

USING CONTRIBUTION ANALYSIS TO EVALUATE U.S. FARM LINK  
PROGRAMS: OPPORTUNITIES TO IMPROVE NON-FAMILY SUCCESSION OF  
THE 'FAMILY FARM'

by

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## **ABSTRACT**

This research examines 12 U.S. Farm Link Programs (FLP) using a type of program evaluation called Contribution Analysis (CA) to determine if FLPs are effective in facilitating farmland transfers between retirement-aged farmers without family successors and new farmers beginning their career. CA guided the data collection, which included web audits, interviews, questionnaires, and scholarly and grey literature review. An analytical framework in the form of a theory of change was developed, followed by analysis of the FLPs and their contribution to farm transfers. Although some FLPs experienced relative success, the lack of professional support systems, a heavy reliance on a self-serve Internet database, and the presence of various external conditions prevent most FLPs from facilitating substantial numbers of farm transfers. In order to conceptualize how FLPs may be more successful, a revised theory of change was developed, offering new perspective on the particular systemic conditions in which FLPs operate.

## **LIST OF ABBREVIATIONS USED**

CA – Contribution Analysis

FLP – Farm Link Program

PE – Program Evaluation

UK – United Kingdom

U.S. – United States



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## **CHAPTER ONE: Introduction**

### **1.1. Problem Statement and Study Purpose**

A Farm Link Program (FLP) is one type of program used in the U.S. to match retiring and beginning farmers in order to preserve productive agricultural land. FLPs, in the most traditional sense, attempt to facilitate the transfer of farms from a retiring farmer or landowner who does not have a family successor to a new farmer wanting to begin their farming career (Hubbard, 2006). FLPs may also assist with facilitating other types of partnerships or arrangements such as short or long-term leases. Also known by other names such as ‘Land Link’ (Hubbard, 2006), FLPs operate in approximately 30 U.S. states and regions, and are delivered by non-profit farming organizations, universities, or, in some cases, an outreach arm of government departments. FLPs aim to give retiring farmers real options in terms of the future of their farmland by matching farmers with land to sell or lease with new farmers who need land and guidance as they acquire necessary farming skills (Hubbard, 2006). The programs intend to keep farmland “in agricultural production while helping preserve rural communities and family farms in the face of ever-growing corporate interests” (Slack, 2012, p. 505). By facilitating matches, the hope is that farmers will be able to retire comfortably and beginning farmers will have land they can affordably and successfully farm, while limiting the loss of farmland to urban development.

This research on FLPs stemmed from a desire to investigate several interrelated issues at once: regional food security (Caldwell, Hilts & Wilton, 2007); adaptation of family farms to the growth of industrial agricultural production (Brookfield, 2008); farmland preservation in the face of expanding urban areas (Daniel & Bowers, 1997); difficulty for new farmers to acquire land (Lusher Shute et al., 2011); difficulty for aging farmers to pass on their farm (Stiglbauer & Weiss, 2000); and rural revitalization efforts (Halseth, Markey & Bruce, 2010). During the initial stages of investigation, matching services, joint ventures, and FLPs surfaced as practical answers to some of these pressing challenges. Some agricultural organizations have established FLPs and related strategies that support both retiring and beginning farmers wanting to engage in farm sales and transfers. Such programs can include support for new farmers to gain experience and

purchase farms, or facilitation efforts between both parties (Hubbard, 2006). In turn, the expectation is that successful FLPs can help ensure that land is protected from development, rural communities are maintained, family farms remain productive, and regional food security is enhanced.

While there is a small body of literature concerned with FLPs, the nature of this research is largely descriptive of what the programs do and how they function (Goeller, 2012; Slack, 2012; Hubbard, 2006; Strange, Thompson, Prosch & Johnson, 2003). Ingram and Kirwan (2011), however, write about the difficulties of these types of programs, and about the ultimate dissolution of an FLP in the UK, the Fresh Start program operated in Cornwall. These researchers suggest that it is nearly impossible for FLPs to predict or mitigate the ‘social factors’ that are inevitably at play within farm transfers, such as the lack of trust that retiring farmers may have for new farmers coming onto the farm (Ingram & Kirwan, 2011). This critique highlighted the fact that while the idea of FLPs seems like a practical solution to some of the issues mentioned above, there has been no assessment of the effectiveness of their efforts and the level of impact that FLPs have on the wide-reaching and systemic problems of farmland transfer in the U.S. The purpose of this research, then, is to evaluate FLPs and their capacity to facilitate various types of farm transfers, and to identify any barriers or challenges that may interfere with the success of this outcome. This insight is then used to recommend measures and program alternatives that might mitigate or alleviate these issues. My research offers a deeper critique of FLPs in terms of their ability to actually transfer farmland, and asks if these programs are truly useful within the context of farmland transfers generally.

## **1.2. Research Questions**

In light of the limited understanding of the potential and challenges of FLPs, this study aims to address the following research questions:

- 1) To date, have FLPs made significant contributions to facilitating farm transfers between retiring and new farmers?
- 2) If so, how are they doing this, and if not, what barriers exist that may limit their success?

Answering these questions necessitated the development of a novel framework to evaluate the FLPs and then an investigation of their effectiveness in facilitating farm transfers. A program evaluation technique known as ‘Contribution Analysis’ (CA) formed the basis of this framework and it will be discussed further in later sections. The research comprised web audits of FLP websites, and interviews and email questionnaires with FLP staff, which were used to reveal important characteristics of each FLP and how they function. This empirically derived information, combined with academic and grey literature, provided the bulk of the data that was subsequently analyzed using the framework based on CA. As very little research has been done in this specific area of inquiry, this work adds to the body of knowledge and to the broader context of farm transfers and succession efforts in general.

It must be noted here that there is a recognized debate in the literature about the value of small- and medium-sized family farms—the focus of most FLPs—in an age of global agricultural production and trade (Libby & Stewart, 1999). Some question the importance of maintaining and protecting small scale agricultural ventures when global food markets appear to be able to supply enough food, and reportedly produce it more efficiently and often more cheaply. As Caldwell et al. aptly state,

Some argue that because of low commodity prices, agricultural surpluses, inexpensive food imports and the overall pessimism that exists in certain agricultural sectors, that there is no point in preserving farmland and that its protection is no longer an issue. Conversely, others argue that the protection of farmland should be a national and local priority based on the need to protect both food production potential and the role of agriculture in the local and national economy (2007, p. 93).

This debate is fully recognized as contentious and complex. This research, however, is situated on one side of this debate—that family farms and local food systems have merit, can benefit communities, and are worth the investment in time and resources spent in trying to improve the conditions under which they operate (Lyson, 2007; Flora & Flora, 1990). FLPs are one such effort aimed at this end and are therefore worthy of investigation as to their impact on family farms.

### **1.3. Outline of the Thesis**

This thesis is divided into four chapters. This first chapter presents the background issues, introduces the research topic and research questions, and provides a brief literature review detailing key definitions and foundational concepts underpinning the research. This chapter also introduces each of the following chapters as well as study limitations.

Chapter Two details the methods used and how a novel evaluation framework was developed based on the preliminary data collection. This framework is then applied in Chapter Three as a way to work through an evaluation of the FLPs.

Chapter Three presents a discussion of the framework's utility as a valuable evaluation tool for FLPs, and then offers the primary evaluation of the FLPs. Several components of the evaluation are presented, including: how well the program delivery mechanisms work; what factors limit the effectiveness of the program delivery mechanisms; and how to re-conceptualize the approach to FLPs based on the research findings. CA is employed throughout the chapter as a way to both legitimize and guide the evaluation process.

Chapter Four concludes the research by summing up its main findings and offering several recommendations that may improve the functioning of existing FLPs, or support the development of a new FLP with the intention of helping to avoid the gaps and/or failures identified during the evaluation of existing FLPs. Some recommendations and suggestions for further study are included in this section.

### **1.4. Study Limitations**

There were four main limitations to this research study. The first was the relatively small sample of FLPs that agreed to participate. While there are now roughly 30 FLPs in various forms across the U.S., at the time of the research, only 19 FLPs were identified. From those identified, 12 agreed to participate and provide detailed information. Because there were only 12 participants out of a possible future 30, there are limits to the richness and depth of the data and the ability to make strong generalizations on the programs.

