorists Berger and Luckmann (1967) and Greene (1978) in maintaining that phenomenological study allows for multiple ways of interpreting experiences and that reality is socially constructed. The phenomenological research approach is designed to understand the meaning of the participants' perspectives and therefore, their reality (McMillan & Wergin, 2002). Researchers do this by being open to discovery and sensitive to the variety of the multiple meanings in the research setting (Nagy Hesse-Biber & Leavy, 2006). This approach is well suited to provide a depth of understanding about young farmer literacy about long term farm viability and sustainability.

### *Interview Method*

"The best-known representatives of qualitative research studies and those that most embody the characteristics we just touched on [characteristics of qualitative research] are those that employ the techniques of **participant observation** and **in-depth interviewing**" (Bogdan & Biklen, 2003, p. 2). Qualitative interviews vary in the degree

to which they are structured, from a “guided discussion” to one that uses questions focused on particular topics. The researcher works at getting the participants to freely express their thoughts around topics (Bogdan & Biklen, 2003). By gathering this descriptive data in the participant’s own words, the researcher can develop insights on how participants interpret some aspect of the world. This study utilized open-ended questions that were flexibly structured to allow participants to answer from their own frame of reference while focusing on this study’s topics of interest.

### *Role of Researcher*

My role as researcher was to document many dimensions of young farmer literacy and learning strategies in attempts to add knowledge, to generate description and meaning about long term farm business viability and sustainability. I bring to this research experiential and educated interest in young farmers and the theme of farm viability and sustainability. To minimize bias arising from my life experience, I chose the researcher role of “observer-as-participant” (Nagy Hesse-Biber & Leavy, 2006, p. 249). In this role my identity was revealed but my engagements with participants in the setting was limited to interviewer. I listened for participant perspectives during the interview process while carefully limiting comments that might reflect my own experiences, opinions, and prejudice. In ethnographic research,

The power of the researcher resides along all points of the research process- from deciding on the research question(s) and the type of research method used to data analysis and interpretation of research findings (Nagy Hesse-Biber & Leavy, 2006, p. 266).

My career roles might have been perceived as giving me a position of power relative to my study participants. I tried to mitigate this potential bias by describing myself as a graduate student and did not refer to my work history or current position. The observer effect was minimized by using an interview space and time convenient to participants and by engaging in social discourse in advance of the interview. This initial type of communication helped to increase the trust and comfort between the participant(s) and myself (Bogdan & Biklen, 2003).

### Method

The method followed for this study required research ethics approval since my study included interviews with humans. An interview guide was developed and pre-tested to verify that the type of information elicited by participants would enrich data related to this study's problem statement. The means by which participants were selected and recruited through agricultural educational events is described. Data collection based on in-depth interviews is organized by the 'Big Paper Process.'

### *Research Ethics*

Ethics approval included details related to informed consent and maintenance of confidentiality. Each participant was required to sign a written consent (see Appendix A) to participate in the interview. The letter of consent outlined the intent and purpose of the research, description of the researcher and details related to interview location, procedures, anonymity, and confidentiality. Confidentiality and anonymity of participants was safe-guarded by (a) securing all audio tapes and written notes in a secured file cabinet, (b) requiring the assistant transcribing the interviews to take a

pledge of confidentiality, and (c) using pseudonyms, fictional community locations and not making the link between the participant and the educational event in transcribed data. The audio tapes will be erased and the transcripts shredded at the conclusion of the study.

*Interview Guide*

The interview guide was designed to seek a rich description of young farmer awareness, understanding, beliefs and experiences related to what they believed will bring farm viability and sustainability to them as individuals. Also of interest were the perspectives the young farmer described about family members who were influential to the farming business. A phenomenological approach requires the researcher to be flexible and responsive to her participant responses thus allowing the informant to spend time on the topics of greatest personal interest to them (Bogdan & Biklen, 2003). Coaching questions were used (a) to help the participant when they had difficulty understanding the intent of the question, (b) to encourage the participant when they seemed eager to add to a theme area, or (c) to increase the information available to me for purposes of description and analysis. Insight gained about concepts, issues and questions from the literature review guided the development of questions asked in the interviews.

This relationship is demonstrated in the following table.

<b>Interview Question</b>	<b>Rationale and Source</b>
<b>Please tell me about your farm operation. - size of operation – do you consider yourself small, medium, or large</b>	In qualitative research, the researcher must establish rapport with the participant based on trust and credibility (Bogdan & Biklen, 2003). This question helped to establish a sense of comfort with the participant by beginning with a topic of



<p><b>- types or variety of farm enterprises</b>  <b>- are there other people involved (i.e. spouse, partner, parent(s), siblings, extended family, neighbour(s), investors, other)</b>  <b>-length of time farming – by yourself, associated with family members or others</b></p>	<p>familiarity. Additional coaching questions to further stimulate participant comfort and to build a sense of researcher credibility included questions related to size of the operation, making mention of specific types of operations such as crops, dairy, vegetables, beef, poultry, and length of time farming.</p> <p>The size, type, geographical location, business structure and other factors about the farm business may contribute uniquely to farm viability. Maynard and Nault in their study on the sustainability of big or small sized farms suggest that “given that there are substantial and increasing differences between the different sizes of farms, there needs to be a differentiated treatment of the two principle types” (2005, pp 15 - 16). In addition, Bamberry et al. (1997) found that factors such as scale of operation (size as well as full or part time), diversity of enterprises, available capital, value of land, the structure of the family business, life cycle of intergenerational operations and the motivation and personal goals of the operators are factors that may have a significant effect on farm management practices and business profitability.</p> <p>Additional coaching questions related to other family members involved in the farm business – spouse, partner, mother, father, siblings, extended family, neighbour, investor, other. Other researchers (Bamberry et al., 1997; Garvin and Associates, 1999; Harvey &amp; Wiebe, 2002) clearly identified that young farmers in general, do not farm in isolation of others who may have a significant influence on their attributes, education, skills, and production and financial practices.</p>
<p><b>Please think down the road 20 to 30 years from now (i.e. your age, family situation, goals). Please describe what you want your farm and farm business to look like or be like 20-30 years from now.</b></p>	<p>This question helped establish the context of viability and sustainability as being a long term prospect, and helped to look past specific short term challenges or opportunities they may be experiencing.</p>

<p><b>Please describe what the term long term farm viability means to you?</b></p>	<p>This is the essence of the phenomenological approach (Bogdan &amp; Biklen, 2003) of attempting to understand the meaning of long term viability as perceived by the individual young farmer within his/her own context.</p>
<p><b>Please describe what the term farm sustainability means to you.</b></p>	<p>This is the essence of the phenomenological approach of attempting to understand the meaning of farm sustainability as perceived by the individual young farmer within his/her own context (Bogdan &amp; Biklen, 2003).  Writers in this theme area, acknowledge there is no clear definition of farm sustainability that has been tested and accepted by researchers. The description of farm sustainability used in this study evolves from definitions for sustainability and sustainable agriculture as described by Maynard &amp; Nault (2005), The Parliamentary Commissioner for the Environment, New Zealand (2004), United Nations (1987), and Williams et al. (2007). The key element is that there is an integration of the environmental, economic, and social-political aspects to farm decision-making that have long term impacts.</p>
<p><b>What does long term farm viability and farm sustainability mean to other members of your family who may have a significant interest in your farm business success?</b></p>	<p>This question pursued further the influence of others as per the rationale above.</p>
<p><b>What are some of knowledge, skills or attributes you have that will help you achieve your long term farm viability and sustainability?</b>  - what kind of personal characteristics or attributes do you believe you have or will need?  - what types of skills do you have or will need?  - what types of knowledge do you have or will need?</p>	<p>The literature relating to leading farmers (top producers, good farm managers, successful farmers) identifies characteristics in these three areas as contributors to farm success (Bamberry et al., 1997; Best Practice Group, 2002; Garvin and Associates, 1999; Harvey &amp; Wiebe, 2002; Saxowsky &amp; Duncan, 1998; Maynard &amp; Nault, 2005):</p> <p><u>Knowledge</u>: new production techniques; technology; financial planning and analysis; farm safety; planning; cost management; farm taxation and law; risk management; commodity marketing; diversification, value adding and food processing; direct farm-gate marketing; farm transfer planning; environmental and resource management; quality control; export market opportunities; political and</p>

	<p>social issues; local knowledge; relationship between the economy and the environment; food science; learning how to learn;</p> <p><u>Skills</u>: building strategic alliances; leadership; farm labour management; strategic and business planning; building relationships and networks; participatory decision-making; problem solving; managing family relationships; integrative skills; managing change; time management; information literacy; benchmarking; communication;</p> <p><u>Attributes</u>: inquisitive mind; helicopter vision; intelligence; positive approach to life-long learning; culture of continuous improvement; optimistic; motivated; positive sense of self awareness; encouraging parents, especially the mother; new paradigms of thinking (i.e. away from consumption and ownership; producing a niche product rather than as price taker for a raw commodity); innovative thinker; anticipating and adapting to ever changing environment; belief in and practice of mental and physical wellness; socio-political awareness; willingness to experiment, re-invent their business and pursue opportunities.</p> <p>This question included three separate concepts of knowledge, skills, and attributes. They were grouped into one question initially to allow the respondent to focus on the area(s) of greatest interest or concern. This is consistent with the phenomenological approach (Bogdan &amp; Biklen, 2003). Additional coaching questions that divide each characteristic into a separate question helped me to probe perceptions about all three.</p>
<p><b>Life long learning includes all types of learning such as meetings, conferences, workshops, internet, books, brochures, field trials, demonstration plots, neighbours, family, courses, university. What are some of the learning activities you may plan to use over time to achieve your long</b></p>	<p>Some of the learning strategies that are identified in the literature (Bamberry et al., 1997; Garvin and Associates, 1999; Harvey &amp; Wiebe, 2002) include:</p> <ul style="list-style-type: none"> <li>-participating in formal education at university or college – agricultural or other education</li> <li>- commitment to life long learning as reflected in a variety and diversity of options: <ul style="list-style-type: none"> <li>*profitability-driven learning</li> <li>*family-influenced learning</li> </ul> </li> </ul>

<p><b>term farm viability and sustainability?</b></p>	<ul style="list-style-type: none"> <li>*learning from neighbours, friends, other farmers, visits to other farms;</li> <li>*organized field days</li> <li>*attending extension initiatives;</li> <li>*media; internet, websites</li> </ul> <p>- networking as reflected in a variety of approaches:</p> <ul style="list-style-type: none"> <li>*joining and/or participation in farmer directed groups for purposes of education and networking</li> <li>*learning from people in other businesses, outside of agriculture</li> <li>*joining and participation in local, national and global associations</li> <li>*participation in research initiatives</li> </ul> <p>-seeking accreditation to affirm new knowledge and skill, to build credibility (legitimacy) with others, and potentially, to enhance non-farm employment and/or business opportunities</p>
<p><b>Do you see or experience any external forces that are or will impact your own farm viability or sustainability?</b></p>	<p>Studies focusing on agriculture over the last two decades describe agriculture's transition or make note of the requirement for ongoing change (Maynard &amp; Nault, 2005; Saxowsky &amp; Duncan, 1998; Williams et al., 2007). The requirements for change are often identified as coming from forces external to the farming operation itself. Some of the external forces identified are: the changing rural environment; new technologies; evolving communication and transportation systems; market trends such as product differentiation; socio-political trends such as the emphasis on climate change, environmental conservation, and animal welfare; changing expectations of consumers and tax payers; and international trade actions in a global marketplace.</p>
<p><b>Do you believe that any of the following has an impact on your farm viability and sustainability:</b></p> <ul style="list-style-type: none"> <li>- succession planning?</li> <li>- off-farm income?</li> <li>- other family members (i.e. spouse, parents, other?)</li> </ul>	<p>This question was added following pilot testing of a draft interview guide as these three topic areas were deemed as very important to the viability and sustainability of a farm business.</p>

<p><b>Do you have any additional thoughts or ideas about our discussion today that you think are important to this topic?</b></p>	<p>This is the essence of the phenomenological approach (Bogdan &amp; Biklen, 2003; McMillan and Wergin, 2002; Nagy Hesse-Biber and Leavy, 2006)) of attempting to understand the essence and meaning of the participant’s perspective and therefore, his or her reality. This open ended question allowed for unpredictable responses on the topic and helped to ensure that perceptions of importance to the participant were included.</p>
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*Pilot Test of Interview Guide*

A draft interview guide was tested in March 2009 with two provincial government staff identified by their managers as young farmers. I used the same recruitment and consent protocols outlined for study participants. As it turned out, one person was 51 years of age. When we discussed the issue he commented that people still think of him as young because he “behaves like a young farmer.” As a result of this experience, my interview protocol started with a direct question about the participant’s age. The second pilot test volunteer and her husband both met the age criteria.

The purpose of the pilot test was to seek verification that the interview questions were likely to stimulate the perceptions of young farmers as anticipated in the study. The following adjustments were made to the interview guide and process as a result of *lessons learned* from the pilot test interviews:

- Be prepared for the spouse and children to impact the interview. Not only did one of the pilot test volunteers include her husband in the interview, their small children were at home and created a delightful but sometimes noisy distraction to the interview. This helped to prepare for two of the participant interviews that followed at which children were present.

- Accommodate learners who like to prepare for the experience. Two of the three people involved in the pilot test interviews suggested that a set of the interview questions be sent in advance of the interview. As a part of the recruitment process, I offered to send the interview questions to participants if they wanted them in advance. One participant made this request and indicated that a parent would be consulted prior to the interview.
- Accommodate visual learners (Gardner, 1999) by providing a set of the interview questions to participants during the interview. All participants at least glanced at the written questions during the interview. The interview guide was left with the participants and they were invited to send any additional comments should they be interested in doing so. No one did.
- Include extra prompting questions related to knowledge, skills, and attributes to stimulate thinking in each of these three areas.
- Include prompting questions related to business succession, off-farm employment, and contributions of the spouse. Even though these topics may have arisen during the interview, I asked participants to comment specifically on these issues near the end of the interview.
- Do not provide a written description of farm business viability and sustainability as was originally intended. From the pilot test, it became apparent that by using this tool I was trying more to educate the participant than to stimulate their own perception on the topics.
- Provide different examples of adult learning strategies. Both pilot test volunteers asked for clarification about learning strategies. During the question with

participants, I included a listing of the variety and breadth of formal, informal and non-formal learning activity and strategies.

The interview guide, as revised following pilot testing, can be found in Appendix B.

### *Participant Selection and Recruitment*

Guidelines for estimating adequate sample sizes for qualitative inquiry, in advance of the research, are non-existent (Guest, Bunce, and Johnson, 2006). In their review of numerous works, Guest et al. (2006) found references to sample sizes ranging from five to sixty interviews. However, Guest et al. (2006) state that the standard by which sample sizes are determined relies on the concept of *saturation*, “the point at which no new information or themes are observed in the data” (p. 59). Utilizing data saturation to determine sample size provides the basis by which qualitative research is able to generate theory or generalizable themes. Guest et al. (2006) in attempting to determine the fewest number of interviews needed to have a “solid understanding of a given phenomenon” (p.77) suggest that analyst qualities, analytic strategy, and objectives of the research should be considered. Given my limitations as a novice researcher and my limited human and financial resources, I chose to conduct six interviews and not to pursue data saturation as a means of determining my sample size. My research strategy was to discover broad themes based on questions developed from the literature. My research objective was to give voice to young Manitoba farmers who tend to be under-represented in the literature (Harvey and Wiebe, 2002). Based on the criteria described by Guest et al. (2006), the fact that I did not determine the number of participants for my study prior to conducting it does not preclude the potential for data saturation. In addition, based in *consensus theory* Guest et al (2006) suggest that there is

a principle by which “experts tend to agree more with each other (with respect to their particular domain of expertise) than do novices” (p. 74). Since the participants in this study can be considered experts in the domain of inquiry, their perceptions of their own farm business viability and sustainability, the small sample size may be expected to “render extremely accurate information with a high degree of confidence level” (Guest et al., 2006, p. 74).