Secondly, it is not typical in program evaluation (PE) to include multiple programs in a single evaluation. This study used PE processes and approaches to provide structure and direction to the type of data that was collected and how the analysis was

conducted. It did not, however, adhere to the unstated assumption in the literature that evaluations should be conducted on a single program at a time. Although the research approach for this study was thoughtful and rigorous and served the purposes of providing answers to the research questions, it is an unconventional use of the PE method.

Thirdly, given that the research used many programs simultaneously to evaluate the type of program as a whole (FLPs), there was virtually no opportunity to work closely with individual programs to evaluate them in great detail. PE practitioners emphasize the importance of working closely with program staff and/or stakeholders in order to benefit from multiple perspectives. The absence of extensive input and feedback from each program prevented any one particular FLP from being assessed in-depth.

Finally, farmers were not part of this study; the study participants were solely staff people at FLPs, creating a clear bias in the data. It was beyond the scope of this research to seek out and include farmers' experiences in relation to FLPs. The complementary perspectives this could have offered would certainly have been interesting and valuable contributions to the research. However, due to the need to appropriately scope the research to something suitable for a two-year, Master-level thesis, it was decided to narrow the focus of this work strictly to the program operations and focus on staff as the participants.

### **1.5. Literature Review**

The literature review explains some key concepts that help situate this research study. The first section focuses on the 'family farm' and defining what that term means. The second section discusses the resilience and adaptability of the family farm in the face of challenges that many farms currently experience. The third section specifically discusses commercial and residential development of agricultural land stemming from the lack of a family successor on the family farm. The fourth and final section explores some of the challenges of succession planning to a family member, and how the challenges are compounded when a potential successor is not a family member. Collectively, the explanation of these concepts as explored in the literature review provides the foundation for the subsequent discussion of FLPs and their role in farmer retirement and succession planning, as explained in Chapter Three.

### **1.5.1. Defining family farms**

Both retiring and beginning farmers are significant focal points of this thesis. Family farms, though discussed less frequently, are implicated in virtually all of the discussions about farms and farmers in this study. It is therefore appropriate and necessary to discuss the family farm as an entity in its own right. To solely consider the farmers involved is to understand farmland transfer issues at a micro level only. Also focusing on the concepts of the family farm, its structure, and the significance of its role in the wider agricultural sector allows a macro level conceptual appreciation for the importance of the family farm within the agricultural sector, and the broader economy. Questions that do not necessarily have clear answers but are important considerations for an FLP, especially in the face of an ever-globalizing agricultural world are: what actually constitutes a ‘family farm’, how do family farms function, and what is the role that family farms are meant to play in the future of agriculture? What changes can and should be expected of family farms in the future and can FLPs help with these changes? These questions will be discussed in this section.

A reasonable question to ask is: if a retiring farmer transfers their farm to a non-family member, is it still a family farm? If it is not a family farm, would the change in status have any negative effects on the farm now or in the future, particularly when it is time to pass the farm on to another successor? For these reasons, being able to clearly define ‘family farm’ is crucial. As farms have changed drastically over the past century (Lyson, 2007), it is understandable that what once may have been a clear definition is now muddled with questions of size, staffing levels, ownership, management, and the role of fellow family members. In the literature, it has been acknowledged that there are indeed “problems of definition” when speaking of family farms (Brookfield, 2008, p. 108). It is difficult to define precisely what a family farm is and how many there are (Brookfield, 2008). Over the years, there have been various definitions with clear disagreement on what characteristics make up a family farm (Alsos, Carter, Ljunggren & Welter, 2011; Brookfield, 2008; Lawrence, 2007; Djurfeldt, 1996; Gasson & Errington, 1993; Pritchard, Burch & Hill, 1993; Gasson et al., 1989; Heady, Back & Peterson, 1953). Despite the differences, there has also been overlap in terms of criteria of ownership, management, and labour. While most definitions offered in the literature take

into account these three things, they tend to vary on the degree to which the family is involved. Earlier definitions (Heady et al., 1953) for example, considered a family farm one that was run by a couple and their family, with very little outside involvement from others. More modern definitions recognize that some family farms are much larger in size and while they may still be owned, managed and worked on by family members, they may also involve significant amounts of outside help (Darnhofer, 2010). A definition offered by Pritchard et al. (2007) has even modified the idea of family farm further to be ‘farm family entrepreneurs’, “where family units remain at the social and economic heart of farm ownership and operation, but in the context where they relate to their land-based assets through legal and financial structures are characteristic of the wider economy” (p. 76).

The United States Department of Agriculture estimates that there are roughly 2,113,615 family farms in the U.S. that comprise, nominally, 96 percent of all farms in the country (United States Department of Agriculture [USDA], 2010). The USDA defines several different types of family farms based primarily on income level ranging from “small family farms” to “Very large family farms” that gross over \$500,000 per year (USDA, 2010). Since ‘family farms’ can be very large and it would be impossible to manage large farms with only family help, the more current definitions presented here better reflect the current types of arrangements where families own, manage and work on the farm, but they also hire staff to help do the farming work. In sum, family farms are not defined by size, but rather by how they are owned and operated.

### **1.5.2. Resiliency and adaptability of family farms**

There has been concern expressed about family farms being enveloped by corporations (Lyson, 2007), but many rural researchers are not convinced that family farms are at such a high risk for disappearance altogether (Brookfield, 2008; Pritchard et al., 2007). Part of the fear may come from the fact that farms are consolidating and increasing in size, thus decreasing the number of farms overall (Statistics Canada, 2012), but this does not necessarily mean that family farms are on the verge of disappearance. Family farms are still the most common form of agricultural operation in North America and Europe (Brookfield, 2008), and even amidst large-scale industrial agriculture, family farms



persist and adapt to changing conditions (Darnhofer, 2010). Family farms operating in the capitalist market are faced with difficulties and complex factors that must be acknowledged and dealt with (Pritchard et al., 2007). For instance, farms are still under pressure to grow in size, but any growth would change the function of the farm in economic and operational ways (Pritchard et al., 2007). Growth, however, does not in itself change the fact that the farms largely remain family owned and run (Pritchard et al., 2007). Growth has been one form of adaptability to the changing agricultural product market.

Growth does not guarantee success, and it is simply inaccurate to believe that all farmers are successful if they are large. While some farms have adjusted to becoming large, some farms have adapted by reducing their reliance on the farm for income and have taken off-farm employment, and are not as closely tied to their land (Johnsen, 2004). These types of farms, known as pluriactive farms, vary in the amount of income they derive from farming versus a non-farming occupation (Pritchard et al., 2007). There is disagreement on what pluriactivity says about the state of family farming; some believe that taking off-farm employment is indicative of the slow demise and destruction of the family farm entity, while others believe that pluriactivity has a positive effect on sustaining or growing a small farm business (Aubert & Perrier-Cornet, 2009). Farmers who have off-farm employment may have stronger social networks, and have opportunities to contribute to rural communities (Darnhofer, 2010). Pluriactive farming is by no means a modern phenomenon; farmers have been adapting to their own circumstances for a very long time, farming part-time and working other jobs to supplement their farm income (Kinsella, Wilson & Renting, 2000; Jervell, 1999). Whether farmers are growing their farm, or reducing their size in favor of off-farm employment, they have demonstrated their willingness to adapt in order to continue farming.

### **1.5.3. Family farms, retirement, and selling agricultural land**

In the U.S., farmland occupies a high proportion of privately-owned land: roughly 40 percent and 914 million acres (United States Environmental Protection Agency [USEPA], 2013a; Nickerson et al., 2012; Daniels & Bowers, 1997). The total amount of

farmland, however, has been decreasing since the shift to industrial agricultural production (USEPA, 2013b) as large farms have dominated agricultural production and smaller family-run farms have gone out of business (Lyson, 2007; Hamilton, 2005). Each year up to 500,000 acres of farmland in the U.S. is redeveloped for non-farming activities; between 1982 and 2010, there was a total loss of approximately 24,125,400 acres (Francis et al., 2012). Although the rate of farmland re-development appears to be slowing (Farmland Information Center, 2014), the development that does occur is largely caused by: increasing prices of farmland; expansion of urban centres (Nickerson, et al., 2012); and retiring farmers being unable to sell their farm, which is partly caused by new farmers' inability to finance the purchase (Lusher Shute et al., 2011). Together, these factors create a complex environment for those working to preserve farmland.