The participants were seven young farmers, which included one married couple, all of whom were 35 years or younger. The non-random sample of participants was recruited through four agricultural educational processes that occurred in Manitoba from November 2008 to January 2009. The selection criteria for participants were that (a) their occupation was farming, (b) they were of the age 35 years old or younger, and (c) they were willing to participate in a ninety minute interview. Recruitment varied depending on the educational event that the young farmer had attended and the organizers in charge. To begin, I recruited from three agricultural annual events which had similar interests as my area of study, farmer profitability and long term success. These included the Manitoba Farm Women’s Conference, Ag Days, and Keystone Agricultural Producers annual conference which included the Young Farmers Committee meeting. Five participants were recruited from these events. One participant invited her spouse to participate in the interview. A seventh participant was recruited from the Dairy Farmers of Manitoba Annual Conference which also offered educational opportunities.

Each event offered unique opportunities for recruitment and required a different recruitment strategy. Ag Days was an open trade show with educational seminars. The annual conferences for Keystone Agricultural Producers’ Young Farmers Committee



and Manitoba Farm Women's Conference were specific events for defined members. The Dairy Farmers of Manitoba Annual Conference was a combination of annual general meeting, trade show, banquet and awards, and educational speakers. All events had taken place before I began my fieldwork. However, some initial contact, as described below, with potential participants took place at three of the events.

An organizer for each of these events was contacted, informed about my research as per the sample letter to organizations (Appendix C), and granted me permission to recruit young farmers who had attended their event. At the Manitoba Farm Women's Conference, organizers granted me permission to attend the event and position myself near the registration table, engage in conversations with young farm women, and ask their permission to contact them at a later date to discuss possible participation in my research. The Ag Days organizing committee and the organizer for the KAP Young Farmers Committee meetings granted permission for me to attend the event for the purposes of engaging young farmers in conversations and asking their permission to contact them at a later date to discuss possible participation in my research. Fourteen young farmers gave me their contact information for me to follow-up with them at a later date. The Dairy Farmers of Manitoba contacted three young farmers who had attended the annual conference and gave them my contact information should they be interested in participating in my research. One interested participant then contacted me directly by email.

Following ethics approval to proceed, potential participants were contacted by telephone, email, and/or mail. In total, I contacted eleven young farmers before I had six volunteers. In general, the five refusals seemed to be based on no real interest to participate in the research once the formal request was made. One potential participant

had agreed to participate but changed her mind when a storm delayed the timing of the interview. Based on their expressed interest, the recruitment letter (Appendix D) was sent, the person confirmed their desire to participate, and the date, time and location were agreed upon for the interview to take place. Dates for two interviews were rescheduled because a winter storm prohibited driving to their location. The Consent Form (Appendix A) was read and signed prior to the interview taking place. All interviews took place in March and April of 2009.

One participant invited her spouse to participate in the interview. This had occurred with one of the pilot test volunteers, unbeknown to me. Since this was qualitative work and the spouse could provide information about the context and environment of the situation I immediately accepted the pilot test volunteer's decision. Consequently, I agreed to the participant's request to include her spouse as well. Since the interview took place as a couple, and individual responses were not provided by both people for all questions, data was extracted from six interviews rather than from seven people.

### *Data Collection*

Of the six interviews, all but one interview took place either in the participant's home or business office as per the participant's request. I traveled to each location at the mutually agreed upon meeting time. Traveling to the farm location afforded me the opportunity to experience the rural environment in which a participant farmed. These landscapes varied from open crop land to treed fields and pastures supporting both crop and livestock farming. Meeting at a participant's home or office offered me the opportunity to experience in a small way, the farm life and business. This enhanced my

ability based on observations to enter into a participant's own frame of reference. I did not know six of the participants, however, I had known one participant in advance of my research. I knew this participant well enough to feel comfortable holding the interview at my home, at his request, when our first meeting time at his home was postponed by a winter storm.

All interviews were situated at the kitchen or dining room table. One participant included her spouse in the interview and in three situations a spouse or a farming parent came into the interview location, engaging in business oriented conversation with the participant. In two situations, the participant's children were present during the interview and occasionally required attention. Coffee was offered and following short introductory conversation, I reviewed the consent form (Appendix A) and answered any questions about the research process. The consent form was signed by the participant as well as the participating spouse and me. I explained the interview process, gave each participant a copy of the interview guide (Appendix B), and tested the tape recorder before beginning the interviews. Each interview continued for approximately ninety minutes which was adequate time to ask all ten questions with prompting questions (see Appendix B). Once the interview was complete, I invited participants to send further comments to me by email and pleasantries and good byes were exchanged. Of note, all participants indicated on the consent form that they would like to receive a summary of my research once it is available. I did not receive any additional comments from participants following the interviews.

Following each interview, I recorded field notes related to the geographical location in which the farm business was located, the physical environment in which the interview took place, and my personal impressions of the participant's participation.

Pseudonyms were used to protect participant anonymity. The audio tapes of each interview were sent by courier to a typist who pledged confidentiality. She utilized Dictaphone technology to transcribe the interview into prescribed field note format (double spaced, line numbers, and rich right hand margins). Upon completing transcriptions, the audio tapes were couriered back to me and held in a locked file cabinet in my home. Transcribed interviews were sent to me by email, printed, and held in a locked file cabinet for the duration of my research and analysis. All audiotapes and hard copies of the interviews will be destroyed following the completion of this thesis.

#### *Organizing the data with the 'Big paper process'*

I used a 'big paper process' (Weir, 2007) to organize the data from the participant interviews. I read the transcripts, referring back to the tapes to correct some errors and missing data. I re-read the transcripts to orient myself to the data that was produced through the interview. I made some notes in the margins to help me find data at a later date. During the third read of each transcript, I wrote phrases, statements, and quotes on lined letter-sized paper. I used separate pages for each question answered by each participant. As I completed the note-taking for each question, I taped the page on to a wall-sized paper that was organized with the participant name listed down the left and the question number along the top. Once the themes were extracted from the data and recorded from the transcripts, the big paper held the first level of themes, organized in one place.

### *Data Analysis*

The 'big paper process' (Weir, 2007) was used to cluster and categorize themes common among participants and to compare themes arising from the data with those found in the literature. The problem statement guiding this study was made up of two questions: one focusing on what young farmers perceive will make their farm business viable or sustainable over the long term and one focusing on young farmer learning efforts to support their potential for farm business viability and sustainability. The big paper process helped to segment the data for each of these questions. Themes were determined through a process of inductive thinking where themes were built as the particulars from the data were grouped (Bogdan & Biklen, 2003).

### Chapter Summary

This chapter identified the qualitative research methodology, phenomenological approach, and method used to execute this exploratory study. Participants who fit specific study criteria were recruited through agricultural educational events from which they voluntarily attended. A small study sample of six young farmers was consequently asked to participate in an individual in-depth interview. The interview was conducted using an interview guide developed based on research studies and reports about farming business success as well as emerging issues of agricultural sustainability. Such an in-depth interview allowed young farmer participants to respond to the issues identified by the literature and to provide insight into their personal awareness, knowledge, beliefs, and approaches to the subject of their long term farm business viability and sustainability. Research ethics were observed through the procedures of informed consent, recording and storage of data, and writing of results. Themes from the data are

identified in the next chapter and are analyzed in relation to the literature review about young farmers and long term farm business viability and sustainability.

## CHAPTER IV - RESULTS

### Introduction

This chapter consists of a description of the findings from six in-depth interviews with young Manitoba farmers. The findings record the perceptions of young farmers about their long term farm business viability and sustainability. The in-depth qualitative interview method and ‘big paper’ data analysis process yielded information that describes what young Manitoba farmers perceived will make their farm business viable, or sustainable, over time. The data also described the learning efforts in which young farmers are or will be engaged to support their potential for farm business viability and sustainability. In this chapter findings are organized by each question as answered by participants. A description of the participants is also provided.

### Findings

#### Participant Description

The six interviews represent seven people since one participant chose to include her husband in the interview. Three participants were female. To protect their anonymity, their pseudonyms are Margaret, Cathy, and Linda. Four were male with pseudonyms Barry, Marvin, Corey, and Linda’s husband Ralph. Their ages ranged from 21 to 34 years of age. One participant was unmarried. All married participants either had children or would be having a child within a few months of the interview. None of the participants’ children were yet of school age.

The big paper process allowed me to thematically organize the data gathered from each question, group responses common to more than one participant, and record my findings by individual question.

### *Question #1 – description of the farm operation*

In their own words, participants provided a basic picture of their farming situation. They described: (a) a primary farm enterprise but also various secondary farm enterprises in which they were engaged; (b) various farm business structures including sole ownership by the farming couple, corporate structure with farming members as share holders or employees, and formal and informal partnerships with farming parents; (c) spousal roles as integral to the overall operational success of the farm business; and (d) cost, competency, and time issues related to hired help that was, or will be, used in the farm business.

#### *Description of the farming operation*

The number of years farming ranged from just over one year to nine years with one participant farming for one and a half years, one for four years, one for six years and two for eight years. One participant had been involved with her husband in farming for nine years but her primary business role was the retail seed sales business for six years. When asked whether they considered their farm size to be small, medium, or large, each participant described their current farm size either in relation to their geographical area or in relation to a provincial average for their type of farming business. All but one participant described their farming operation as medium in size. Corey identified his as a large farm operation. Marvin and Linda and Ralph were primarily dairy farmers, Corey and Barry were primarily crop farmers, Cathy was primarily a beef farmer, and Margaret was in retail seed sales which was connected to a certified seed growing farm. While participants identified their primary farming business, all but one farm business included



a mix of farming enterprises: (a) 75 milk cows plus 200 acres of crop land and some hay and pasture; (b) 2,800 acres of crop land plus 500 acres of hay and pasture, and 75 beef cattle; (c) 220 beef cattle plus 1,800 acres of crop land, 500 acres of forages and pasture, and custom grazing of another farmer's beef cattle; (d) a retail seed sales business connected to 4,000 acres of crop land and a seed cleaning, treating, and inoculation business; (e) 45 milk cows and 90 acres of crop land rented to a neighbouring farmer; and (f) 3,700 acres of crop land.

Statistics Canada (2010a) classifies thirty two types of farms according to the commodity or group of commodities that account for 50% or more of total receipts. Farm size is most often described in terms of acres in production or gross income from sales. The average farm size is 1,001 acres up from 891 acres in 2001 (Government of Manitoba, 2010b). Farms with less than \$50,000 in farm cash receipts, while declining in numbers relative to other income categories, still represent the single largest grouping of farms in the province (Government of Manitoba 2010c). The number of farms with \$50,000 to \$100,000 represents the lowest numbers of farms while farms generating in excess of \$100,000 in farm cash receipts have increased over the years (Government of Manitoba 2010c). Farms that generate \$250,000 or more in farm cash receipts represented 19.1% of the farms in 2006 (Government of Manitoba 2010c). These statistics can provide the context for farms in Manitoba. However, participants in my study can not be compared with other Manitoba farms since I did not ask for the detail required to do so.

### *Type of farm business*

Two participants described their working partnership with farming parents. One participant and his wife farmed independently from parents. One was an employee of the corporation owned by the parents. Two participants farmed within an incorporated business structure with farming parents. Manitoba statistics (Government of Manitoba, 2010c) show that of the 19,054 Census farms in 2006, 14,900 were involved in unincorporated farms while 2,710 Manitoba farm families were involved in incorporated farms. In five of the farming situations, the farming parents played significant roles in bringing the farming children into the farm business and continued to carry out significant farm business functions. For example, in one situation the participant managed the cattle operation while her father managed the grain operation and they helped each other as needed. This was providing a gradual succession to the participant who was the third generation family member to farm. The participant made the decisions and was responsible for the workload for the cattle operation while learning the cropping side of the business in advance of the father's retirement. In the other situations, the participants described a variety of ways in which the management decisions, workload, and financial risks were shared with a parent(s).

Succession planning was mentioned frequently and participants described how important this process was to them as they look to their farming future. In all five situations, parents of the participant(s) played significant roles in the farm business. While the father tended to focus on the production responsibilities such as seeding, harvest, milking, or animal care and feeding, the mother's role focused on the financial management duties. In all cases, the mother did the bookkeeping and generated the

management reports for decision-making or financial reports for banking and tax management activity. In addition, some farming mothers participated in production activity such as operating farm equipment or milking cows. In three of these five inter-generational farming families, the mother's role in helping to build and maintain positive human relationships was described as important. She often acted as the mediator or the person who helped to reduce conflict and stress. One participant and his wife farmed with no business connection to parents.

#### *Spousal role in the farm business*

The married participants, each spoke of the significant roles that their spouse played in the farm business. The roles ranged from co-management of one of the farming enterprises to bookkeeping, equipment operation, milking and/or management and financial decision-making. This was the case for females raised on the farm as well as for those who were not. All male participants had been raised by farming parents. As stated earlier, all married participants were in the early child rearing stage of life. In three situations, the participant described the female as having the major responsibilities in caring for the child or children. However, in all four couples who had children at the time of the interview, both parents participated in child care activities. As an example, the evening during which I interviewed Marvin, he was caring for his young children. We had to take a break from the interview while he nursed one child who was sick. In the interview with Linda and Ralph, their children were present and both parents responded to their needs.

### *Hired help in the farm business*

Hiring farm labour was a topic raised by each of the participants and will be explored in more detail later in this paper. At the time of the interview, Corey and Margaret hired outside employees as was required to operate the larger acreages or diverse enterprises. The participant farming without assistance from parents spoke about hiring casual farm labour on occasions during which he and his family needed to be away from the dairy operation. The other participants purposely chose to distribute the workload amongst family members rather than hiring employees. Barry, Linda and Ralph, Corey, and Cathy all farmed with their parents and identified that they had siblings but none of them were participating in the farm business. The importance of succession planning from farming parents to children will be explored in more detail later in this paper.

### *Question #2 - long term view of farm business*

Three key themes arose from this question about the future of the farm. The themes relate to (a) change, (b) children, and (c) farm labour. All participants talked about things changing from what farming is and how they do it now to something different in the future. In all situations, the vision for the future included the desire for their children to farm. A common challenge or concern for each farm business was the capacity to do all the work that is or would be needed.

### *Change*

All participants acknowledged that the family farming business had changed from one generation to another and would continue to do so over succeeding generations. For example, Cathy's parents maintained a cow-calf operation but when she joined the farming operation, she chose to change the beef operation to a feeder steer business. Barry's parents used to be dairy farmers but chose to get out of that enterprise and into beef cattle instead. Linda and Ralph worked with their parents to modernize the dairy facilities and expand the size of the herd. Marvin, Margaret, and Corey described different business structures from what their parents had. Marvin described his dairy business as unique because he had chosen to specialize in the managing and handling of the milk cows. He purchased most of the inputs (feed, silage, and hay) and services (mechanical, technology, herd nutrition and health) required to support the dairy. He indicated that in most dairy operations, the farmer and his family tended to complete most of these activities rather than paying for outside services. Margaret's family business model identified her and her husband as employees of the farming corporations rather than share holders. This allowed them to qualify for Employment Insurance benefits during their child rearing years. Corey's business model was one whereby only immediate family members were shareholders rather than his parents' experience of a multi-extended family ownership structure.