As urban areas expand, prices for adjacent farmland increases (Keuthe, Ifft & Morehart, 2011) as this land becomes attractive for residential and commercial development. Between 2000 and 2010, U.S. farmland values doubled, affecting the cost of both renting and buying land (Lusher Shute et al., 2011). This increase makes it hard for a new farmer to afford farmland. As three quarters of new farmers do not come from a farming background (Lusher Shute et al., 2011), accessing land and capital is a major obstacle to starting their farming career (Inwood, 2013; Inwood, Clark & Bean, 2013; Lusher Shute et al., 2011; Ahearn & Newton, 2009; Mailfert, 2006).

Furthermore, development in an agriculturally focused rural area is known to take a toll on the productivity and profitability on the farms that remain (Williams et al., 2010). When there is development happening in the vicinity of an agricultural area, farmers often begin to see development as 'inevitable' and do not strive to make changes in their agricultural model to remain viable (Lindstrom & Bartling, 2003). "Farmers often feel discouraged from taking creative action to continue farming and are put in a financial situation where they need to sell quickly, causing prices to fall, which fails to contribute adequately to farmers' financial health and encourages continued suburbanization" (Lindstrom & Bartling, 2003, p. 2).

At the same time, many aging farmers do not have children willing to take over their family's farm (Scott, Cameron & Benjamin, 2010). Farming has long been a family business but is a difficult career. Competition from international food markets and

industrial agricultural production can make it difficult for small farms to be profitable (Lyson, 2007). As a result, many farm children are choosing other careers. Family-run, smaller farms are still plentiful—they make up the majority of U.S. farms (88%) (USEPA, 2013b)—but the future of many of these farms is at risk without adequate succession planning. The 2007 U.S. agricultural census reported the average age of farmers in the U.S. as 57 (increasing from 55 in 2002) with those farmers over the age of 75 increasing 20% since 2002 (USDA, 2007a). Traditionally, farms are passed on to the farmers' children when the farmer approaches retirement age, but farm children are increasingly more likely to pursue careers off the farm than take over the family farm business (Ball & Wiley, 2005). This results in farmers working well beyond traditional retirement age as they are often left without a successor (Amshoff & Reed, 2005; Ball & Wiley, 2005).

By 2030, it is estimated that one quarter of current U.S. farmers, or about half a million, will retire (Lusher Shute et al., 2011). Each will need to decide what to do with their farmland. In most cases, farmers will need to sell the farm, but to whom and for how much are serious questions. A farmer's decision will ultimately determine their quality of life during retirement, as well as their personal and family legacy (Keating, 1999).

Developers can and do offer high prices for some farmland and it is understandable that a farmer without a successor needing to finance their retirement would sell their land for this purpose. As noted, it is difficult for farmers to sell at a price that enables financial security in retirement, but is still affordable to a young farmer beginning his or her career (Pitts, Fowler, Kaplan, Nussbaum, & Becker, 2009). Therefore, as farmers age and are not able to sell their farm to a successor, one can expect an increased risk of farmland converting to urban or sub-urban use. These losses are typically irreversible and, notwithstanding the resurgence of urban agricultural practices in cities like Detroit (Colasanti & Hamm, 2010), farming will decline as a result. Research on how farmers may be successful transferring their farms will help inform endeavors seeking to enable farm transfers and prevent development.

#### **1.5.4. Understanding challenges to family farm transfers**

Farm transfers are fraught with complex and interconnected problems and challenges, making them difficult even within families. Understanding and anticipating the problems experienced within farm families are key foundations to an effective FLP such that it can help clients navigate the hurdles that are inevitable when transferring such operations to non-family members. The difficulties farmers experience have numerous root causes such as: not developing a succession plan; not communicating a transfer process to the successor resulting in differing expectations and needs of the two parties (Pitts et al., 2009); the affordability of the farm; and the financial concerns of the retiring farmer such as pensions and other taxation issues (Ingram & Kirwan, 2011). Indirectly, some conditions make farm succession more difficult such as the age of the farm owner, the size of the farm, the net worth of the farm, and the perceived ability of the successor to be a successful farmer (Mishra, Johnson & Morehart, 2003). These will be explained in more detail below.

#### **1.5.4.1. Communicating the succession plan and addressing opposing financial needs**

Farmers who create succession plans expect their farm to continue being productive (Higby, Ruhf, & Woloschuk, 2004). The process of developing a meaningful succession plan, however, can be arduous and lengthy. Succession plans, essential to a successful farm transfer, should begin well in advance of the time when the transfer needs to occur. It can be difficult for some farmers to initiate the subject of succession with a potential successor due to fear of losing control over their farm during the succession process (Pitts et al., 2009). Of course succession plans are not one-way streets. Farmers who truly want to see their farm continue must involve the successor in the planning, but meeting competing needs of the two parties can be very trying (Pitts et al., 2009). Most notable is the ability to negotiate the different financial needs of the two parties. Pitts et al. (2009) notes, “on the one hand, the senior generation needs to sell the farm at a high enough price to ensure their financial security. On the other, if the successor is to be able to operate the farm successfully, (s)he needs to be able to buy it at an affordable cost and avoid taking on too much debt” (p. 68). Farmers, even if they pass the farm on to their children, will expect to sell it to them and use the money for retirement (Zollinger &

Krannich, 2002). Other farmers may want to continue farming some of the time and only reduce their work on the farm rather than retiring completely (O'Neill, Komar, Brumfeld & Mickel, 2010), which can complicate the farm transfer. Being able to effectively and constructively communicate such logistical and financial issues is a major concern of the farm succession process and is relevant for both family and non-family successors alike.

#### **1.5.4.2. Timing of the farm transfer**

Determining the optimal time to begin a farm transfer is also an important consideration. Stiglbauer and Weiss (1999) have studied how timing affects the likelihood and ease of a farm transfer between generations. They point out that “a farmer who postpones succession will have more difficulties in finding a successor within the family since his children will have started looking for alternative employment in the non-farm economy” (1999). Even if the child finds other farm employment, or buys another farm, the farm operator is left with the choice of selling the farm to a non-family member, or closing down the farm business (1999). Beginning the process early increases the chances of passing the farm on to the desired successor higher (Glauben, Hendrik & Weiss, 2004), whether with gradual responsibility takeover as explained by Gasson, Errington and Tranter via their concept the ‘succession ladder’ (1998), or using another type of mentorship approach. The longer a farmer waits to involve a successor in the takeover of the farm, the less likely is it that it will be passed on (Stiglbauer & Weiss, 1999). Glauben et al. (2004) put this threshold at age 60.

#### **1.5.4.3. Succession and breaking ties with the land**

It must be recognized that farmers passing on their farm business are also giving up the land that they have farmed, and possibly lived on for their entire life. The emotional attachment to the land can make succession a particularly difficult process. Farmers often have a long-standing connection to their farmland and this may limit their desire to break ties to the land upon retirement (Mishra et al., 2003). Especially difficult are those transfers that will likely occur outside of the family; given this emotional attachment to the land, there may be a “strong desire to keep the business within the family” (O'Neill, et al., 2010, p. 2). The sense of ownership and stewardship of the farmland adds a

biographical element to agricultural land in that it is not simply another form of capital, but is connected intricately with the farmer's life, work and family (Alsos et al. 2011). Hesitation in letting go of the farm can hinder the succession process especially if the farmer must sell it to a non-family member.

Understanding the family farm and the prominent challenges and realities they face relating to farm transfers serves to contextualize the work of FLPs. There are many complicated factors at work that can affect the delivery of FLP services, and the effectiveness of those programs. These issues will be expanded upon further in Chapter Three.

## **CHAPTER TWO: Research Methods and Building an Analytical Framework**

### **2.1. Introduction**

The structure and approach to this data collection and analysis was heavily based on a Program Evaluation (PE) method known as Contribution Analysis (CA). Using CA inherently required deviation from a standard research approach (i.e. collect all data, analyze, discuss, and make conclusions). Instead, an initial round of data collection was followed by preliminary analysis, which provided the foundation for the development of a key tool in CA, the theory of change, and the creation of an analytical framework. Further data collection was then completed, followed again by analysis and a revision of the theory of change. Because this approach was somewhat unconventional, it necessitates explanation. Accordingly, the description of CA in abstract terms and the explanation of its specific application in the context of this research are delivered in tandem.