All participants talked about their farming operation changing in the future as well. Margaret's vision for the future of the seed sales business was influenced by how she perceived the current consolidation of the industry. She saw her seed business moving more to wholesale, requiring a fleet of long-haul trucks, and less direct contact

with the farmer-customer. She described lively discussions with her husband and parents regarding possible expansion of the crop land base with her mother's words of wisdom interspersed: "To what end? Consider the ever-increasing workload verses making more money." Barry spoke about the rural landscape and the importance of having neighbours. His vision included neighbours of moderate size achieving the economies of scale and profitability by working together. Participating as a group of farmers, each would have an area of specialty such as seeding, harvesting, or animal husbandry, and acquire the necessary expertise to manage this part of a larger operation. Together the group of farmers could afford the required equipment, could negotiate substantial discounts for farm purchases, and could share the workload.

Linda and Ralph looked to further modernization and adaptation to make their dairy operation as efficient as possible such that farm labour would continue to come from family members only but allow for appreciable family time and a balanced lifestyle. They might also consider diversifying by registering their cows and getting in to purebred dairy cattle sales. Depending on the opportunities, they also talked about doing some more cash cropping. Along similar lines, Marvin saw diversification rather than expansion of farm size in his future. By adding the sale of dairy genetics to his farm income, he could continue to do what he loved most, working with the cows, while diversifying his farm income. Cathy saw some expansion in her cattle herd size but also the continuation of her father's philosophy of *intensive* rather than *extensive* management of resources. Cathy describes this approach as "making money by farming intensively rather than using large acreages." For her, this meant incorporating production practices that get better yields, produce better cattle, get better gains on cattle, making use of good used farm equipment, keeping cost of production low, and

taking advantage of options available to protect the environment such as zero-till, biodiesel, and beneficial soil and water practices.

Other participants described their future in similar terms. Linda and Ralph spoke about moving with the times and looking for new ideas, improved methods, and increased efficiencies: “You don’t actually have to get bigger to make more profit.” Marvin’s dream was not to be a large dairy [a mega dairy milking 500 cows]. He was focusing on improving the herd through genetics as well as herd health and comfort. He was already investing in good genetics and would continue to purchase good quality cows, perhaps purchase good bulls, and experiment with some embryo transfer practices. In addition to gaining better productivity and income from milk sales, these actions would lead him to his goal of adding another income stream by selling the dairy genetics of his cow herd. Corey described his struggle as to his direction for the future: to purchase and add more land to increase the size of the crop farm verses maintaining a manageable farm size that limited the requirement for farm labour and allowed for adequate time for family life, recreation, and leisure.

All participants talked about farm business debt loads. Goals for the future included lower debt and/or no debt. Securing ownership of the land base that would be required to support the farming business was also important for all participants. They all stated the belief that competition for farm land could be a threat to their future. Thus if their farm operation included rented land, plans would include purchasing the land: if it was financially viable to do so. Being able to purchase new parcels of land when the opportunity presented itself was discussed during four interviews.

### *Children*

All participants spoke about their children or future children in relation to the future of the farming business. In all cases, the young parents wished that one or more of their children might be interested in a farming career. They talked about the preparatory work that would be needed over the next twenty to thirty years as they themselves would be contemplating retirement. In all cases, participants also stressed that it would be the child's choice as to whether they would enter the farm business; that the children would not be forced to farm. Linda and Ralph clearly stated that their children would have chores and would learn but they would not be forced to farm as a career. Marvin's reflection was along the same lines: Even if they do not dairy farm, "I think they still learn valuable life skills."

As the participants visualized the future 20-30 years later, they all acknowledged that good solid planning would need to take place to prepare for the possibility of children entering the business. Participants talked about starting succession planning earlier rather than later: as early as when children may be in their mid-teens. Marvin's comments summarized similar comments from other participants: "We'll have to think about succession planning before it is in panic mode." He talked about looking at options for business structures, such as incorporation, cow ownership by the children, and shares in the farm business. He and his wife "want to encourage children to farm by having them involved, giving them responsibility, taking them to shows, and joining 4-H where they can show their own calf." The parents wanted to encourage interest in the industry from a young age.



### *Question #3 – personal meaning of long term farm viability*

Participants described long term farm viability as relating to both financial success and to social and environmental issues.

#### *Financial viability*

For all participants, the meaning of farm viability included the financial, economic and/or profitability aspects of the farm business. Viability meant (a) that the farm would be able to make money, (b) that the farm would be able to grow, (c) that they achieve financial survival, or (d) that debt loads would be reduced or eliminated. As Linda and Ralph described it, farm viability meant: “Putting your farm in a direction that in the next 20 years, it’s still a profitable operation.”

#### *Social and environmental viability*

The meaning of viability also included descriptions related to social and environmental aspects. During three of the interviews, participants spoke specifically about the importance of lifestyle: (a) the importance of things like vacations, leisure time, material possessions; (b) being able to run the farm without having to go off the farm for work; (c) the quality of their life; and (d) the ability to pass the farm on to their children. A quote from Corey reflected the intentions of these participants: “We want a comfortable lifestyle, but we don’t have to be super rich.” Two participants also included aspects of environmental sustainability when they described farm viability. As Cathy stated, farm viability is both financial and environmental: “If you don’t have one, you don’t have the other.”

#### *Question #4 – personal meaning of farm sustainability*

The term farm sustainability seemed to have a broad meaning by participants. They made statements related to keeping what you have, land stewardship, having it paid for, making a profit, and the ability to keep farming and producing off the land. As with the term farm viability, farm sustainability included the components of farm financial success as well considerations for the environment and society's expectations in food production methods.

As Cathy stated, farm sustainability is “the ability of the farm to continue year after year with the stresses you're putting on it and have the farm still be able to work for you.” Barry related farm sustainability as a “philosophy of nature similar to Maslow's theory of hierarchy of needs.” Barry described farm sustainability as integrating the basic needs of the farmer, society's more advanced needs, and the land's ability to meet the needs. He described it as a balance where each impacts the other and must consider the other in order for the farm, land, air, water, and society's food system to be sustainable. He quoted one of his mentors, a Hutterite elder who told him “take care of the land and follow nature's rules.”

With a coaching question that mentioned the three components of sustainability described in the literature as economic, environmental, and socio-political, all participants expanded their discussion to include some aspect of each component. Their comments were grouped into the following themes: (a) society's expectations, (b) environmental practices, (c) government regulations, (d) influencing political decisions, (e) production and economics, and (f) human relationships.

### *Society's expectations*

All participants spoke about the impact that society's demands have on their farm business. Both Cathy and Marvin commented that those who did not have a farm and rural living experience do not understand enough about farming to make well informed decisions about agriculture. Marvin, whose business is with livestock, talked about the importance of animal welfare issues. He was convinced that giving the public a good image of farm production was important: "We need to get our message out. Farmers want to do their part as environmental stewards and for animal welfare. We need to increase the urban person's understanding of food production from farm gate to grocery store." Marvin had invested time, energy, and financial resources into comfortable stall design, lots of bedding, and good ventilation and lighting. He believed these improved production techniques were already contributing to his sustainability as they lead to improved financial gains as well as meeting the perceived expectations of the non-farming public.

I think even in the span of a year and a half, I actually think some of those renovations we made to the barn have already paid themselves off just by some of the older cows we've been able to keep going. Whereas if they had been cramped into a smaller stall, maybe banging themselves up and being less productive.

Corey expressed similar sentiments. He believed that "farm viability depends on the public's understanding and willingness to pay for food." Marvin acknowledged he not only paid attention to current issues that placed demands on his farm business, but also to emerging consumer trends. He spoke about a growing momentum for a *food*

*sovereignty* approach to agriculture policies. He saw this in the *buy local* movement where consumers expressed greater confidence in locally produced foods: “Rather than free trade being the best philosophy, maybe control over our food is a better idea.”

Participants described other expectations or demands from society at large: (a) food traceability whereby foods that may be connected to a safety or disease issue can be tracked back through the food chain to the specific farm on which the raw product was produced; (b) demand for organic production of foods which increases production costs for the farmer; (c) fear of the use of bio-technology in food production which, for the farmer, reduces the implementation of new technologies that can be used to deal with droughts, climate change, or other environmental and market issues; (d) resistance to the use of pesticides as a means of controlling weeds, insect or fungus infestations in crops, and (e) resistance to the use of antibiotics or other medications as health aids in livestock. Participants expressed their understanding that society’s expectations would require ongoing adaptation, as has been the case in the past, and would have significant impact on the sustainability of their farm business. With this acceptance, however, participants expressed some anxiety about the financial costs of implementing some of the changes demanded by society. As Cathy stated, “they can be unrealistic if it means the farmer can’t make an income.”

Four participants mentioned rural depopulation being of concern for their farm sustainability. Margaret talked about “towns getting smaller and neighbours becoming fewer and farther away.” She predicted that greater geographic distances would increase the costs of farming and seed sales. Increasing distances also meant that “you will not always know or have a personal relationship with who you do business with.” Barry described the concern for the lack of neighbours. At some point in time, the isolation

from nearby neighbours would make living in the country less than attractive for farming families. The concern related to declining rural population is quantified by Census data. Provincially, one in eighteen Manitobans live on a farm, accounting for 5.5% of Manitoba population in 2006 compared to 6.2% five years earlier (Government of Manitoba, 2010c). Margaret talked about the influx of European farmers in her area. She spoke positively about their influence on the production practices of their neighbours suggesting that local farmers can learn from immigrants and their experiences in another country. The 2006 Census counted 3,340 immigrants in Manitoba's farm population or 5.3% of the total provincial farm population (Government of Manitoba, 2010c).

#### *Environmental practices*

All participants acknowledged that their environmental practices were linked to farm sustainability. A number of comments indicated that participants felt their use of the land, soil, and water was important to farm financial viability as well as to society's broader expectation that farmers should protect the environment against degradation. Cathy's approaches to sound environmental production practices were interjected throughout the interview and reflected in her comment: "You know, when you see a bald eagle or when you see crocuses on the hill, you know it's a special thing."

#### *Government regulations*

During four of the interviews, participants described the significant impact that government regulations imposed on the farming sector have, and will have, on their farm sustainability. Margaret is expecting "huge" changes, restrictions, and legalities related

to water and soil management that will require adaptation and will impact the economics of their businesses. Marvin saw the provincial government making regulations and implementing initiatives to safeguard the environment and he expressed concern that actions may be taken on perception rather than the actual situation or based on science. He questioned whether some regulations that are being imposed are fair or reasonable. Margaret believes that society and government actions may force farmers back to more “traditional” production methods. Without new technologies and inputs, farmers may have to look to even larger acreages to be able to make a profit.

#### *Influencing political decisions*

All participants included comments related to the actions taken by governments at the municipal, provincial, or national level. Government policies, regulations, and programs impact their farms in many ways. Six participants described the importance to their long term sustainability of being involved in policy development and leadership activity in this area. The dairy farmers, Marvin, Linda and Ralph, described how important support by governments and society for the dairy supply management system was to their long term sustainability. They felt it was important for them to be involved in their dairy farmer associations, to stay up-to-date on issues, and to have input. Barry, Corey, and Margaret and her husband were all active in farm-based policy organizations as well. The strategy used by Margaret and her husband was to take turns in the executive positions of certain farm organizations so that they both have the opportunity to have input and provide leadership on critical farm policy issues.

### *Production and economics*

Linda and Ralph described the financial component as the most important component of the sustainability triangle. From their perspective, economics is two-sided. Not only must their farm be profitable to stay in business, but “If society does not want to purchase our food product, then we are out of business.”

At the time of the interview, they were focusing on significant financial investments to build and maintain their farm business. Other participants frequently related their production practices and farm economics to the increased costs that will be required to make the adaptations expected by society and governments. Linda’s and Ralph’s strategy was to be aware, to be able to see the direction they will have to take the business and “start saving money if an expensive new change is required.”

### *Human relationships*

Corey spoke emphatically about the importance of strong positive relationships among farming family members. He stated that when a farm business was based on family labour and input, it would not be sustainable if the relationships break down. He also expressed the importance of his wife’s happiness with their circumstances: “As long as she’s helping me, I feel I can do more” and “If I had to choose, I’d probably give up the farm before the family.” Along this same line of thinking, Marvin’s comments spoke to the special nature of a family farming business: “The farm is different because it does involve the whole family.” Thus, his wife has to enjoy farming as well as him. He talked about the big commitment, risk, high debt load, payments and lifestyle. He stated that if his wife’s views were “dramatically different, to be honest, I don’t think we would be farming.”

Both Corey and Margaret included the aspect of succession planning within their discussion on relationships. This was simply stated as making sure the farm is there for the next generation: to be sustainable through the generations. This included planning for the future for oneself, as well as for the children who might take over the business. An important aspect of sustainability was the transfer of knowledge. Margaret expressed the importance of a good working relationship with her father to be able to pass on his personal knowledge about the seed business and customer base. Without this transfer of knowledge, the business was vulnerable. Sustainability could also include planning for future employees. Margaret expressed the need that whoever might take over the workloads, they would need to be properly trained and working efficiently by the stage in life that she and her husband wanted to exit the business. Sustainability for Margaret meant that there was quality of life for now and for retirement.

Farm sustainability for these participants seemed complex and hinged on many aspects of the theoretical components of sustainability; economics, environment and socio-political. As Linda and Ralph stated: “Sustainability is not doing ‘patchwork.’ This runs into problems. Do it right, otherwise it could be the end of your business.”

***Question #5 – meaning of viability and sustainability to others***

Most participants spoke about how their farming parents were integral to their ability to enter farming, to learn from them many important aspects of the business, and to establish a workable succession plan for the transfer of the farm assets from one generation to another. Through prompting questions, participants also provided some commentary about their farming spouse/partner, children, and siblings. Spouses’ and partners’ ability to participate in a meaningful way in the farm business as well as their



satisfaction with the family's lifestyle were deemed critical to the long term sustainability of the farm business. Most of the participants had siblings but none had joined the farm business at the time of the interviews. However, there was a general recognition that the interest in the family farm by siblings had a major impact on the young farmers' viability.

### *Spousal support*

As Marvin farms with no business connection to parents or other family members, he indicated that they had little to no significance on his farming operation. He spoke about the role that his wife currently plays which, in addition to taking the major role in caring for the children, included bookkeeping, accounting, and decision-making responsibilities. He suggested their long term farm viability would include her specialization in management of the farm financial records and accounts as well as informed participation in business decisions. He suggested that his wife's opinion about sustainability might differ somewhat in relation to the social aspect: that she might find it more important to be able to get away for weekends and holidays. Corey indicated that family time would be an important aspect of sustainability with his spouse as well. Marvin indicated that eventually their young children would significantly influence farm viability and sustainability as the family began planning for their future. Similar comments were made by all farming couples who had or would be having children. At the time of the interview, Cathy had not had in-depth discussions with her boyfriend on the topic, but he was showing an interest in learning more about farming and was interested in helping out.

### *Parental support*

All participants who farmed with parents believed that, although there were some differences, their parents had a common understanding with them of what farm viability and sustainability was, and needed to be. Cathy believed her father shared similar thoughts, practices, and goals as her. His study of the principles of holistic management changed his “environmental thinking.” She described her father’s thinking: “Farming isn’t just about making money, but also about the impact on the environment, time off to enjoy other things with leisure time, and being a self-sufficient operation.” Cathy spoke about her mother’s strong and welcome influence.