### **2.2. Contribution Analysis**

#### **2.2.1. Overview and use of CA**

CA is an analytical method that was developed by John Mayne in 2001 (Mayne, 2012) that aims to determine how much a program's activities can change a particular problem or phenomenon. It avoids the attempt to demonstrate that the program alone causes a particular outcome; rather, CA is based on the understanding that programs do not operate in a vacuum. CA accounts for the fact that external factors may have more of an impact on a program's outcome—i.e., the outcome that is observed—than the structured activities of the program itself (Shadish, Cook, & Leviton, 1991).

In the case of FLPs, any range of external factors—including land values, human relationships, location, trends in the farming sector, expectations of farmers or buyers, and a host of other powerful influences—may impact farm sales and transfers. FLPs may not be equipped to offer services that can effectively address all of these external factors. The real question, then, is what *do* FLPs currently offer that helps to improve the frequency and success of farm transfers and/or what *could* they offer?

CA was chosen as the analytical framework for this research because it provides a suitable structure for critically assessing the complex nature of farm transfers. Given its purpose to “reduce the uncertainty about the contribution the intervention is making,” CA can help develop insight regarding the particular contribution of FLPs in relation to the impact of other factors (Mayne, 2011, p. 54-55). CA provides a framework that makes use of information about the program and its outcomes, but also requires incorporation of data and research that address other contributing factors. Table 2.1 provides an explanation of the standard stages included in CA, how they are applied in this study, and how this research deviates from or expands upon the standard process.

Table 2.1: Stages of CA and applications

Stages of CA	Description of stage	Function	Application and deviations from CA in this study
1. Set out the attribution problem	Establish the research question and determine what we want to know about the program’s effectiveness.	Description	Applied as intended, no major deviation ( <i>Chapter One</i> ).
			Added a preliminary data collection stage to gather information about FLPs (web audits, and interviews/questionnaires) ( <i>Chapter Two</i> ).
2. Develop theory of change	Create a flow diagram of how the program is theoretically supposed to affect change.	Description	Extrapolated from preliminary findings to develop a general, cross-program theory of change ( <i>Chapter Two</i> ).
			Added a preliminary analysis stage to extrapolate themes that dominated theory of change ( <i>Chapter Three</i> ).
3. Gather information on theory of change	Collect primary and secondary data that gives information about the program.	Research	Applied by gathering more academic literature on identified themes dominating the theory of change ( <i>Chapter Three</i> ).
4. Assemble the contribution story	Put together the pieces to assess the validity of the theory of change.	Analysis	Applied by reporting on the findings supporting the identified themes in the theory of change ( <i>Chapter Three</i> ).
5. Gather more evidence	Determine where there are still gaps in the research and gather more data accordingly.	Research	Did not explicitly apply this stage.
6. Revise contribution story	Incorporate new data into the contribution story and reassess its relationship to the theory of change. Make final conclusions about the program in the form of a statement of contribution.	Analysis	Did not revise the contribution story. Instead proposed a revised theory of change with stronger theoretical basis based on the research findings ( <i>Chapter Three</i> ).

Note. Adapted from Mayne, 2008.



There are six main steps to CA as outlined in Table 2.1; the first two are mainly focused on describing the program and its functions, and the last four are focused on researching and analyzing the information available. Stage one involves establishing the research questions, which were stated in Chapter One. The following steps will be outlined in this chapter as they occurred chronologically in the research process, paying particular attention to the development of the theory of change<sup>1</sup>.

### **2.2.2. Preliminary data collection**

The research process involved various stages of data collection. The initial stage of data collection comprised Internet searches for Farm Link programs in the U.S. Using Google, search terms like ‘farm link programs’, ‘land link programs’, and ‘farm matching programs’ were used to first identify as many programs as possible in the U.S.. The Farm Transition Network website provides a list of all FLPs in their network, which was also used to identify FLPs.

Each program website was reviewed for information about how the programs work, history and success records, other relevant documentation or research, and contact information. The information about each program was entered into a spreadsheet and categorized based on those topics. Based on this information, a set of interview/survey questions were developed to draw out information not available online such as yearly budgets, staffing levels, and the relationship with the state government (Appendix A). It also included open-ended questions aimed at eliciting a more candid description of the matching process and its challenges as experienced by the program staff.

Following the development of the questions, an email was sent to a staff person at 19 FLPs requesting they either participate in a phone interview or complete a questionnaire, both of which used the same set of questions. Twelve staff people agreed to participate. Over a three-month period data were collected from these participants. Eight participants chose to complete the questions in writing and submit them by email, and four participants chose to discuss the questions over the phone. The phone interviews

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<sup>1</sup> The theory of change will be explained more fully in section 2.2.3., but it is essentially a flow diagram depicting how a program is intended to work and how its actions affect an outcome. It is an important component of CA.

were not recorded, but extensive notes were taken and returned to the participant for verification that the information was accurately captured. Some subsequent changes were made based on the participants' review.

The question responses were then organized into a series of tables in order to easily compare responses to each question. The data were reviewed for significant trends, commonalities, or stark differences between the programs. These primary data were augmented by existing academic and grey literature to produce the theory of change (Table 2.2). The data were also used during the development of the contribution story, which will be explained more fully in Chapter Three.

### **2.2.3. Theory of change**

Once the research questions were established, the next two stages were related to the creation and understanding of a *theory of change*. A theory of change is similar to the logic model used in other types of evaluation, but differs slightly (Anderson, 2005). The theory of change is typically a diagram used to explain the expected flow of the program and how each function of the program affects the outcomes (Mayne, 2012; Mayne, 2011; Mayne, 2008). It is usually advisable that evaluators work with program staff and stakeholders to develop the theory of change together (Sridharan & Nakaima, 2012), but as many FLPs were being evaluated collectively, working with FLPs to develop the theory of change was not practical or relevant due to the variances between the programs. Therefore, in this instance, the theory of change is based on the observations and a synthesis of understanding about FLPs—as a category—that emerged from a preliminary analysis of both the web-based and empirical data collected.

#### **2.2.3.1. Development of the analytical framework**

To use CA as an analytical framework there was a need to first develop the theory of change. In this instance the theory of change needed to reflect the conditions and context of the FLPs involved in the study; and thus, some preliminary data collection was required to support its development (see Table 2.1). Emerging from this theory of change were themes that provided the framework for the remainder of the analysis.

To be specific, this study investigated FLPs generally – not individual programs. Preliminary data supported a collective understanding of the various programs included

in this study and was used to create a theory of change that can be applied to FLPs generically. It is based on the elements that are similar throughout all FLPs; aspects that were unique to a particular FLP were not integrated in the development process. In essence, the theory of change explains the motivations behind these specific activities that are included—in some form—in the participating FLPs. It also points out plausible risks that programs may encounter that hinder their efforts. This theory of change is a synthesis of scholarly and grey literature, and web audits of the specific FLP websites. It is used in this study to help assess the functioning and success of the FLPs in general, but could also be used by individual FLPs to understand their impact and the risks to their success.

Table 2.2 reflects the resulting theory of change for FLPs. Each section of the table represents a specific stage in the ideal process of an FLP enabling a farm transfer. Each stage depends on the success of the previous stage, and this is reflected in the table. This theory of change outlines the flow that is supposed to occur within an FLP under ideal circumstances. There are certainly differences in approach and in specific activities, but because most of the programs proceed in a similar fashion, it is appropriate to generalize across programs.