Barry and Corey stated that their parents felt long term farm viability and sustainability meant that the farm continued on to the next generation. Barry stated that his parents believed that the farm should last for future generations and they “really want him to succeed. Therefore a good succession plan is in place for viability and growth.” Corey indicated that he and his parents both see a good succession plan as critical to long term viability but perhaps his parents are “a little less comfortable about taking on more debt and expanding because they need to secure their retirement income.” Margaret also indicated that her parents may have some differences of opinion related to farm size, expansion and the need to “take on more” but would make the changes “if the fit is right.” Linda and Ralph described his parents as being ready to transfer the farming operation to them. Cooperation to make this change was important to Linda and Ralph’s future. The couple indicated they enjoyed assuming the responsibilities. They talked about other farming families where the making of farm financial decisions, the transfer of decision-making to the younger generation, and/or the plan for the

distribution of the parents' wealth to their children had caused a lot of friction and could deter a younger couple's farming viability over time.

Margaret thought that her parents believed they had done a good job of farm sustainability. Part of this sustainability included "contributions back to the local economy." Margaret thought that her parents had developed a good local business and were respected as a source of information and knowledge: "They helped guide new Canadians to a Canadian style of farming." Barry, too, felt his parents expressed a pride in their work and their effort. It was during this question that Barry contemplated a new idea about farm sustainability; thinking perhaps that a 'paradigm shift' might need to take place. He compared the concept of land ownership in Canada with what takes place in Europe. He expressed the belief that in Europe, "you don't really 'own' the land. It gets passed on. You make a living from it."

#### *Sibling interest in the family farm*

Should Cathy's sister decide that she too wanted to come back to the farm, this would have a big impact on Cathy's future. Her parents had indicated that the sister would be welcome and since Cathy's farm business was connected to her parents' operation, she would be required to also accommodate the decision. Barry and Corey both felt that their siblings wanted them to succeed in farming. Barry stated that his sisters "have a good lifestyle and can still enjoy the family farm. They are satisfied with their share of the parents' wealth." Corey's comments were similar: "My brother and sister want the farm to stay in the family and be profitable so they can be assured of the value of their inheritance as well."

### ***Question #6 – competencies needed to achieve viability and sustainability***

I asked this broader question to give participants an opportunity to zero in on their particular area of interest or comfort. To try to ensure that I had data in all three areas (knowledge, skills, attributes), I asked additional prompting questions specific to each area. For purposes of this thesis, responses are grouped into each of the specific areas.

- ***What kind of personal characteristics or attributes do you believe you will have or will need?***

A variety of personal characteristics and attributes were identified by participants as important to achieving long term viability and sustainability. Two attributes were named by all participants, adaptability and enjoyment of farming. Other attributes mentioned were perseverance, patience, relating well to others, commitment, well rounded, leadership, life long learner, optimism, humour, and gratefulness.

#### *Adaptability*

Cathy believed strongly that willingness to adapt to change was the most important attribute for a farmer. She talked about the importance of keeping an open mind, being open to advice from others, and making changes that worked for her and her farming operation: “We’re constantly changing over time but not with crazy abandonment.” Cathy felt the ability to adapt was a learned attribute and talked about her father’s practice of change, not because he had to, but he did so “with good measure.” Margaret believed there would be tremendous changes in their seed business where they would move from being a retailer of certified seed to being a wholesaler for larger companies. She too talked about being able to develop a business model that would work for her in

order to be able to survive the change. Linda and Ralph talked about modernization and adaptation to new technology, production systems, and efficiencies. Marvin preferred to be “on the early side of adopting new technologies” and Barry spoke about the importance of “managing opportunities.” Corey saw a lot of “volatility” in farming and Margaret talked about “adapting to changing cycles and trends.”

### *Enjoyment of farming*

The other attribute that was named by all participants was enjoying farming. In Barry’s words, “you have to be keen in the first place, to enjoy it. If you don’t enjoy it, you might not be that keen at doing it.” Margaret expressed the importance of “doing what you are passionate about” and if there are parts of the farming business that you did not enjoy, hire someone else to do it. Similarly, Marvin stated that it was important to “know where I am weak and where I really need to draw on the expertise of others so that there’s not a blind spot.” Marvin also believed that a farmer should not only enjoy the production responsibilities, but that a farmer also needed to enjoy learning about other aspects such as agricultural policy, government regulations, new technologies, and marketing. Linda talked about her decision to quit her off-farm job and commit to new roles in the farm business. She did not like living on the home farm while not contributing to the workload. Even though she missed some of the routine of the off-farm employment, she clearly stated “you got to be happy where you are.”

### *Perseverance and patience*

A number of descriptors were mentioned for a characteristic that I have grouped as perseverance and patience. Participants also described aspects of being stubborn or

goal orientated. Marvin felt it was important to set goals and “plow forward and make it work.” Linda and Ralph’s perspective was to “stick to what you want.” Cathy experienced the patience that her previous employer took in teaching her to do her job well and saw this as an attribute that was important in her own farming business.

#### *Relating well to others*

Being able to get along with others was an attribute mentioned by many participants. This was reflected by Linda and Ralph when talking about the working relationship with his parents. Linda described Ralph as having a pretty “easy going personality” and Ralph talked about the trust between him and his parents. Similarly, Barry talked about “not staying mad” with his family members. It was important to be able to work through a fight quickly and get along. Barry talked about the importance of having good relationships with his neighbours, cooperating with them, and helping them when they needed it. He called this ‘Karma’: “If you do good things for other people, a lot of times good things will happen to you too.” Marvin extended the importance of getting along to having good working relationships with the many experts and specialists that he drew upon to help make his farm successful.

#### *Commitment to farming*

Barry, Cathy, Marvin, and Linda and Ralph all mentioned the characteristic of being hard working and having a commitment to farming. Linda and Ralph stated that a farmer needs to be “willing to put in the time, to get it done right.” Ralph felt that he was a bit of a perfectionist, as did Marvin. Marvin saw this attribute as contributing to his success: “and I think that is, in a large part, because I care about the details.” Cathy

talked about her need to do things her way and to her standards but she also talked about the importance of admitting when she was wrong. As a young female, Cathy felt she needed to have a “thick skin” and stand her ground with the agricultural product suppliers and buyers that she must deal with in her cattle operation.

*Other characteristics and attributes*

Other characteristics and attributes mentioned by participants included being well-rounded, being comfortable in showing leadership, being a life-long learner, and being optimistic. Having a good sense of humour was mentioned by Cathy as helpful in maintaining good relationships but also to help reduce stress when workloads were heavy. Cathy felt it was important to be grateful for what one has: “I have an appreciation for the farm because of all the people who did it before me. I’m part of something special and I’ll do my best to continue.”

- ***What types of skills do you have or will need?***

A number of different skills were identified by participants as important to their long term farm viability and sustainability. Business management skills were mentioned specifically during six interviews. Marvin described the importance of goal setting, planning, and putting the financial plan in place that he and his wife felt was important before seeking financial backing from their banker. This made it possible for them to be proactive and assertive in asking for and getting the financing that they needed. Cathy mentioned a number of business management skills that are needed. These included: (a) calculating your own cost of production; (b) proper management of your own commodity in terms of production and marketing; (c) completing farm records and accounts; (d) making decisions to manage risk; and (e) making good day-to-day

decisions related to production, workloads, and use of the natural resources. Margaret talked about the importance of financial skills, keeping track of the finances and being able to analyze the business. It was important to understand the business: “You can hire bean counters but if you don’t know where you are at, you’re in big trouble.” Cory spoke about treating farming like big business and “if you don’t have the skills, you need to find outside help to replace those skills.” Marvin, Linda and Ralph also talked about knowing what skills you need, and when you need to hire professionals to assist in managing the farm business. Marvin indicated that he uses professional help “in almost every aspect of our operation”. Developing technology skills was related to business management skills. Marvin emphasized the importance of being skilled in using the internet. Others talked about skills involved in new production technologies such as soil testing, global positioning systems (GPS), or robotic milking systems.

Human resource management skills were stated as important by all participants. The skill of working with people was described as important in a number of different settings. Margaret talked about the ‘people skills’ needed to be successful in the seed business: being comfortable with communications, telephone skills, building rapport with customers, and building rapport with networks of people. Linda, Ralph, Corey, and Barry talked about the importance of developing and maintaining good family relationships with his spouse and parents. Cathy and Marvin extended the importance of relationship skills with bankers, trades people, and other business connections.

Managing farm employees was mentioned by all participants. Cathy admitted that her skills in this area were weak and like Linda and Ralph, would prefer to have the workload managed by family members rather than hired labour. Corey’s experience with hired employees made him realize how important employee management was to the



long term success of his operation. He talked about learning what employees want and need so he can attract good employees from a competitive marketplace. Marvin believed that hiring people to work on his farm would require good training so they can do the job well enough to meet his standards satisfactorily. Corey smiled when he stated that “ if it wasn’t for the humans, farming would be fun and easy.”

Communication skills were identified as important by Barry, Corey, Linda and Ralph, and Margaret. Key to successful family businesses, they all mentioned that good communications amongst family members was important (a) to learn from one another, (b) to discuss and agree upon farm business goals, (c) to be able to work together during high stress situations and manage the stress and conflict. Skills in managing stress and time were mentioned by Corey, Cathy, and Margaret. Related to this, Cathy described how physical fitness is important to have the physical strength and endurance to do the job. Margaret stated that information gathering skills were important and Barry talked about the importance of having political acumen.

- ***What types of knowledge do you have or will need?***

All participants had achieved formal education levels at university or college. Beyond this, all participants talked about the importance of life long learning through non-formal and informal educational opportunities. Various learning needs were identified with a strong emphasis on business management knowledge. Other learning topics included new production technologies, new computer technologies, emerging trends, potential changes, agricultural policies, new regulations, and succession planning.

### *Formal Education*

All participants indicated they held a post secondary educational degree or diploma. In the 2006 Census, statistics show that ten percent of Canadian farmers had attained a university degree. Of the 2,180 with a degree, 12.3% were female operators and 9.1% were male operators. The formal education achieved by the participants in my study, was related to either the production or business management aspects of agriculture, or both. Generally, participants indicated that the educational content was useful but other aspects of the formal education were far more important. Barry admitted that his diploma in agriculture gave him the “nuts and bolts” but what was more important to him was that he “learned how to learn more.”

### *Nonformal education*

This life long learning paradigm was mentioned by Cathy, Linda and Ralph, and Corey. Cathy was encouraged by her father to take advantage of nonformal learning opportunities that came her way: “It was worth going as long as you’re always willing to learn new things. That’ll take you pretty far. If you’re not willing to put the time to learn those things and assume you always know it, you might be missing out on something that could help you.” Linda and Ralph connected the learning paradigm to farm profitability: “If you want to take the time and learn it and actually put it into practice, it will be a benefit. You can save money. You can make money.”

### *Informal education*

A major benefit of their formal education was learning the importance of networking. As Margaret described it, through networks, you can “go straight to the

well” for the latest and most valuable information. Cathy, Margaret, Marvin, Barry, and Linda and Ralph all talked about the valuable information they had learned while working in agri-industry prior to starting to farm. Marvin felt the knowledge he learned about optimum animal health and dairy business operations prepared him well for his own dairy business. He also understood that this would be knowledge that he would have to continue to acquire. Cathy expressed her gratitude for the knowledge that her work peers taught her in the area of cattle breeds, pricing cattle, and determining quality animals.

### *Learning needs*

Cathy’s comment that “everything is about management” reflects the numerous comments participants made about the importance of learning and improving their knowledge in farm financial management, financial calculations and planning, management accounting and bookkeeping, learning and using new technologies, marketing and learning about growing for the market. Her father’s advice was “to learn these well.” Linda and Ralph and Marvin emphasized the importance of learning good decision-making skills so they can know how best to invest in the farm business during times of constant change.

In addition to keeping abreast of the latest information and technologies related to beef production and marketing, Cathy believed she needed to learn more about bio-diesel production, repairing machines, and welding. Linda and Ralph identified calf management and feed rations as learning needs to ensure their production system remains sustainable. Other learning topics that were mentioned included the new

technologies such as field mapping, web-based market information, learning how to access information and surfing the net efficiently, and learning how to work together.

Learning about future trends and possible changes was mentioned frequently, oftentimes in relation to new regulatory requirements. Marvin stated that knowing what is going on in the industry and policies that are being set for the industry would be very important. Also thinking to the future, Marvin and Linda and Ralph expected they would need to learn more about succession planning as children grow older. Cathy and Corey stated they were still learning about succession planning as they work through the transfer of the farm from their parents to them.

#### *Question #7 – learning strategies*

These young farmers were actively engaged in a variety of learning activity. All participants spoke about the need for ongoing and future learning as well. They obtained information from a variety of nonformal and informal learning opportunities available to them. Learning strategies identified as key to their long term farm business viability and sustainability related to (a) being adaptable to the changing agricultural environment, (b) maintaining an attitude of life long learning, (c) maintaining a diverse network of people and organizations, (d) developing and maintaining good communication skills, (e) being able to establish priorities and long term goals, (f) ensuring that farming provides an adequate lifestyle, and (g) managing or eliminating farm debt.

#### *Nonformal information sources*

As Marvin stated, there is a “wealth of information available” and participants described the breadth and variety of nonformal learning activity they plan to utilize. All

participants indicated they would continue to take advantage of conferences, meetings, workshops and seminars that were offered locally, regionally, or provincially. Barry's perspective was that these types of learning events were "cheap" and well worth the registration fee. Marvin too indicated it was well worth his and his wife's investment of time and the cost of hiring relief milkers for them to attend. All participants saw the value of the opportunities for learning but also as a means to develop their contacts and networks. As Cathy put it, "You get free lunch and you may learn something in the day, and if you don't learn something from the course, you may learn something from the guy you're sitting next to. You know, you may develop a good business relationship with someone who wants to sell you his cattle next time."

Participants use both hard copy and internet-based information sources as well. Marvin, Linda and Ralph, and Margaret talked about enjoying industry magazines, newsletters, and journals. Marvin indicated he received and read seven to eight journals on a regular basis. Barry and Marvin made specific mention of their use of information available through various websites, services such as on-line marketing, as well as internet-based learning activities. Corey mentioned that availability of high speed internet remained a barrier for some in rural areas.

#### *Informal information sources*

Consistent with the variety of types of learning activity, participants plan to gather knowledge and skills from a variety of different sources. Barry, Marvin, and Margaret described the importance of the information provided by farm organizations and Corey emphasized those that encourage participation by young farmers. Agri-industry speakers, sales representatives, professionals, and government specialists were

all mentioned as good information sources. They said that parents and other family members will continue to provide important information and skills, especially during the ongoing processes of farm business transfer and succession and other farmers will continue to be informative. Linda and Ralph talked about learning from larger operations. Corey talked about getting different ideas from other young farmers and learning what they are thinking while Cathy spoke about learning from other farmer's experiences and mistakes.

#### *Key learning strategies*

Participants indicated that their learning must be related to some key strategies: (a) being adaptable to the changing agricultural environment, (b) maintaining an attitude of life long learning, (c) maintaining a diverse network of people and organizations, (d) developing and maintaining good communication skills, (e) being able to establish priorities and long term goals, (f) ensuring that farming provides an adequate lifestyle, (g) managing or eliminating farm debt, and (h) developing learning strategies for others.