Table 2.2: Theory of Change

Description	Assumptions	Risks
<b>Stage 1: External conditions that provide basis of FLPs</b>		
1. Farm children not taking over family farm business	<ul style="list-style-type: none"> <li>• A non-family member could take over the farm business instead</li> </ul>	<ul style="list-style-type: none"> <li>• Typical transfer process does not favour non-family succession</li> <li>• Farm is not appropriate for a beginning farmer</li> </ul>
2. Farmland is at risk of being sold for development	<ul style="list-style-type: none"> <li>• Farmers prioritize keeping their land in production</li> </ul>	<ul style="list-style-type: none"> <li>• Selling farmland for development is a preferable or acceptable choice for farmers</li> </ul>
3. Farmers need help finding a successor	<ul style="list-style-type: none"> <li>• FLPs can be a natural go-to place for farmers seeking help with a farm transfer</li> </ul>	<ul style="list-style-type: none"> <li>• Farmers can engage in farm transfers independently</li> <li>• Farmers seek assistance at another trusted organization</li> <li>• Farmers do not trust non-family members to take over the farm</li> </ul>
4. Beginning farmers struggle to find affordable farmland	<ul style="list-style-type: none"> <li>• FLPs can help bring new entrants into farming</li> </ul>	<ul style="list-style-type: none"> <li>• Farms remain too expensive to purchase despite efforts of an FLP</li> </ul>

<b>Stage 2: Program Outputs (what programs commonly offer)</b>		
1. Database	<ul style="list-style-type: none"> <li>• Database is effectively used by all interested parties (seller and buyer)</li> </ul>	<ul style="list-style-type: none"> <li>• Database is an inappropriate tool and/or is not well utilized</li> </ul>
2. Basic staff support / facilitation	<ul style="list-style-type: none"> <li>• Enough support is given to supplement the use of the database</li> </ul>	<ul style="list-style-type: none"> <li>• Participants need more help than what can be provided</li> </ul>
3. Print resources	<ul style="list-style-type: none"> <li>• Can provide relevant and appropriate guidance for farmers</li> </ul>	<ul style="list-style-type: none"> <li>• Print resources are not an acceptable and appropriate medium for farmers engaging in farm literacy</li> </ul>
4. Educational opportunities	<ul style="list-style-type: none"> <li>• Workshops, etc. are useful learning tools that augment FLP work</li> </ul>	<ul style="list-style-type: none"> <li>• Lessons are not applied, or do not reach the population necessary for effectiveness</li> </ul>
<b>Stage 3: Immediate Outcomes</b>		
1. Awareness of potential farm buyers / sellers	<ul style="list-style-type: none"> <li>• Farmers have used FLP information / resources</li> <li>• The use of the database has been successful</li> </ul>	<ul style="list-style-type: none"> <li>• Farmers do not use FLP information / resources to understand farm transfers</li> <li>• Database is ineffective at initiating potential matches</li> </ul>
2. Opportunities arise to arrange a mentorship or lease-to-own arrangement (non-sale partnership)	<ul style="list-style-type: none"> <li>• A potential match has been identified</li> <li>• Farmers are prepared to teach and begin relinquishing control</li> </ul>	<ul style="list-style-type: none"> <li>• Personal differences prevent farm transfer</li> <li>• Farmers do not have the required specialized knowledge or support to arrange a non-sale partnership</li> </ul>
3. Opportunities arise to negotiate a farm transfer	<ul style="list-style-type: none"> <li>• A potential match has been identified</li> <li>• Farmers are prepared to begin discussing a farm transfer</li> <li>• Farmers have access to appropriate professional assistance to help negotiate a transfer</li> </ul>	<ul style="list-style-type: none"> <li>• Personal differences prevent farm transfer</li> <li>• Farmers do not have the required specialized knowledge or support to arrange a farm transfer</li> </ul>
4. Better understanding of farm transfer process	<ul style="list-style-type: none"> <li>• Farmers have used resources or participated in workshops</li> </ul>	<ul style="list-style-type: none"> <li>• Farmers are not prepared to put new knowledge into practice</li> </ul>
<b>Stage 4: Intermediate Outcomes</b>		
1. Farm mentorships / lease-to-own arrangements occur	<ul style="list-style-type: none"> <li>• FLP was helpful</li> <li>• These arrangements would have been made anyway</li> </ul>	<ul style="list-style-type: none"> <li>• Personal or other issues prevented arrangements from occurring</li> </ul>
2. Farm transfers occur	<ul style="list-style-type: none"> <li>• FLP was helpful</li> <li>• Farm transfers would have been made anyway</li> </ul>	<ul style="list-style-type: none"> <li>• Personal or other issues prevented transfers from occurring</li> </ul>
3. Retiring farmers are financially secure	<ul style="list-style-type: none"> <li>• Farm transfers adequately provide farmers with enough money to fund retirement</li> </ul>	<ul style="list-style-type: none"> <li>• Farmers are not able to sell the farm for enough money to live comfortably through retirement</li> </ul>
4. Agricultural production is sustained in region	<ul style="list-style-type: none"> <li>• New farmers will maintain level of production as previous owner</li> </ul>	<ul style="list-style-type: none"> <li>• New farmers engage in smaller scale farming, possibly part-time</li> </ul>

Stage 5: Final Outcomes		
1. Farm preservation / development prevention	<ul style="list-style-type: none"> <li>• Farms transferred to new farming generation</li> <li>• Farm is not developed</li> </ul>	<ul style="list-style-type: none"> <li>• Farm is sold for development or left fallow</li> </ul>
2. Rural employment	<ul style="list-style-type: none"> <li>• Farming venture is successful and able to employ staff</li> <li>• Spin-off industries maintain viability</li> </ul>	<ul style="list-style-type: none"> <li>• Farms are too small to require extra staffing</li> <li>• Farms are unsuccessful businesses</li> </ul>
3. Farmland transferred to a new generation	<ul style="list-style-type: none"> <li>• Farms sold to people for farming purposes</li> <li>• Farmers retire financially secure</li> </ul>	<ul style="list-style-type: none"> <li>• Farms not transferred</li> <li>• Farms sold to people who choose to significantly downsize farming operations</li> </ul>

Stage 1 outlines the conditions that act as catalysts for the formation of many FLPs. As outlined in Section 1.1, FLPs are designed to respond to certain conditions that are present (first column), making assumptions about ways to address and improve these conditions (second column). The third column shows inherent and/or deeply rooted risks that will work against efforts of FLPs, but may not be easily overcome even with the presence of FLPs.

Stage 2 focuses on the actual day-to-day work done within the FLPs to address the external conditions set out in Stage 1. Specific activities are listed in the first column; the rationales of these are based on *assumptions* about how effective they will be, which are listed in column two. Elements that may hinder the effectiveness of FLP activities are listed as a risk. Essentially, the assumptions and risks stand in contrast to one another; either the assumption is correct and the task performs its intended function, or the risk becomes reality and the program outputs are not implemented as they are intended. The program outputs are arguably the most important portion in the theory of change—if the program outputs are ineffective, then in theory the final goals will not be reached.

Stage 3 steps away from the program activities and considers what immediate outcomes result from the program activities or outputs. These outcomes would occur only if the program outputs had been effective, and the main focus is that farmers are beginning to engage in a transfer process in different ways. The assumptions relate back to the effectiveness of the program outputs, and the risks of ineffectiveness. There is a direct correlation between the program outputs (Stage 2), and the immediate outcomes.

Stage 4 represents the intermediate outcomes of the FLPs. The main focus here is the finalization of farm transfers that had been initiated in the previous two stages. Again,

both the assumptions and risks are based on the expectation that the previous stages had been successful and operated as planned. For instance, if a farmer is able to transfer their farm and be financially secure in retirement, it is assumed that the FLP services were helpful and the risk that the farm would not be sold for enough money did not materialize.

Stage 5 reflects the broader societal outcomes that would result from successful FLPs. If FLPs are able to successfully reach this stage and the desired final outcomes become a reality, the problems identified in Stage 1 would essentially be solved. This theory of change, then, begins with several problems, outlines how an FLP would attempt to address those problems, what immediate and intermediate outcomes would ideally result from the program activities, and finally what would change because of this process.

Several topical themes emerged from the theory of change; these themes guided the second round of data collection and helped contextualize the findings. The theory of change, therefore, helped to frame the remaining research process. The themes were areas that warranted further investigation and attention based on their importance and relevance to the FLPs. In this instance, the theory of change clearly outlines how the activities of the FLPs interact and affect more wide-reaching issues related to farm transfers, and allows for the development of the contribution story, which will be presented in the next chapter, but is briefly explained below.

#### **2.2.4. The contribution story**

The contribution story is the culmination of a CA-based research process where the results are presented as a qualitative synthesis of literature and empirical data (Mayne, 2008). In this instance, this includes both the primary empirical data gathered through the completion of the questionnaires and interviews with FLP staff, as well as a review of relevant academic and grey literature. The contribution story uses the data to explain how the programs affect the observed outcomes, and acknowledges factors unrelated to the program that may also affect the observed outcomes (Mayne, 2001). In other words, the contribution story serves to validate, question, and explain the theory of change.