#### Adaptability

Corey expressed what many participants spoke about; "agriculture is continually changing." Each participant mentioned the importance of being flexible and being able to adapt to external forces, changing trends and cycles, and society's expectations. Linda and Ralph's strategy was described as: "You can pick a direction, but you gotta keep it pretty open because there's always new rules, new regulations that change things. If WTO [World Trade Organization agreement] goes through and we lose part of our market, then ...." Barry and Linda and Ralph mentioned the importance of being able to adapt information to their personal farming situation. Marvin admitted that he was

fascinated by technology. He talked about the “mind boggling advancements” mentioning that he had already implemented computerized milk records, computerized production records and analysis, internet banking, as well as computerized barn ventilation and other equipment. Margaret talked about being able to adapt to new business structures, perhaps a more vertically integrated seed business. Corey and Barry both described the necessity to deal with farm size and farm labour through creative new cooperative farming arrangements with other partners or neighbours.

#### Ongoing education

Learning and the importance of keeping oneself up-to-date was mentioned by all participants. Barry and Linda and Ralph talked about keeping an open mind while Corey described the need to refresh and stay current. Marvin felt it was important to “recognize his limiting factors (bottle neck) and shore them up so the entire farm is not held back.” Margaret talked about the importance, to the success of both the farm and the seed business, of gathering a breadth of information to use in decision-making. Cathy commented that “you know, you are never too old to learn something new.” She emphasized the importance of having a willingness to learn and to absorb everything one can from their experiences. Marvin added that learning for him and his wife must be prioritized:

I’ve also made it a point, as much as I can, to get away and I have no problem paying someone to milk the cows for me to go to a meeting because, sometimes, I see that as the more important thing. I think farmers need to make sure that we’re not sacrificing the important things for the urgent things.

All participants indicated that ongoing long learning included the informal learning experiences of ‘learning by doing.’ This statement particularly applied to the day-to-day

farm experiences which influenced future decisions and to succession planning with the transferring of knowledge and skill to the incoming generation. Cathy commented that she “learned way more with hands-on than you ever learn in school.”

Three participants talked about their interest in additional post secondary education. Margaret contemplated pursuing a master in business since her role will be as the CEO of a major corporation. To date, she has not acted on this possibility. Cathy and Corey had expressed interest in further university education, but felt time constraints and distance were barriers to following through on this desire.

### Networking

All participants talked about the value of networking with other people and within farm organizations. Networking was considered important for learning and for taking action on issues of importance to farmers. Margaret stated that it was important to “get out beyond the local knowledge” and both she and Cathy valued their direct connections to their former university professors and fellow school mates who were working in agriculture. Margaret described the value of getting involved in research networks and activity. She got new knowledge, contacts, and learned about other businesses in other parts of the province or country.

Barry talked about individuals having unique information and connections and when everyone connects it “creates a huge network of getting things done.” Marvin expressed his opinion that from a regulatory standpoint, farmers have more “power” with a bigger collective voice rather than by being larger in size but fewer in numbers: “I believe it is an unhealthy mindset that by thinking that by elbowing everyone else out and just getting bigger and bigger and bigger, that you have more market power. I think that’s actually running ourselves into a bit of a corner.” Corey, Marvin, Margaret, and



Linda and Ralph related this collective voice to being members and attending farm events and farm organizations. It was through networks of farm organizations that Corey and others believe farmers can contribute to policy making, to help develop good public relations with the non-farming public, and to support the farmer's voice on issues such as environmental stewardship and modern food production practices.

Networking, as mentioned by all participants, included the development of good relationships with agricultural experts and professionals. Marvin described his experience in a dairy management group that provided learning, skill development, and advice from experts on farm economics and production. He also mentioned the importance of benchmarking his knowledge, skills, and practices with other farmers. He felt it helped to identify his strengths and weaknesses, to help monitor his farm progress by comparing with others and to be watchful, anticipating possible failures or problems. Margaret talked about the value of learning about other farm organizations in the research projects in which they participated.

#### Communications

Another important strategy is the ability to develop and maintain good communications. This included good communication amongst spouses who hold specialized information and responsibilities for the farm business. As Marvin and Margaret noted, they needed to listen and learn from their spouse. Barry, Corey, Cathy, and Linda and Ralph acknowledged that good communications about goals, decisions and day-to-day operations was critical to maintaining good relationships with their spouse and/or farming parents. Group discussion and interactive communication strategies with others was also important to gathering new ideas, problem solving, and

finding solutions. As Marvin described it, a traditional paradigm in his father's or grandfather's generation would have been to:

just work harder and slug through it. And to a degree that used to work. But now if there's a problem that's causing issues on the farm, just to work harder or be more determined won't necessarily fix it, right. If there's an actual problem that needs to be fixed, then you need to draw on other people as well.

#### Priority and goal setting

Setting priorities for farm business viability and sustainability was described as important by most participants. Margaret stated that farmers must deal with possible conflicting goals and values from governments and society in general. It was important to acknowledge these factors when setting priorities for the farm business. Marvin stated the importance of acknowledging that priorities change over time: "I think with timing, guys that never get off the yard, aren't going to be the guys that are farming 20 or 30 years from now."

#### Lifestyle

The importance of balance between the demands of the farm business, family, leisure and recreation was expressed in a variety of comments throughout the interviews. Linda and Ralph and Marvin expressed the importance of this strategy in long term farm sustainability. Linda and Ralph mentioned that farm business decisions need to enhance their family's lifestyle. Margaret's mother challenged Margaret and her husband to explore the reasons for business expansion to be sure that family balance was being considered. Even through his first few years of starting up, Marvin acknowledged his decisions must allow for "balance" and time off for him to be with his young family.

### Debt management

Linda's and Ralph's perspective summarized several comments made by participants regarding debt loads. A key strategy was to learn to make decisions that manage debt loads such that undue stress is not caused for family members. All participants stated their desire to be debt free (or nearly so) as a financial strategy.

### Learning strategies for others

In addition to their own learning activities and strategies, some participants mentioned learning strategies for their spouse and/or farm employees. Marvin felt that his wife needed to know "enough to be able to discuss and contribute to major decisions." Her learning strategies were to discuss and learn from her husband, to attend dairy conferences and club events, and to review the financial records generated from the milk management group in which Marvin participated. Margaret described how each spouse needed to learn about the other spouse's part of the business: his being production of certified seed and hers being seed sales and service. Both needed to learn from each other to make the two businesses successful. Each person also needed to participate in leadership roles as members, representatives, or as executives within farm organizations. Their strategy was to take turns over time because of the demands of a young family and their busy work schedules. Marvin described the importance of having a well trained employee who would be able to do the job to his standard. A possible consideration would be the herdsman training available through Assiniboine Community College. Margaret and her husband talked about creative business arrangements to attract quality employees to either of their two businesses. It was important to her that they are properly trained, skilled, and knowledgeable to be able to run the operations when she and her husband were ready to retire.

### *Question #8 – impact of external forces*

Forces, external to participants' farms, have a significant impact on their long term farm business viability and sustainability. The predominant external forces mentioned throughout the interview included public pressures, actions of governments, and rising costs of doing business.

#### *Public pressures*

Public pressure related to environmental stewardship, food quality and safety, and animal welfare was mentioned frequently in participant responses. Society's expressed concerns have and will continue to result in government action such as restrictions and regulations in agriculture. All participants expressed concern that some of this public pressure as well as government response may be based on lack of information, lack of knowledge about food production, or lack of science-based information. However, Marvin's response was that he'd rather be on the leading edge of impending changes than is a straggler.

#### *Government actions*

All participants felt government actions across the world will continue to have an impact on their farm viability and sustainability. For example the World Trade Organization negotiates policies and trade rules in agriculture. In addition, various governments in the United States make decisions on a regular basis that impact Manitoba farmers. Linda and Ralph and Marvin operate within a government structured supply management system. As Marvin stated, "top of our list is that we need to have a good supply management system for our own success and sustainability."

### *Rising business costs*

Changing costs for doing business are often out of the control of the individual farmer. Linda and Ralph and Marvin both spoke about the impact higher interest rates, possibly arising from a recent economic downturn, would have on their business. This is especially true since they were beginning farmers carrying higher debt loads. Cathy talked about the impact that high input costs would have on her operation. Margaret saw that increasing distances between farms, because of fewer farmers on the landscape, would impact their business costs but also the way they would have to do business. Related to this, Cathy, Corey, and Marvin mentioned that competition for land would impact their viability if they could not attain sufficient land to farm sustainably. Corey mentioned that world economics and competition also impacts his farming operation: “if we can’t compete, we can’t make money. Then we’re gone.”

### *Question #9 – impact of succession planning, others, off-farm income*

The volunteers involved in my pilot test interviews believed that succession planning, off-farm income, and influence of other family members was critical to farm sustainability. Consequently, this question was designed to ensure responses to these issues were elicited from participants. Succession planning and the impact of other family members were mentioned in a number of contexts throughout the interviews. From the perspective of these young farmers, thoughtful succession planning was considered integral to their long term sustainability. This related to the planning for their succession into the business as well as the future planning for their own children’s entry. Other family members impact tremendously on their farm viability in the areas of workload, transfer of knowledge and skills, financial support as well as work-life

balance. None of the participants believed that off-farm employment was a realistic option for maintaining the viability of the farm business. On the contrary, all participants felt that off-farm employment of one or both of the spouses would result in a less than thriving farm business because of the drain on the human resources: the loss of much needed knowledge, skill, energy, commitment, and time that is required from both spouses to run a viable and sustainable operation. Participant comments are interesting as writers of Manitoba Agriculture, Food and Rural Initiatives interpret Census data to suggest that off-farm employment is increasing: “In the 2006 Census, about 40% of Manitoba farm operators reported their main occupation as non-agricultural compared to 35.1% in 2001, suggesting that more operators are working off the farm” (Government of Manitoba, 2010c, p. 10).

### *Succession planning*

Good planning for the transfer from one generation to another was mentioned by all participants throughout the interview. Margaret’s statement provides a reflection common to everyone: “It’s huge, absolutely huge.” She stated that you must do it now and do it right to avoid issues when parents leave the business. She mentioned issues such as excess taxation, cash flow shortages, and loss of management knowledge and skills. She also talked about the continuum of planning. It is ongoing: “No sooner do you transfer from your parents, you plan for transfer to your children or successor.” Margaret’s and her husband’s future goal was to build up the business enough to be able to retire independently of the farm so the farm business could generate sufficient income for whomever succeeds them [children or hired manager]. Cathy described her parents’ philosophy for succession to the incoming generation. They did not believe that the

children should have to go into debt to finance the farm purchase and thus risk bankruptcy or low profitability for the “first twenty-five years of farming.” Cathy’s parents preferred to use strategies such as having the incoming generation pay for expansion and improvements, and by incorporating the business for distributing wealth fairly. This philosophy was reflected earlier in Barry’s comments in relation to a European model whereby each generation doesn’t really ‘own’ the farm, they just have the privilege of using the farm to produce an income for themselves, and then pass it on to the next generation. In order to accomplish a satisfactory succession, all participants felt it was important to gather information, attend learning sessions, and get good professional advice.

Cathy described how important it was to her that she was a third generation farmer. She was influenced by her father’s vision and goals and explained, “It’s a family business for a reason.” Because of this strong belief that the farm is a family farm, her sibling would be welcome. This would impact Cathy’s farm business plans dramatically. Corey talked about the importance that the distribution of parental wealth amongst siblings be fair, but this may not actually be equal in order for the farming sibling to be successful. He too expressed great pride to be able to transfer the farm to his child.

As was mentioned, all participants wanted their children to choose to farm but none would force them to do so. Barry’s philosophy would be for them to leave the farm for awhile, work elsewhere, and discover what they want to do as an occupation. He indicated that “there’s none of this half-hearted farming.” Children need to be committed to taking over the farm business. Margaret recognized that flexibility in timing for the children to make the choice would be required. It would also be important to determine their capabilities and to allow time for learning to do their job well. She emphasized how

important it was “for a person to be happy and contributing in the areas that they are skilled and comfortable.”

#### *Impact of other family members*

As mentioned in earlier questions, spouses or potential partners, parents, and siblings had significant impact and influence of the farm business. Often, the balance between the family and the farm was raised. One participant was unmarried at the time of the interview. She acknowledged that her choice of a partner/spouse will have a big impact on her farm business. A lot depended on how much responsibility each would shoulder for child care and for farm duties, especially during the fourteen-hour long work days in the spring. She acknowledged that it would be “a point of trying to balance all interests.”

#### *Off-farm income*

All participants had experience working away from the farm before their decision to enter farming. However, all participants stated that off-farm employment was not a choice for them now. In fact, they hold a strong belief that when one of the spouses works off-farm it actually results in the farm being less profitable. Barry described what he saw with friends who have off-farm employment. That job dictated what they could do in their farm business. It cost them money. Barry believed that “the priority has to be the farm. You have to make the farm pay all the time.” This was consistent with Marvin’s comment: “Whatever you make off the yard, you’re probably going to lose at home by not being there.” Corey stated that off-farm employment had no role on their farm: “I’d rather put all my time, and my wife’s time and energy, into the farm operation



and do it properly.” Marvin and his wife worked off farm before purchasing their farm. They had set a goal to buy their farm within ten years. The amount of money they were able to save dictated the size, type, and timing for their entry. They made the decision that for farming to work for them, off-farm employment would *not* be an option. Marvin indicated that they might not have entered the dairy business if they could not have put together a business plan that made it work without off-farm income. He expressed the belief that the farm, family, and the job would suffer if either of them worked off the farm: “We are not interested in that kind of farming where we need off-farm income to be viable.” Marvin stated that this would be a sign of a “sick business.” Margaret acknowledged that both she and her husband were well educated and would have lots to offer to an employer, if off-farm employment became necessary, but they had no interest in doing so. At the time of the interview, Barry’s wife was employed off the farm and maintained her professional competency and personal pride in her work. She loved the farm, did some work on the farm, and expected this might increase over time. Marvin also indicated that if his wife had a desire to find employment in her profession, it would not be until their children were older and they would not count on her income as a means of keeping the farm financially viable: “If you’re thinking long term viability, that [off-farm employment] might be a short sighted approach. It seems better to invest that time seeing how you can make the farm more profitable.”

### ***Question #10 – additional thoughts***

When asked this final question, participants tended to offer summary statements of philosophy or advice. They talked about the importance of goal setting, farm self-sufficiency, protecting the environment, and continuous learning. Personal and family

issues such as relationships and lifestyle were mentioned as important. The need for more farmers providing a collective voice rather than bigger farms with fewer farmers was posed as a real concern for farm sustainability in the future.

*Philosophies and advice for sustainability*

Barry commented, “Keep on doing what you are good at, and then learn to do things better.” Corey talked about emphasizing personal relationships and farm economics. Marvin described his belief that today’s trend of fewer and bigger farms, higher productivity, and fewer animals on the land may not be sustainable. With the growing size of operations, “the collective voice as farmers is smaller and this does not convert to market power or political power.” Linda and Ralph emphasized the importance of having common goals between spouses and farming parents: “It just won’t work if you’re not all on the same page.” They also talked about preparing a little bit and “take it as it comes. There are too many ‘what ifs’ to plan in any more detail. Make the operation as smooth and profitable now so it can carry through to the next change.”

Cathy, once again, called upon her father’s goals which included being self-sufficient, having no debt, always be improving, having leisure time, doing personal development, and addressing environmental issues. As she was challenged to look to the future, her father wanted her to answer three questions: “Do you do more work? Is there any point in doing more work? Can you afford not to?”