The observed outcomes are the result of a number of factors, and the purpose of CA—particularly the development of the contribution story—is to help us understand whether “the program is a significant factor in the occurrence of the outcome: that

without the program in place, the outcome would probably not have occurred or would have occurred in a significantly different way” (Mayne, 2001, p. 13). It is at this stage that one begins to assess the credibility of the program and the role it played in contributing to the observed outcomes (Mayne, 2008). Essentially, the contribution story identifies the evidence and the gaps in the evidence regarding the accuracy of the theory of change, and whether the assumptions made about a program’s effectiveness are accurate (Mayne, 2008). The contribution story, which is where the bulk of analysis occurred, employs “logic, critical thinking, and prior research” to test the theory of change (Mayne, 2012, p. 277). Specific to this research, the creation of the contribution story allowed flaws—if any—to be identified in how the FLPs function that prevented them from being successful.

### **2.2.5. Revision of the theory of change**

The development of the contribution story aids in clarifying what flaws may exist within the theory of change and highlights what modifications are required to better reflect current issues and realities. This revision is not part of CA explicitly, but for the purpose of this research, it was deemed necessary to undertake a revision of the theory of change so as to better apply the research findings and offer more robust recommendations for developing a successful FLP. The revision of the theory of change is discussed in Chapter Three.

### **2.2.6. Evaluating program ‘success’**

The following chapter will evaluate the FLPs based on the CA process and collected data described above. The evaluation will consider various kinds of ‘success’ of the FLPs. Determining what success means for the programs warranted a closer look at each FLP’s stated objectives of FLPs. Each FLP included in this research has stated their goals on their website; this information was tabulated and compiled (Table 2.3).

Table 2.3: Stated objectives of FLPs involved in this study

<b>Program</b>	<b>Farm transfer as a stated goal or service offered</b>	<b>Farming Opportunities and other non-transfer arrangements as a stated goal or service offered</b>	<b>Land Protection as a stated goal or function</b>
Virginia Farm Link Program <sup>1</sup>	X	X	Not explicitly, but the FLP is part of the Office of Farmland Preservation
Pennsylvania Farm Link Program <sup>2</sup>	X	X	X
Central New Mexico LandLink <sup>3</sup>	X	X	
Iowa State University Beginning Farmer Center: Ag Link <sup>4</sup>		X	
New York Farm Link <sup>5</sup>	X	X	
Center for Rural Affairs: Land Link Services (Nebraska) <sup>6</sup>	X	X	
iFarm Oregon <sup>7</sup>		X	
Colorado Land Link <sup>8</sup>	X	X	
New Entry Sustainable Farming Project Farmland Matching Service (Massachusetts) <sup>9</sup>		X	
New Jersey Farm Link Program <sup>10</sup>	X	X	
Land Link Montana <sup>11</sup>	X	X	
Ohio <sup>12</sup>		X	

*Note:* Citations for Table 2.3 listed in Appendix B

*Note:* Ohio data gathered from survey

Table 2.3 identifies three common objectives that FLPs may use to structure and deliver their services: matching farmers to facilitate transfers; matching farmers to enable farming partnerships or learning opportunities; and preserving agricultural land. Not all FLPs focused on all three objectives, but these data indicate that most FLPs have farm transfers as a goal, and all of them have finding other non-transfer opportunities for farmers as a goal. These data demonstrate that it is appropriate to evaluate the programs based on these metrics, which will be discussed in greater detail in Chapter Three.



## **CHAPTER THREE: Using Contribution Analysis to Assess the Potential of Farm Link Programs to Facilitate Farm Transfers**

*Though not yet submitted, the bulk of this chapter is intended for submission to a peer-reviewed journal, TBD.*

### **3.1. Introduction**

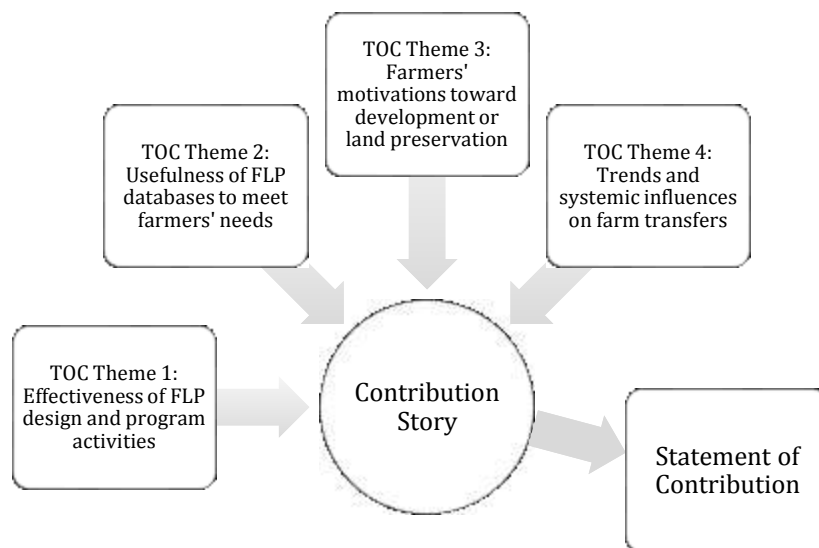
This chapter builds on the theory of change developed in Chapter Two. Themes are extrapolated from the theory of change and studied individually in order to create a contribution story. Following this analysis, the theory of change is revised in order to more accurately reflect the circumstances in which FLPs currently operate.

### **3.2. Methodological approach to analysis**

Empirical data collected from the FLPs and related external factors inform the analysis of the FLP operations in a number of ways. First, one must consider the day-to-day, ‘on the ground’ work that the FLPs do, and connect that to the number of farm transfers they have been involved with: this will be a key indicator of the effectiveness of their practices. Second, an investigation is required of the external factors, influences, and trends that are present and how they may influence the transfer process and in turn the success of the FLPs. This is important because, as noted in Chapter Two, FLPs do not operate in a vacuum and there are numerous influences on how well FLPs can and do function. Presented below is the cumulative work of steps four through six of CA as outlined in Table 2.1 of the previous chapter: developing the contribution story; finding more evidence; and revising the contribution story. In this instance, creating the contribution story enables one to identify the significant gaps in how the FLPs function, which contribute to their limited success. The end result of the contribution story is a *statement of contribution* (Mayne, 2008), which clearly states if and how the FLPs are currently able to contribute to land transfers. Emerging from this are several recommendations for possible improvements to FLPs that may help mitigate some of the operational challenges experienced by FLPs. Because the presentation of results and the analysis of those results are bound up together in CA, they are integrated in a single section here.

Key themes drawn from the theory of change were used to provide structure to the contribution story. This approach highlights the aspects of the theory of change that most inform the contribution story because CA provides only vague instructions about how to build the contribution story (Lemire, Nielsen & Dybdal, 2012; Delahais & Toulemonde, 2012). The contribution story consists of the exploration of four themes and their significance to FLPs as depicted in Figure 3.1. Certain assumptions and risks in the theory of change centre around particular issues believed to influence FLPs. By categorizing these underlying influences one can assess their nature and their influence on the functioning of FLPs. Once the themes that influence the theory of change are understood, they can be discussed in relation to the other, and how they collectively impact FLPs and farm transfers.

Figure 3.1. Theory of Change (TOC) themes and their relationship to the Contribution Story and the Statement of Contribution



Themes emerging from the theory of change include: a) the effectiveness of FLP design and program activities; b) the usefulness of FLP databases to meet the needs of farmers; c) farmers' motivations toward development or land preservation; and d) trends and systemic influences on farm transfers. These four themes are linked to specific FLP operational assumptions, upon which all program activities are based. Testing the theory of change is accomplished by discussing each theme in the context of how it affects the

FLPs, and the land transfer process. The cumulative assumptions associated with these themes (taken from Table 2.2) are challenged using literature and the findings from the interviews/questionnaires. Testing the theory of change in this way incorporates common practice found in other types of theory-driven evaluations, where the strength of a program is tested according to how well the components of the theory function (Mayne, 2001). The reason one assesses the components of a theory of change is because this “analysis either confirms—verifies—the postulated theory of change or suggests revisions in the theory where the reality appears otherwise” (Mayne, 2012, p. 271). The research seems to suggest that the factors that influence the success of FLPs are deeply intertwined, yet can fall neatly into smaller categories. These categories will be examined in isolation, and then discussed in relation to one another afterwards.