## Chapter Summary

In this chapter the data derived from six in-depth qualitative interviews of young Manitoba farmers is reported. Data from ten interview questions revealed participant perceptions related to their own long term farm business viability and sustainability. They described some of the attributes, skills, and knowledge they believed were important to future success. Participants also described some of their current and future learning strategies for attaining long term viability and sustainability. Several themes arose from the data which were categorized and analyzed in Chapter five.

## CHAPTER V – DISCUSSION, IMPLICATIONS AND RECOMMENDATIONS

### Introduction

In this chapter analysis, implications, recommendations, and conclusions as drawn from this study are provided. The analysis is structured to respond to the problem statement related to identifying what young farmers perceived as the personal characteristics required and the learning strategies necessary to achieve farm business viability and sustainability. Implications suggested by the data are offered along with commentary as to the possible use by potential stakeholders. Recommendations from this study take the form of considerations for stakeholders who actively participate in agricultural education, program development and delivery, policy making, and delivery of services.

### Analysis

Analysis of the data is designed to discover information related to my problem statements. The first section examines the characteristics of young farmers to determine what they perceive will make their farm business viable, or sustainable, over the long term. The second section focuses on what learning efforts or strategies young farmers intend to employ to support their potential for farm business viability and sustainability. Data arising from this study are compared to themes found in the literature. Thus, the literature was used to evaluate the validity of the young farmer voice expressed in this paper.

### *Characteristics of leading farmers*

A number of personal attributes and knowledge and skill sets identified by the young farmers interviewed in this study were perceived to be important to their long term success in the business of farming. Many are a reflection of ones found in the literature. Because they tended to be strongly supported by all participants, the themes on which I have focused my analysis are (a) adaptability to change, (b) passion for farming, (c) human resource management, and (d) work-life balance.

#### Adaptability to change

Participants not only recognized change as a reality, but they also talked about how they have accepted it and internalized change as their core way of thinking. Adaptation and change was demonstrated by each participant's purposeful change of his or her farming operation from that of the parents' business. Linda described her husband Ralph's vision for the future as one to modernize the operation. He was "always looking for new ideas and moving with the times." These young farmers were not satisfied to keep the *status quo* when they joined the operation. The enterprise was adapted to suit the person's interests, skills, and goals. Marvin started farming with his wife, and not with farming parents. They chose a business structure quite different than other dairy farms in the area. Each person reflected on how changing expectations from external forces such as the non-farming sector of society, and local, provincial and national governments, as well as the global marketplace will continue to drive changes. As an example, Corey saw the global marketplace critical to the viability and sustainability of his crop farm business, "if we can't compete, we can't, make money. Then we're gone." Marvin stated his preference as, "I'd rather be on the leading edge of these things than

kind of a straggler at the end.” These young farmers understood that the ability to adapt skillfully will be crucial to their long term farm business viability and sustainability. This attribute is supported in a number of studies that describe agricultural as undergoing transformational change (Ag Coach Insights, 2006; Best Practice Group, 2004; Maynard & Nault, 2005; Saxowsky & Duncan, 1998; Williams et al., 2007).

### Passion for farming

The attribute of passion for their career was expressed in a variety of ways by these young farmers. The love of farming as a business was expressed as an essential characteristic for long term success in the business. Barry spoke about choosing farming as a career, “You had to be keen in the first place to enjoy it. And if you don’t enjoy it, then you might not be that keen at doing it.” These young farmers believed that their spouse and other farming partners must have the same satisfaction and commitment to the farm business for it to be successful. From my interviews, participants seemed to be expressing that there was no *grey area* related to the decision to venture into the farm business. In fact, participants who spoke about young farmers who chose to work off-farm at the same time as running a farm operation were seen as having a lower chance of being viable over time. Young farmers in this study were adamant that they must be committed to the business full time to make the farm profitable. Marvin believed that farms who relied on off-farm employment as a strategy was a sign of a “sick business.” From his standpoint, “whatever you make off the yard, you’re probably gonna lose at home by not being there.” Diverting time, skills and energy away from the farm meant that the farm business was not being adequately attended to. Timing and use of resources are so tight there is very little room for mistakes and eventually, this diminishes the farm

family's ability for long term viability. Margaret was confident that both her and her husband could gain a good off-farm job because of their education and experience. But unless the farm business was in dire financial circumstances, neither would choose that option. This commitment to full time farming was extended to spouses and other business partners and there seemed to be a parallel to optimism for the future of farming as found in the literature. Farmers in other studies identified the importance of being highly motivated and satisfied with their career choice. The young farmers studied by Harvey and Wiebe (2002) expressed their satisfaction for their role "in a global society" (p.24). Garvin and Associates (1999) linked optimism to taking action for farm improvements and additional learning. Bamberry et al. (1997) highlighted the importance of parents, in particular mothers, in shaping the farming family's optimism for farming.

#### Human resource management skills

Young farmers in this study expressed the importance of successfully managing their relationship with the people around them: spouses, farming parents, siblings, professional experts, other farmers, customers, and farm employees. Of prime importance were the relationships with their spouse and with farming parents. Being able to communicate, manage conflict, and make best use of individual interests and skills within the farming operation were identified as critical to the long term success of their farm. Linda and Ralph emphasized the importance of having and working towards common goals, "It just won't work if you are not all on the same page." Margaret described her mother as her best friend and how together they were able to work out some of the communication and planning issues that tended to cause tension in the

family business relationship. Cathy's dad was her mentor. She described the positive interaction between herself and her parents in relation to decision-making, setting goals, planning for the future, enjoying each other's company, and laughing together. There was a recognition that both spouses in the farm business need to be actively involved. They need to be conducting work functions in which they are interested and in which they will acquire ongoing skills that contribute to long term farm business viability. This may be a learned understanding for those working with farming parents as, in all cases, both the mother and the father held important roles within the business. It was also strongly stated by Marvin, who was not farming with his parents, that his wife's role in the farm business was crucial, not only to their long term success, but also was integral to their decision as a couple to begin farming in the first place. Olson et al. (2003) found that not only are there strong indicators that women contribute to and lead in the family business, to not recognize this fact hinders the sustainability of the family business. Bamberry et al. (1997) recognized that complex interactions between people on and off the farm were very much part of good farm management. This acknowledgement led these researchers to recommend increased content from the social sciences in agricultural education. This is consistent with Olson et al. (2003). These researchers concluded that the success of the family business largely depends on how the family manages the overlap of resources, constraints, and processes between the family and the business.

Networking with other farmers and with professionals in the field of agriculture was considered an important activity and thus the skills to do so, if not a natural attribute, must be acquired. For example, Margaret and her husband both had the interest and skills to participate in farm organizations and even as leaders within such valuable



groups. Whereas Linda and Ralph acknowledged that communicating and participating within the structured farm organizational network was a skill that they, Ralph in particular, were purposely building as well as their confidence to actively participate. The stated importance of networking is consistent with the belief and practice of leading farmers interviewed in the best practices studied by the Best Practice Group (2004) and Ag Coach Insights (2006).

Skills related to managing employees was raised by all participants as important for business viability and would likely become increasingly so as their business advanced. These young farmers seemed to recognize that when hiring farm labour, it must be done with careful consideration for it to be successful. Corey talked about how he needed to better understand what was important to the employee, such as salary, benefits, and working conditions, for him to be a good employer. His goal would be to attract employees who would find working in his farm business as a satisfying experience and remain with the business for a period of time. Corey's comments suggest that it would require a different paradigm of thinking than the way other farmers may think about farm work. Margaret's businesses already employed people outside of the family. Successful employee management also included proper education and training such that non-family employees might be part of her succession planning and retirement from the business. In his dairy operation, Marvin valued the mutually beneficial relationship that he had with another dairy farmer who was available to manage the daily milking when his family needed to be away from the farm. Since the skills and abilities of employees in a dairy operation are critical to profitability, Marvin's goal over the long term would be to hire someone who would be well-suited to the business and would be willing to gain certification through formal herdsman education. Linda and Ralph and

Cathy were reluctant to consider hiring non-family farm labour. They expressed concerns about the ability to attract and keep good employees. However, as their parents exit the farm business, they realized they may well have to consider hiring outside help and acquire the knowledge and skills to make this successful. Studies such as those undertaken by Ag Coach Insights (2006), Bamberry et al. (1997), Best Practice Group (2004), Garvin and Associates (1999), and Olson et al. (2003) validate the importance of good human resource management skills to the success of a farm business.

### Work-life balance

Consistently, the young farmers in this study spoke about the importance of having a balance between farm work and family life. Long term sustainability for their farm family included making choices for family time on a regular basis, enjoying leisure and recreational activities, and managing stress and physical health. There was acknowledgment that if their spouse was not happy, over the long term, the chances of farm business success were reduced. In fact, Corey's perspective was that if he had to choose between the family and the farm, he felt he would leave the farm business. Marvin and his spouse demonstrated that their long term family goal was to farm together. They worked together for ten years to set up the resources to be able to enter farming within a business model that complimented their personal and family goals. This model allowed them to raise their young children without having off-farm employment and accommodated the skills and interests of both farming adults.

The young farmers in this study see one of the benefits of the farming lifestyle as being inclusive of their children and other family members. They all expressed their desire for their children, or future children, to choose farming as a career. They could

encourage this by having children interact with parents within the farm environment. Even at young ages children were exposed to their parent's work simply because the home is closely located to the farm enterprise. These young parents indicated their children would have farm chores (roles in the farm operation) that introduced them to the business at an early age. However, all participants indicated they would have to allow their children to choose farming as a career. Linda and Ralph spoke about not "forcing" the children to farm; they should be able to make the choice. Margaret acknowledged that one or more of her children may not have the aptitude or skills needed within their farm businesses. An important aspect of sustainability for these young farmers was the passing of the farm business to the next generation, but not at all cost. Corey's statement summarized this desire, "Like I say, sustainability, I'd like it [the farm business] to be available for Charlotte, my daughter." This expressed desire to include their children in the family business has support in the literature as being financially beneficial to the business as well. Olson et al. (2003) showed that by employing family labour, family business revenue increased.

Stress management was mentioned either directly or indirectly by all participants. Being able to manage long and stressful workloads, alongside family members, was mentioned frequently. These young farmers seemed to understand that their ability to farm over the long term would be much enhanced if they could find ways to laugh together, communicate with one another, and deal with conflict. Barry adopted the approach that he learned from his parents of "don't go to bed mad at one another." Cathy spoke about the importance of her physical fitness and well being as important to her ability to do the work required on her farm. All the young farmers in the study chose to take breaks from the farm business for leisure time, even if some of this leisure time

was also related to learning and networking at agricultural events. Leading farmers in the best practice study (Ag Coach Insights, 2006) made specific mention of the importance of personal health, taking time for rejuvenation, and family leisure and recreation.

Reducing stress was also related to managing debt loads. As new entrants into the business, they all spoke about having debt loads that caused them stress. When asked what their farm operation would look like in 20 – 30 years, most of them saw themselves with little or no debt. In practical terms, Cathy's parents did not believe in a farm business succession plan that required the incoming generation to be tied with paying off debt for the first twenty-five years in business. Linda and Ralph saw their ability to enjoy a healthy lifestyle being tied to their farm being financially prepared for possible costly expenditures that might be required because of the changing farming environment. This was tied to their goal to achieve a lower debt load.

There was a general awareness that managing one's time was an important skill and practice. Each spoke about workloads and the desire to maintain a balance for family and lifestyle. However, statements like the one made by Cathy about working fourteen hour long days while her labour force at the time included her father and mother seems inconsistent with her desire to run the operation without hired employees when the parents retire. Corey, too, expressed concerns about time constraints while at the same time considering farm expansion, dealing with challenges of managing employees, and expressing a strong desire for family and leisure time. While these young farmers seem to know about managing time in relation to achieving goals, they may be more dependent on their youthful energy and passion at this point in time rather than time management skills. Some family business owners/managers, studied by Olson

et al., expressed a similar perception that their businesses were more successful because they chose to make “time for their families” (2003. p. 660). However, results from this study show that the owner/manager must be careful. Skipping or delaying business tasks may be associated with less income and owner/manager overload and thus not an improvement for family outcomes. They did suggest that taking time from sleep rather than family time resulted in greater family functionality and thus greater business success. Managing their and their family’s time appropriately is an important business skill and could help them implement strategies that would successfully deal with workloads, decisions about business growth, and tied to this, decisions about whether to hire non-family employees.

Young farmers in this study frequently emphasized work-life balance themes such as the importance of family time, leisure, stress management, and time management. These themes are found as important in the literature, but are not as strongly stated (Ag Coach Insights, 2006; Williams et al., 2007).

#### *Adult education and literacy strategies*

Young farmers in this study found it challenging to look long term (20 – 30 years into the future) for their farming business. However in attempting to do so, they were able to describe some learning strategies they thought would be needed to be viable and sustainable over the long term. All participants talked about the importance of life long learning. Their strategies included nonformal and informal learning opportunities. Participants saw their future farming operation as needing to be flexible and adaptable to ever changing societal expectations and regulatory requirements, environmental farming practices, and global markets. These farmers seemed to understand that strategies in

dealing with economic, environmental, and socio-political components of the agricultural sector would be required for the long term viability and sustainability of their farm businesses.

#### Adult education strategies

Young farmers in this study saw life long learning as key to their success. The base for learning was built prior to entering the business of farming. All of them brought formal educational learning to their farm business. Value added benefits to the formal education included “learning how to learn,” as Barry expressed it, and the connectedness they got with fellow students and professors who continued to influence their farm skills, abilities, and approaches long after graduation. These young farmers also spoke of the value of what and how they gained knowledge and skills during their pre-farming work experience. Cathy expressed her deep appreciation for the knowledge relayed to her, as well as the patience that her employer and co-workers had with her in learning the business of cattle breeds and buying. Marvin’s experience as a dairy nutrition specialist provided a direct benefit in knowledge when he chose dairy farming as a career.

None of the young farmers interviewed in this study were contemplating more formal education, or at least not immediately. However, nonformal and informal learning would continue for the foreseeable future as a strategy necessary for long term viability and sustainability. Marvin’s comment about having a “plethora of learning opportunities” is well supported in the literature. Adult educational activity has been embedded in agricultural development strategies since pioneer days (Blackburn and Vist, 1984). A variety of formal, nonformal, and informal educational opportunities

continue to be offered by universities, colleges, governments, and agri-industry (Bamerry et al., 1997; Best Practice Group, 2004; Garvin and Associates, 1999).

All participants expressed their interest in taking advantage of a variety of learning opportunities which offered information about new production options, farm business management, new technologies, new understanding about government policies and regulations, and about leadership development within agricultural organizations. Information and skill development in the area of employee management and succession planning were specifically mentioned. Participants were well positioned to participate in a variety of learning modes as well. Conferences or seminars provided both new information but also opportunities to learn from a fellow farmer or build a relationship with an agricultural researcher that would prove to be beneficial some time in the future. Web-based information sources were frequently used by three of the young farmers, but all of them were active on-line learners for at least some types of information. Farm magazines and information sources were also used frequently to increase knowledge in production and policy topics. Learning from other farmers was important. They identified the importance of transferring knowledge from the farming parents. They also sought opportunities to interact and learn at the neighbour and community level as well as at the regional and provincial level with farm organizations. Barry and Marvin expressed their opinions that farmers who do not get off the farm, are less likely to make it in the long run.

This study generated a number of responses indicating there was a general awareness about environmental sustainability. However, my data do not show that the young farmers in this study had thought through learning strategies related to improving their literacy around environmental sustainability. Their learning strategies tended to be

focused on the economic component and to some extent the socio-political components of sustainability. Cathy indicated she and her parents had adopted a significant number of production practices specifically to “address environmental issues.” The other participants emphasized external forces that require adaptation but they did not describe strategies for on-farm changes. It appears that the key strategy for literacy around environment sustainability might be in the form of activism within farm organizations. By being actively engaged in farm organizations and learning about the emerging trends facing the agricultural sector, participants believed they were more aware of the complex social, political, and global environmental issues that might impact their farm. Participant statements may also indicate that their strategy was to try to influence the direction in which environmental policies were applied to agriculture.

#### Economic viability strategies

Farm profitability was foremost in the minds of these young farmers. Their focus was not only on their immediate circumstances, where some appeared to have invested and indebted themselves substantially to enter the farm business, but also for the future. As Corey described his perspective, farming is a business and it can't survive if it does not make a decent income for the farming family. Thus, many times I heard statements related to reducing or eliminating debt as one of their economic strategies. In addition, concerns were raised about the economic pressures on farm businesses to adapt farming practices as per environmental and socio-political expectations. Linda and Ralph's strategy was to make the farm operation as efficient and profitable as possible today and to reduce debt loads, thus allowing the farm business some room to accommodate additional costs that could not yet be defined but could be expected.



The young farmers in this study also related their economic viability to succession of the farm business: the transfer of the farm business from their parents to them and/or the transfer to their own children at a later date. They spoke about the importance of how their parents approached succession planning. Each young farmer described situations different from one another but described common useful experiences about using experts, attending learning sessions, having active family discussions and planning, and taking action on the transfer of financial, labour, and management responsibilities. They all stated their goal would be to engage in succession planning early as they anticipated the possible transfer of the farming business to their own children. Learning key skills and strategies would be necessary to enable the farm to remain sustainable into the next generation. In the literature, succession planning is identified as important to farm business success (Bamberry et al., 1997; Garvin and Associates, 1999). However, the perspective tends to be focused on the older generation of farmers and options they have to transfer the farm to their children.

#### Environmental and socio-political literacy

These young farmers showed a level of literacy around issues of environmental and socio-political sustainability. They showed awareness of society's expectations for farmers to safeguard the environment and to ensure the welfare of the animals in their care. Such awareness was emphasized by Saxowsky and Duncan (1998). These researchers stressed the importance of farmers to be able to understand, anticipate and respond to the expectations of "consumers, taxpayers, rural residents, other farmers, agri-business people, and rural business people" (p.13).

Young farmers in this study expressed concerns that such external pressures to adapt farming practices may not be based on scientific information but exist because the non-farming public does not understand food production practices. Never the less, all acknowledged that society's expectations will continue to have an impact on their farm business operation. They also understand that their long term sustainability will be dependent on their ability to understand these trends, to influence socio-political thinking around such issues, and be able to adapt to changes that will be required, and perhaps imposed, through government regulations.

#### Change management strategies

As the literature shows, managing change throughout out the history of western agriculture is not a new concept (Best Practice Group, 2004; Maynard & Nault, 2005; Saxowsky & Duncan, 1998). The young farmers in this study acknowledged this history and saw adaptability and managing change as key to their farming future. Each of them spoke about their vision of their farm 20-30 years into the future. None of them saw their farming business remaining static. Their strategies for learning included efforts to understand and anticipate what would be on the horizon and then develop decision-making tools and skills that would enhance the response for their farming operation. In Barry's words, "just keep on doing what you're good at and then learn to do something better." The importance of change management strategies is validated by the literature (Ag Coach Insights, 2006; Best Practice Group, 2004; Maynard & Nault, 2005; Williams et al., 2007; Wilson & Tyrchniewicz, 1995). Ideas for diversifying the farm to add additional farm income streams, adapting new technologies as they prove to be economically and environmentally advantageous, and exploring new models for the

structure of the farm business were all posed during discussions with these young farmers. The importance of the rural landscape and rural communities was included in their thinking about the future.

These young farmers challenged the thinking that to be viable, they had to expand the size of their farm operation, challenging the “bigger is better” thinking. Marvin approached it from a political perspective and questioned the influence and power that big farm operations have if there are only a few of them in business on the rural landscape. He suggested that larger numbers of smaller or medium-sized farming units have more voting power and thus more influence within the realm of socio-political sustainability. Barry’s thinking was to look at the scarcity of people on the rural landscape as being a barrier for young families to choose to live and farm. Neighbours, communities, and services are too far away. His vision included the sharing of workloads and expertise amongst farming neighbours to achieve economies of scale and market power and thus long term economic viability. Margaret’s experience already included a diversification of income sources from farm production, seed treatment and certified seed sales. She was already anticipating changes in these production and retail sectors that would dictate substantial changes in how she and her husband manage their businesses. She too was struggling with the temptation to expand the size of their land base but was considering issues related to work-life balance and not just analyzing the decision based on economies of scale. Cathy’s strategy was to learn well how to farm intensively and make the most out of her farm assets without compromising the environmental quality of her land, air, water, and animal assets. Her appreciation of the natural environment, that she says she has the privilege to enjoy on a daily basis, spoke

to her commitment for environmental sustainability while achieving farm economic viability.

Linda and Ralph, Corey, Marvin, Barry, and Margaret were choosing change management strategies that included involvement and/or leadership within farm organizations. They saw farm organizations as a means by which they can learn about emerging trends, threats, and opportunities as well as have a venue by which they could influence change to protect their family's investment.

### Implications

By asking young farmers to describe what has an impact on the viability and sustainability of their own farming business, personal perspectives were stated. The young farmers in this study seemed to understand economic viability along similar themes as those found in the literature. Farm management skills, use of new technologies and production practices, understanding the marketplace, and managing the farm as a business as mentioned by the young farmers in this study were consistent with what is identified in other studies as factors that lead to farm success (Ag Coach Insights, 2006; Bamberry et al. 1997; Best Practice Group, 2004; Garvin & Associates, 1999; Harvey & Wiebe, 2002). It appears that from current educational opportunities as well as work and life experiences, these young farmers are acquiring literacy around their economic viability.

Agricultural experts write about the importance of farmers attending to society's expectations for issues such as environmental protection, food safety, and animal welfare (Parliamentary Commissioner for the Environment, 2004; Saxowsky & Duncan, 1998). Emerging societal expectations have an important impact on agricultural

sustainability (Maynard & Nault, 2005; Williams et al., 2007). Agricultural policy also includes a focus on environmental sustainability within the agricultural sector (Agriculture & Agri-Food Canada, 2007; Wilson & Tyrchniewicz, 1995). Some views even suggest that a farmer's "social license to farm" (Parliamentary Commissioner for the Environment, 2004) could be revoked if these issues are not attended to seriously.

The young farmers in this study seemed to be highly sensitized to socio-political factors in agricultural sustainability and described specific examples of environmentally responsive actions they had taken on their farm. They seemed to understand that the decisions and responses they make within their business must be connected to the socio-political demands for agriculture. Not doing so could have the potential of jeopardizing their ability to keep on farming, although one can not assume that all young farmers have a similar level of literacy around socio-political sustainability. In my search for studies that describe the farmer's perspective, some farmers have identified this same importance (Williams et al., 2007). However, to date the farmer's perspective on environmental and socio-political sustainability, and in particular that of the young farmer, has not been studied as broadly as the farm economic component of sustainability.

It appears that literacy about sustainability and viability arises from an ecological system of awareness, learning, and behaviour. Using an ecological paradigm, a human development theory developed by Bronfenbrenner (Terry, 2006), as the lens through which policy, programs and services are developed for young farmers might prove an effective way of assisting them in achieving viability and sustainability. The ecological paradigm sees human experience as nested systems of physical, interpersonal, and environmental contexts (Terry, 2006). At the micro-system level (Terry, 2006) the

intimate family unit is very important to the family farm business. This is further verified by Olson et al. (2003) study on family businesses. The young farmers in my study identified flexibility and adaptability, work-life balance, stress and time management, passion and commitment to farming, family happiness/satisfaction, making a place for children, and communications as important aspects of sustainability. These characteristics and experiences take place at the micro-system level.

Sustainability was also related to the relationships and roles described by the young farmers within their family unit. Personal relationships with parents, siblings, other farmers, professors, agricultural experts and service providers were also highlighted as important. Identifying roles for family members and employees that suit their personal interest and expertise was expressed as an important strategy for long term farm business viability and sustainability. Strategies for family business sustainability recommended by Olson et al. (2003) included the orientation of family and non-family employees to their role within the business structure. Bamberry et al. (1997) and Best Practice Group (2004) also identified the importance of managing the human resources available to the farming unit by finding appropriate roles and functions. As did the young farmers in this study, these researchers identified the importance of using professional expertise when family time or skills were lacking. Use of professional expertise to assist in succession planning was of particular importance to the young farmers in this study.

This micro-system level of interaction and decision-making dominated much of the conversation in this study. This may suggest that the micro-system of a happy, well-functioning, well-informed farm family unit, along with positive interpersonal relationships, is seen to be a most important aspect of long term viability and

sustainability. This is consistent with the findings of Olson et al. (2003) whereby the success of the family business depended on family processes and how the family responded to disruptions: families with higher functional integrity were more likely to be able to resolve business challenges. Additionally, these findings are consistent with the professional practice framework from which I understand farming. The socio-ecological framework (Gibson et al, 2001) describes individual change within the context of social change. Change is very much influenced at the individual and interpersonal levels of interaction.

Through the socio-ecological framework, change is also influenced by interactions at the levels of social structure, policies, and systems. It appears that external forces, or the exo-system as described from an ecological paradigm, were also part of these young farmers thinking about and planning for long term viability and sustainability of their farm businesses. They identified external forces such as society's expectations that farmers increase their environmental protection of the land, air, and water. They experienced government regulations requiring changes in production practices related to environmental and animal welfare issues. They were aware that world trade agreements and global market requirements have a significant impact on their farm's profitability and viability. Two young farmer participants were operating within the government legislated dairy supply management system. They indicated that they understood the importance to their farm business sustainability based on continued government support for this system.

These young farmers understood that external forces have, do, and will continue to have a direct influence on their farm business. The young farmers in this study did not express a sense that they had no control over external forces, such as has been reported

in some studies (Bacon & Brewin, 2008; Garvin & Associates, 1999). Within their exo-system, these young farmers saw the necessity to interact with farm organizations and governments. They did so to be able to understand and anticipate what the near future might hold for their individual farm operation but also as a means of influence. Most of the young farmers in this study believed that taking on a leadership role within their farm organizations would allow them to accomplish these goals more effectively.

Participants in this study identified that knowledge, skills, and practices related to farm production and farm economics were important factors for farm business viability. For the young farmers in this study, learning about sound farm production and business practices started early, as a member of a farming family, was enhanced by employment experience prior to farming, and continued well into their own farming career. They described learning through formal, informal, and nonformal means on an ongoing basis. However, these young farmers seemed to believe that farm production skills alone do not lead to long term sustainability.

Participants shared some of their ideas about farm business sustainability for the agricultural sector in general. In looking into the future, participants were not convinced that a “bigger is better” paradigm would lead to long term sustainability. Young farmers in this study proposed that profitability could mean that farm businesses achieve increased productivity by adding new farm income streams through diversification such as developing and selling dairy genetics from the cow herd. They also proposed that profitability could be achieved by making more intensive use of human, financial, natural, and farm resources on a medium to smaller scale. Participants talked about working in cooperation with neighbouring farmers to achieve an economy of scale that provided skilled labour and purchasing power while supporting the individual medium



and smaller sized farm operations. Another of their suggestions was based on the “buy local” ecologically conscious consumer trend which is intended to support local food production and thus, local farmers.

Perhaps the socio-political driver for this thinking is related to the gradual depopulation of rural Manitoba. Demographic statistics (Statistics Canada, 2010) show population in areas of Manitoba, distant to urbanized centres, is declining. This trend continues while at the same time rural areas close to commuting distance to an urban centre are increasing slowly. Agricultural production and related value-added enterprises may continue to be the only businesses suited to operating in the more isolated areas of the province. This may be especially true if there is a trend away from off-farm employment as the young farmers in this study demonstrated. However, if all farm operations become mega in size with too few farm families living on the landscape, even families operating on a larger scale may become disillusioned. The young farmers in this study spoke about the importance of lifestyle and concern about their rural communities.

The smaller number of farmers that operate today could be perceived as having less socio-political power: the number of farm family members being only 5.5 % of Manitoba’s population and with only 26,600 farm operators identified by Statistics Canada (2010). Young farmers in this study were aware of the demographic of the farming population. They seemed to be prepared to consider alternative farm production and business structures that would help retain or increase the number of farm families living on the rural landscape. Additionally, they felt that steps needed to be taken to increase the socio-economic power of the farm population by focusing on increasing the farm population rather than just the size of farming operations.

## Limitations of the study

The young farmers interviewed in this study provided insight as to their personal perspectives on long term farm business viability and sustainability. They were also willing to identify the learning efforts and strategies that they believed would support their potential for farm business viability and sustainability. Participants were volunteer respondents chosen using a non-random sampling technique. In addition, the sample size was small and was not determined by the use of data saturation sampling method. The findings in this study can not be generalized as representative of all young farmers or a predictor of probability. Thus stakeholders interested in serving the farm population must be cautious in using the findings from this study. Such stakeholders may include educational institutions, researchers, governments, and agri-industry, all of whom strive to provide relevant policies, programs, and services for farmers. However, perceptions and ideas offered by the young farmers in this study about their farm business viability and for the sustainability of the agricultural sector in general should be heard.

In the first place, the voices represented in this study are of young farmers only and they willingly offered their perceptions of what they feel will bring their farm business viability and sustainability over the long term. Thinking within the context of long term viability and sustainability afforded the young farmers with a different paradigm in which to consider their farm business. Many of their ideas are supported by the literature and thus should be given serious consideration when stakeholders plan research, formal educational curriculum, extension programs, support programs, and/or farm policy.

It is to be noted that participants in this study would be characterized as *participatory* as they made choices to participate in organized learning events and networks. It is likely that this paradigm for participation makes recruitment for research easier. Reaching *non-participatory* young farmers would likely be more challenging and would require a different recruitment procedure than the one used in this research.

### Recommendations

The following recommendations drawn from this study are offered as concepts and ideas to be considered by agricultural stakeholders interested in providing young farmer educational programs and services; these being universities, colleges, provincial and national governments, agricultural businesses, and agricultural consultants and trainers. These concepts and ideas may also be useful in the development of agricultural research, policies, and programs.

1. Consider approaching educational services through an ecological paradigm where the micro-level of interpersonal relationships, learning, and behaviour change takes place. It is important to not minimize the importance of family issues and human relationships and the impact they have on long term farm business viability and sustainability. Ecological paradigm concepts have been well defined by Bronfenbrenner (Terry, 2006) and may provide a perspective in helping young farmers seek viability and sustainability literacy through a more family and relational-centered approach.
2. More studies specifically targeting young farmers are needed to better understand their thinking, their literacy about viability and sustainability, their needs, and their strategies. Farmers under the age of 35 make up only 10% of the

farm population but are critical to the future of farming in Manitoba. Academic researchers and government agents conducting studies should consider framing research within the family business sustainability model which locates the entrepreneurship of a business within the social context of the family (Olson et al., 2003). Consideration should also be given to identifying recruitment strategies that would permit the study of different subsets of young farmers such as those who do not readily participate in organized learning events or networks or new immigrant, Aboriginal, or commutarian young farmers from Hutterite colonies.