### **3.3. Results and analysis: How FLPs affect farm transfers**

#### **3.3.1. Effectiveness of FLP design and program activities**

Each FLP has unique characteristics, and one would expect these characteristics to influence FLP effectiveness in the specific context within which each operates. In the following section, each characteristic is identified and examined to understand its apparent impact on the outcomes of the program: primarily, the number of successful matches, transfers, and/or leases that resulted from program efforts. These include program budgets and funding, staffing, and program delivery mechanisms.

Of particular interest in this evaluation is the fact that three FLPs stand above the rest in terms of effectiveness and success as determined by the number of matches reported. New York Farm Link reported 75 transfers in total, with another 500 farmers receiving services related to long-term transfers; Iowa Ag Link program reported 68 farm transfers within the last 6.5 years; and iFarm Oregon reported 35 transfers, including long-term lease agreements. The other programs that offered a specific number of transfers reported fewer than ten, while some others could not provide a specific number because they did not collect that data. In light of the differences between numbers of matches, it is important to try and understand how the characteristics of these programs may impact the effectiveness of their programs

It should be noted at this point that some FLP staff explicitly mentioned that the number of transfers is not necessarily an appropriate way to measure program ‘success’ of the program, and that the program should be evaluated on its ability to help farmers establish any type of connection with other farmers. From Table 2.3, however, we can see that transfers are important to many of the programs, along with helping to establish other farming opportunities (apprenticeships, leases, land-share, etc.). Despite the comments by some FLP staff, it appears that the programs were created with the intention of supporting successful land transfers. The number of transfers is therefore an appropriate metric for evaluating success in this research. When FLP staff were asked how many transfers were made as a result of the program, several of them indicated that sales, and leases, and other types of connections defined by FLPs as transfers<sup>2</sup> were all satisfactory forms of ‘transfer,’ and provided responses to this question based on that particular criteria. Therefore, from here on, transfers will include sales, leases, and other forms of longer-term partnerships.

### **3.3.1.1. Budgets and funding**

FLPs rarely operate as the sole activity or focus of an organization. In most cases FLPs are delivered by organizations also involved in other initiatives, offering a variety of additional services to their respective farming clientele. Reportedly, the budgets of the FLPs are not always clearly allotted; when asked about the yearly budgets of FLPs, most participants could only provide an approximate dollar amount. The work of the FLPs often blends with other support offered by staff. That said, the budgets of the 12 FLPs surveyed range from none<sup>3</sup> to over \$120,000 per year. Most budgets were between \$15,000 and \$50,000 (eight out of twelve) and much of this money went towards paying program staff.

An important finding was that neither levels of funding nor source of funding correlated with the number of transfers. For example, a program that reported a budget of \$120,000 had zero matches associated with the program efforts, while the program

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<sup>2</sup> Some FLP staff included any type of connection made between farmers (e.g. long-term leases, partnerships, or land-share arrangements) within their definition of ‘transfer.’

<sup>3</sup> One program reported that it was operating at a loss – its organizational budget did not allocate any funds for the FLP work, but the work was being done by staff anyway.

reporting the most matches had a budget of approximately \$45,000 per year. A fairly young program also reported a relatively high number of matches while operating with a budget of only \$30,000. Nor did the source of funding correlate with program success. Funding came from three main types of support: government (both grants and regular departmental allocation), university funding, and private donations (endowments, grants, etc.); some programs charge a user fee to new farmers, though this was not typical. Retiring farmers were not charged a fee in any of the programs included in this study.

### **3.3.1.2. Staffing**

As most FLPs operate with a somewhat limited budget, resources are limited. Therefore, it is important to understand how effectively FLPs can operate within such constraints: what are the implications for the program? Staff levels at all the programs are minimal: three programs have one full-time staff only, and nine have only a part-time staff person who typically spends the balance of their time working in other areas or on other initiatives separate from the FLP.

Hubbard (2006) considered the role and function of staff in FLPs and how their day-to-day work impacted the FLP. The study identified different approaches staff take in their position with FLPs; some adopt a more hands-on approach in trying to facilitate matches (weeding out unsuitable participants, making referrals to other opportunities, or initiating matches between participants), while others convey information and opportunities but only provide matching help or other advice when requested. Hubbard makes the point that, “it is no surprise that these under-staffed programs facilitate matches as efficiently as possible by publicizing the information and resources, hoping their participants will utilize them well” (Hubbard, 2006, p. 20). The time and energy that is needed to help actively initiate matches is not always available to FLP staff.

This research echoes Hubbard, 2006: FLP staff reported being stretched very thin, having limited time and financial resources to keep the FLP functioning at even a basic level. Only three participants reported having a full-time staff member involved in facilitating initial matches or making the first connections between potential matches. Nine of the programs reported having a ‘direct referral’ type of program intended to

allow farmers to contact one another without the assistance of a staff person, although it is unclear if and how this actually occurs.

However, despite small staffing levels, some programs have been relatively successful (New York, Iowa, and Oregon as mentioned in section 3.3.1.), demonstrating that success and funding are not necessarily correlated. This finding suggests further investigation is needed to better understand the specific nature of those program feature(s) that are most commonly linked to success.

### **3.3.1.3. Program focus**

In assessing the structure of the FLPs, it is clear that programs generally operate on the same principles, with similar mechanisms, for their program delivery. This suggests that variations in the number of transfers may result from differences in the organizations that run the FLPs, or the influence of the other services offered by the organization on the success of the FLP<sup>4</sup>. These other services and programs might affect the functioning of the FLPs; if these services can help build and strengthen networks to support farmers, they may be helping to create better conditions for farm transfers in a broader sense. The types of additional services that FLPs provide can be divided into three categories. The first category noted is farmer education—in the forms of business planning for both new and established farmers, education on various farming issues (e.g. crop management, adding value), and/or providing to farmers print or online resources such as workbooks on relevant issues like succession planning. The second category is broader social and political engagement and includes the operation of farmers' markets or building consumer information and resources, policy development or government lobbying, and/or rural development work generally. The third category is related to land issues such as preservation, conservation, and zoning.

Of the three programs that declare the most number of matches to date, two of them have a heavy focus on the first category (education for farmers). The third high-rate match program has some focus on education for farmers, but also on broader social and

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<sup>4</sup> FLPs generally operate as one segment of an organization that offers numerous services and programs. All of the FLPs that participated in this research were run simultaneously alongside other programs and services offered by their respective umbrella organizations.

political engagement activities. None of the three are concerned with land conservation explicitly. So, while the programs that have had more farm transfers than others may have useful programming with an appropriate balance of foci, it is difficult to attribute those successes to one characteristic of a program that would be replicable by all FLPs.

Hubbard (2006) reported that additional resources to supplement the FLP service, as well as partnerships with other organizations, are necessary to effectively facilitate matching. That research also points out that specific characteristics of FLP programming cannot be linked with successful transfer, but instead to how well an FLP can encourage connections between key stakeholders, professionals, and supporters (Hubbard, 2006). Unfortunately, this requires staff capabilities that are often beyond what the FLPs typically provide (Hubbard, 2006). According to Hubbard, “the most frequently mentioned resource [needed] to bring into the process is an approachable, agriculturally savvy lawyer to help craft a solid business arrangement” (Hubbard, 2006, p. 16). However, this assumes that a match can actually be initiated through the FLP; only once a match has been made can the support then come from those lawyers who can help navigate the legal details and circumstances and help finalize a farm transfer (Hubbard, 2006). At the same time, however, Hubbard reports “almost all land link professionals stressed that a program’s overall success cannot be based on the number of matches facilitated—especially when fundraising—because matches do not happen very often” (Hubbard, 2006, p. 26).