3. Consider investigating, to a greater depth, young farmer literacy about environmental sustainability. Additional research on how to present the broader, society-driven issues, as they relate to an individual farm operation, may also be useful. This may be particularly true for environmental sustainability as the young farmers in this study seemed to be somewhat lacking in their literacy in this area. They had general awareness at the farm level and had made some adaptations, but long term strategies for farm-based environmental sustainability had yet to be established.
4. Consider suggestions made by young farmers in this study about farm size. Retaining and attracting more farmers to the rural landscape brings more socio-political and voting power to the farm population than does the scenario of fewer farms of larger size. Heightened socio-political influence may very well contribute to the long term sustainability of farm businesses in Manitoba. Whereas the economic power of larger farm operations offers economic gain, it may be detrimental to sustainability in the long term if this is the only model on

the rural landscape. This concept is consistent with suggestions made by Maynard and Nault (2005) that sustainability of the agricultural sector will depend on a mix of farm types and sizes and that differentiation among small, medium, and large farms will be necessary. These researchers identified value in supporting small and medium-sized farms as well as the larger operations.

5. Consider studying and analyzing different approaches to farming systems suggested by young farmers in this study such as cooperative farming arrangements that build on individual skills and expertise but provide the economies of scale to compete economically in the marketplace. A reconsideration of the value that off-farm employment brings to the farm family income is also needed. These young farmers believed that off-farm employment decreased viability and sustainability rather than ‘making it possible for them to continue farming.’ The analysis of such new farming systems would build on some of the analysis offered to the Agricultural Institute of Canada (AIC) and to government (Williams et al., 2007; Agriculture and Agri-Food Canada, 2007), Such analysis would require innovative thinking and policies to be applied to services and programs such as agricultural insurance, farm financing, farm incentives, financial supports, taxation, statistical reporting, and educational activity.
6. Consider how the broader, society-driven issues are presented and discussed. The more personalized these issues are to the individual farm business and the impact on the farming family, the more effective transformational change can be encouraged. When young farmers see issues such as pressures from society, government policy and regulations, and global trade agreements that will require

adaptations within his or her individual farm business, it can be expected they will respond. They could be expected to respond by increasing their knowledge and understanding about the issues, by developing adaptation strategies that will contribute to their farm business viability and sustainability, and possibly, by becoming active at higher levels of leadership and decision-making. This may be particularly important for farm organizations which strive to serve and support young farmers. Participants in this study included networking and involvement in farm organizations that provided targeted learning and a legitimate voice for young farmers as one of their strategies for long term viability and sustainability.

7. Passion, commitment, and optimism were key motivators for these young farmers to choose farming in the first place and to be able to sustain their farming operation over the long term. Sometimes this optimism dwindles in the face of forces that seem too large, complex, or outside one's personal control (Bacon & Brewin, 2008). Presenting positive options and strategies that can help young farmers respond to such forces at their individual farm level may help in retaining their passion. The young farmers in this study seemed to operate a great deal at the micro-system level with family members and other inter-personal relationships dominating their paradigm. Decision-making and responses at this micro-level seem to contribute most to long term farm viability and sustainability. It is expected that young farmers who are motivated to deal with challenges will find strategies that they can use to ensure their farm viability and sustainability.
8. As ideas brought forward by young farmers in this study represent a critical demographic of farmers offer both practical and innovative options for farm

viability and sustainability, it would be important to be inclusive of young farmers in policy making as well as research, curriculum, and program development. It was also apparent in this study that considering the impact on all family members, in particular the spouse/farming partner, would be an important aspect of such activities.

## Conclusions

By conducting this study, I sought to understand what young Manitoba farmers perceive will make their farm business viable or sustainable over the long term. The young farmers in this study demonstrated they understood many of the aspects of farm viability and sustainability and their perspectives are supported in the literature. They identified personal characteristics such as adaptability to change, passion for farming, human resource management skills, and work-life balance as critical to the farm family and thus to the sustainability of the farm business. Understanding does not in itself lead to viability and sustainability. Young farmers in this study were also able to articulate various strategies they intended to use to achieve long term viability and sustainability for their farm. These included strategies for life long learning, for economic viability, for increasing environmental and socio-political literacy, and for managing and adapting to change. Once again, many of their strategies are consistent with what can be found in the literature.

The emphasis on human relationships, work-life balance, spousal roles in the business, and succession planning leads me to suggest that a useful model for studying young farmers' viability and sustainability is through the ecological paradigm lens. This may pose a challenge to agricultural stakeholders interested in providing programs and

services to young farmers. In this study valuable discussion about farm size, structure, and socio-political power is provided. The young farmers in this study make suggestions that are well worth investigating further.

Ongoing educational opportunities are highly regarded and the findings of this study suggest that young farmers should be targeted directly and that recruitment strategies should be identified that reach a variety of different types of young farmers. Because of the interest in life long learning by the young farmers in this study, this may be the best venue in which to help young farmers personalize environmental sustainability and thus be able to develop appropriate strategies for their individual farm operation. Particularly remarkable is the optimism and passion these young farmers expressed. Building on such a base and thinking creatively about the future of farming may well help stem the tide of farm and rural depopulation and help bring sustainability to individual farm enterprises in a new and hitherto unimagined way.



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## APPENDICES

### Appendix A – Consent Form

**Department of Educational  
Administration, Foundations  
and Psychology**  
203 Education Building  
Winnipeg, Manitoba  
Canada R3T 2N2  
Telephone (204) 474-9018  
Fax (204) 474-7564  
eafpdept@ms.umanitoba.



UNIVERSITY  
OF MANITOBA

### RESEARCH STUDY CONSENT FORM

**Research Project Title:** *Young Manitoba farmer literacy for long term farm viability*

**Researcher:** I am Debora Durnin-Richards née Durnin, a graduate student at the University of Manitoba, and this research will contribute to work towards my Masters thesis.

**This consent form, a copy of which will be left with you for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.**

The purpose of this research is to explore young farmer literacy about long term farm viability and sustainability. I am seeking to understand each participant's personal perspectives on the topic, what you know about what will make your farm viable over the long term as well as your strategies for learning both in the past and into the future. With the use of the emerging terminology around sustainable farming practices, I would like to understand better your awareness and understanding of what this means in relation to your vision for long term farm business survival and success.

The study will involve a series of questions that are intended to stimulate your thoughts, ideas and explanations about what you think will lead to long term farm viability, what your thoughts are related to sustainable agriculture, what you believe you need to learn, and how you will achieve this learning.

The study will consist of an audio-taped interview of approximately one (1) to 1½ hours in length at a mutually agreed upon location that will ensure your privacy and confidentiality. The thesis document and all written notes will use pseudonyms and fictional community locations to ensure anonymity. All audio tapes and written notes will be stored in a secure area. Tapes will be reviewed by the researcher and an assistant that has taken a pledge of confidentiality. The assistant will transcribe the audio tapes. This will take place in a private location. The tapes will be erased at the conclusion of the study and the transcripts shredded. To ensure anonymity, the thesis document and all written notes will use pseudonyms, fictional community locations, and will not link you with the farm event from which you were recruited.

**Your signature on this form indicates that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. In no way does this waive your legal rights nor release the researchers, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from the study at any time, and/or refrain from answering any questions you prefer to omit, without prejudice or consequence. Your continued participation should be as informed as your initial consent, so you should feel free to ask for clarification or new information throughout your participation from either the researcher or the course instructor:**

**Researcher:** Debora Durnin-Richards née Durnin at (telephone) or (email)

**Thesis Advisor:** Dr. Marlene Atleo at (telephone) or (email)

**This research has been approved by the Education/Nursing Research Ethics Board (ENREB). If you have any concerns or complaints about this project you may contact any of the above-named persons or the Office of Research Services, Margaret Bowman, Coordinator of Human Ethics at (telephone), or (e-mail). A copy of this consent form has been given to you to keep for your records and reference.**

---

Participant signature

Date

---

Researcher signature

Date

---

A written summary of this study's findings will be available by email or hardcopy upon request. Please indicate if you wish to receive a summary:

Yes \_\_\_\_\_ No \_\_\_\_\_

If yes, please provide your preferred contact address.

Postal address:

---

Email address: \_\_\_\_\_

## Appendix B – Interview Guide

### Interview Guide – “Young Manitoba farmer literacy for long term farm viability”

The following questions will be used to guide the 1-1½ hour long interview. I am hoping these questions will stimulate your thoughts, ideas and explanations about what you think will lead to long term farm viability; what your thoughts are related to farm sustainability; what you believe you need to learn; and how you will achieve this learning.

1. Please tell me about your farm operation.
  - size of operation – do you consider yourself small, medium, or large
  - types or variety of farm enterprises
  - are there other people involved (i.e. spouse, partner, parent(s), siblings, extended family, neighbour(s), investors, other)
  - length of time farming – by yourself, associated with family members or others
2. Please think down the road 20 to 30 years from now (i.e. your age, family situation, goals). Please describe what you want your farm and farm business to look like or be like 20-30 years from now.
3. Please describe what the term long term farm viability means to you.
4. Please describe what the term farm sustainability means to you.
5. What does long term farm viability and farm sustainability mean to other members of your family who may have a significant interest in your farm business success?
6. What are some of the knowledge, skills or attributes you have that will help you achieve your long term farm viability and sustainability?
  - what kind of personal characteristics or attributes do you believe you have or will need?
  - what types of skills do you have or will need?
  - what types of knowledge do you have or will need?
7. Life long learning includes all types of learning such as meetings, conferences, workshops, internet, books, brochures, field trials, demonstration plots, neighbours, family, courses, university. What are some of the learning activities you may plan to use over time to achieve your long term farm viability and sustainability?
8. Do you see or experience any external forces that are or will impact your own farm viability or sustainability?



9. Do you believe that any of the following has an impact on your farm viability and sustainability:
- succession planning?
  - off-farm income?
  - other family members (i.e. spouse, parents, other)?
10. Do you have any additional thoughts or ideas about our discussion today that you think are important to this topic?

---

If you would like to share further ideas about any of the above topics following this interview, feel free to send them to me by email at XXXXXXXXXX@XXX

Unless you indicate to the contrary, this additional information would be included as data collected for my thesis “Young Manitoba farmer literacy for long term viability.

Appendix C - Sample Letter to Organizations

**Department of Educational  
Administration, Foundations  
and Psychology**

203 Education Building  
Winnipeg, Manitoba  
Canada R3T 2N2  
Telephone (204) 474-9018  
Fax (204) 474-7564  
eafpdept@ms.umanitoba.



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OF MANITOBA

To: General Manager  
Dairy Farmers of Manitoba  
(email address)

From: Debora Durnin-Richards née Durnin, Graduate Student University of Manitoba  
(address)  
(email)  
(telephone)

Re: Request for assistance to access young Manitoba farmers

I am currently working on my Masters in Adult Education and carrying out my research this winter. My research involves interviews with young farmers. This letter is a request for permission to make contact with the young farmer presenters at the 2008 Dairy Conference. I would like to invite one of them to participate in my research *Young Manitoba farmer literacy for long term farm viability*. I am approaching Dairy Farmers of Manitoba because it seems to support the spirit of my research.

My research goes to the heart of what permits viability and sustainability of farming by investigating the perceptions of young farmers about these issues. In my research, the age category that designates participants as a young farmer is 35 years of age or younger. This segment of the farm population is at its lowest percentage of the farming population in history. Currently young farmers are only 10% of the farming population, a decline from 13.4% since the 2001 Census. This continued decline of young farmers participating in the farm and rural economies is alarming. This is especially so when it is

generally understood that securing the next generation of farmers is considered essential if society is to retain a viable, well structured agricultural industry.

I seek to explore a young farmer's literacy around his or her long term farm viability and sustainability. Literacy involves what people know and do to learn about a topic of importance in their life in order to achieve their goals, adapt to change and participate fully in the wider society. A review of research in which topics related to characteristics of leading farmers, good farm management practices, and farm sustainability provides the focus for my interview questions. I will be seeking to understand participants' personal perspectives and knowledge on these topics as well as their strategies for learning about long term farm viability and sustainability.

In order to explore individual perspectives, I am asking six young farmers to participate in an individual interview that lasts approximately 1½ hours. I will audio tape the interview session so my recall of their description remains true to their commentary. The knowledge to be gained through this study respects the assumption that the reality for each participant is subjective and depends on their particular context.

My research is approved by a University of Manitoba Research Ethics Board and is conducted under the supervision of my Thesis advisor. This process requires each participant to fully understand what the research is about and consequently to sign a consent form prior to participating.

Should you agree to assist me, I would ask that you make contact with the young farmers who presented at the Dairy Conference last December and if one of them is interested, make the appropriate arrangements for me to make contact with them. Feel free to share my email and/or telephone contact information with them. I am hoping to complete all the interviews by the end of April, if possible.

If Dairy Farmers of Manitoba is interested in receiving a summary of my research findings once they are complete, I would be more than happy to share them with you.

I thank you for considering my request and I look forward to hearing from you.

Yours sincerely,

Debora (Durnin) Durnin-Richards, PHEc

## Appendix D – Sample Recruitment Letter

**Department of Educational  
Administration, Foundations  
and Psychology**

203 Education Building  
Winnipeg, Manitoba  
Canada R3T 2N2  
Telephone (204) 474-9018  
Fax (204) 474-7564  
eafpdept@ms.umanitoba.



## UNIVERSITY OF MANITOBA

Date: March 17, 2009

Debora Durnin-Richards née Durnin  
(address)  
(email address)  
(telephone number)

To: (Name of participant)  
(email address)

I am a graduate student in the Faculty of Education at the University of Manitoba undertaking research for my Masters degree. As a participant at the KAP Young Farmers Committee, the KAP has given me permission to contact you and invite you to participate in my research on young farmers.

My invitation is to participate in an interview that would be approximately one to 1 ½ hour in length. I will be asking questions on what you believe will lead to long term farm viability for your farming business. I also want to explore what you perceive farm sustainability is and what learning strategies you believe are important to achieve your farm viability and sustainability.

The following provides a short summary of the study and the time and content expectation for study participants:

**Research Project Title:** *Young Manitoba farmer literacy for long term farm viability.*

**Researcher:** Debora Durnin-Richards née Durnin, graduate student in the Faculty of Education at the University of Manitoba completing thesis research.

**Purpose of research:** The purpose of this research is to explore your perceptions about long term farm viability and sustainability. I seek to understand your personal perspective and your knowledge about the topic, as well as your plans for learning activity that may help you achieve long term farm viability and sustainability.

**Project Summary:** The study will consist of an audio-taped interview of approximately one (1) or 1½ hours in length. You will be asked questions about: your thoughts, ideas and explanations about what you think will lead to long term farm viability; what your thoughts are related to sustainable agriculture; what you believe you need to learn; and how you will achieve this learning. This study is voluntary and you will be free to withdraw from the study at any time, and/or refrain from answering any questions that are posed to you.

I would like to arrange an interview time and location with you for the morning of March 30<sup>th</sup>, 31<sup>st</sup>, or April 1<sup>st</sup>, 2009. I would drive to the (community) area and we could arrange to meet at a location near you that would be convenient for the interview to take place. Please contact me at the above email address or telephone number to make further arrangements.

**Privacy and Confidentiality:** The study is confidential and your anonymity will be preserved. All audio-tapes will be destroyed at the end of the study. Pseudonyms and fictional community names will be used in all written documentation and your responses will not be linked to this event.

Should you have any questions or concerns about my request, you may contact my thesis advisor: **Dr. Marlene Atleo at (telephone number) or (email address).**

Yours sincerely,

*Debora Durnin-Richards, PHEc*

Debora (Durnin) Durnin-Richards, PHEc