This sentiment often emerged during this study, as participants explained that in addition to ‘making matches’ they focus on other activities like those mentioned previously (farmer education, social and political engagement, and land conservation); connecting farmers to ‘opportunities’ was the high priority for FLPs. Given that the organizations that run the FLPs vary in the services they offer and the kind of relationships they may have with their particular clientele, the FLPs may subsequently vary in their perceived importance and relevance with the farming community. ‘Matching’ may be one of many needs that an organization attempts to address, and the context surrounding each program can affect how successful attempts to match farmers are or how much attention is paid to that goal. Due to the differences between programs, there does not appear to be one universal formula for successfully facilitating a

significant number of land transfers. One program that self-defines as an FLP focuses mainly on farming as a business, and assisting with growth and management of the agriculture sector; another program focuses a great deal on agricultural research and education of farmers, offering workshops and resources; and another program works with the general population and advocates for local food and local food policies that benefit both farmers and consumers. The few programs that have experienced relative success among their counterparts clearly do not fit a single model.

It is unclear what the relative contribution is of FLPs to the overall number of farm transfers that occur each year, but it appears to be small. According to the USDA report, *2007 Census of Agriculture, Farm Numbers*, 291,329 new farms started between 2002 and 2007, making up about 13% of all farms in production during those years (USDA, 2007b). It is unclear whether these farms were transferred to family or non-family members, or whether these were entirely new farming operations starting up on previously unfarmed land. Despite these questions, however, given the small number of farm transfers made through the FLPs surveyed, it is clear that FLP transfers are responsible for only a minority of farm transfers or start-ups. The relatively small influence that FLPs have on the overall number of farm transfers raises the question of what wider issues may also be influencing low transfer rates among FLPs. This part of the contribution story suggests that the program designs as they stand may be inadequate as tools to influence the rate of land transfers. As the contribution story is built, a clear portrayal of what the FLPs do with limited staff and financial resources will underpin the overall understanding of the potential impact of the FLPs. The limited influence on farm transfers is fairly clear, but is this the whole story? The following three sections endeavour to unearth some of the specific challenges that may be linked to poor outcomes for FLPs, what additional factors may need to be considered, and what modifications could be made to improve the success of FLPs.

### **3.3.2. Utility of FLP databases**

The results of the interviews/questionnaires strongly indicate that FLPs place a major emphasis on the use of their database to initiate matches between participants. Many participants indicated that the programs were originally set up to use the database as the



main tool for gathering information about farm sellers and farm seekers. Since programs are generally minimally staffed and underfunded, participants indicated that these databases were intended to automate much of the work that is core to the functioning of the FLP matching process. The set-up of the databases differ in each case, but many participants indicated that they allow automated emails or contact information to be sent to either the farm seller or farm seeker under certain conditions and with varying degrees of anonymity; personal contact information is never available online publicly, and some programs screen participants and facilitate initial contacts between parties. The utility of this strategy is, therefore, worth examining as its function and the level of uptake on the part of users are likely significant factors in the success of the FLPs.

Participants reported significantly higher numbers of farm seekers than farm sellers in these databases. The databases typically hold contact information and details related to new farmer opportunities (land to lease/buy, mentorship opportunities, etc.). Several went so far to say that the farm seekers who drive the program, appearing to be the more eager of the parties in terms of initiating connections. Only two programs directly encouraged retiring farmers to be the main drivers. Goeller (2012) also noted a disproportionate number of farm owners (fewer) and farm seekers (more) listed in FLP databases despite the fact that it is usually free for farm owners to register with the FLP database (whereas farm seekers are often required to pay a fee to register). The lack of uptake of the program database by retiring farmers signifies a potential problem to be addressed, as it suggests that a computer-based database might be a barrier to uptake by retiring farmers. It is possible that retiring farmers are less interested in engaging with an FLP that requires submission of an online form to begin the matching process. If one considers the nature of Internet usage by farmers generally there are inherent issues associated with embedding a computer interface into the main structure of FLPs. These are discussed further below.

#### **3.3.2.1. Aging farmers and Internet use**

The body of literature that explores Internet use by farmers is fairly homogeneous in its observations and conclusions despite differences in geography or farm commodity of the study populations (Charatsari & Lioutas, 2013; Briggeman & Whitacre, 2010; Stenberg

& Morehart, 2007; Mishra & Park, 2005; Howell & Habron, 2004). While most farmers do have a personal computer (Briggeman & Whitacre, 2010), the scope and scale of Internet usage depend predominantly on things like farm size (Briggeman & Whitacre, 2010; Stenberg & Morehart, 2007; Mishra & Park, 2005; Howell & Habron, 2004), income levels, education, and age (Stenberg & Morehart, 2007).

Computers are fairly well used for business-related tasks such as accounting, financial statements, record-keeping, and word processing (Mishra & Park, 2005). As of 2004, however, the rate of adoption of regular Internet use for daily farm business tasks was much lower than that of other businesses of similar size; more recent data is not available (Warren, 2004). A survey of the literature suggests that activities such as email, on-line banking, or purchasing/selling goods are minimal and certainly not used universally among farmers (Charatsari & Lioutas, 2013; Taragola & Van Lierde, 2010). This is not a product of limited rural access: as of 2011, about 60% of rural residents had access to high speed Internet compared to 70% of urban residents (United States Department of Commerce [USDC], 2011). Although Internet use by farmers is gradually increasing (USDA, 2013), this is likely due in part to new farmers who used the Internet as younger adults, and are carrying that behavior forward as they age (Stenberg & Morehart, 2007). Limited Internet use amongst farmers—particularly amongst older farmers—should not necessarily be seen as a problem as long as the Internet does not immediately become a “default medium for knowledge transfer, commerce, etc.,” thus leaving some farmers at a disadvantage (Warren, 2004, p. 380). There are legitimate reasons why Internet adoption and use has been slower among aging farmers, and understanding these issues is key if FLPs are to properly address farmers’ information needs.

It is not surprising that age is a major indicator of whether a farmer will be familiar with the Internet and make use of it in his or her farm operation. Quite simply, “older operators are less likely to adopt the Internet” (Briggeman & Whitacre, 2010, p. 573). Studies consistently show a clear negative correlation between age and Internet use in farmers’ business (Stenberg & Morehart, 2007; Howell & Habron, 2004). This is not to suggest that farmers do not have computers, or the Internet, but instead that in the context of their farm business, the Internet may not be a tool that is used (Stenberg &

Morehart, 2007). Age, then, is one plausible explanation for why the FLP databases are sparsely populated with farm owners—farmers on the brink of retirement age will be less likely to use the Internet for anything more than basic functions.

### **3.3.2.2. Personal security on the Internet**

Personal security on the Internet is also a concern for older farmers. The concern that personal information will not remain secure on the Internet makes some farmers cautious to adopt it (Briggeman & Whitacre, 2010; Warren, 2004). In comparison to other population groups, farmers are more concerned about Internet security than most other people (Stenberg & Morehart, 2007), although this may be simply related to their own lack of familiarity with the Internet (Briggeman & Whitacre, 2010). This concern was noted by FLP staff, who reported that it is important to take extra care to protect names and contact information in order to alleviate the discomfort of older farmers about providing personal information to an online database. FLPs must not only ensure that the farmers' information is secured and protected, but must also convince the farmers that this is the case.

### **3.3.2.3. Perceived usefulness of the Internet**

Regardless of demographic, the process of learning and adopting a new technology must demonstrate that the benefits of using the new technology are greater than the effort required to learn and use it. If the benefits are “lower than the effort, it [will] not be used” (Taragola & Van Lierde, 2010, p. 374). This concept builds on the Technology Acceptance Model work of Hubona and Geitz (1997). They suggest any type of technology adoption process requires the potential adopter to first perceive the technology as useful and easy to use. This determines the adopter's attitude toward the technology, which in turn drives his or her intention to use it. Intention is followed by the actual use of the technology (Hubona & Geitz, 1997). Therefore, in the case of a farmer, he or she must first be convinced that the Internet will be useful, if he or she is to bother trying to learn how to use it (Briggeman & Whitacre, 2010). The phenomenon observed in research is often that farmers are not aware of how they can benefit from using the

Internet (Taragola & Van Lierde, 2010), and their “lack of perceived need for the Internet” will prevent its use (Briggeman & Whitacre, 2010, p. 581).

Perception of what the Internet can offer will strongly influence a farmer’s choice to even begin using the technology. Moreover, if not perceived to be useful then the Internet will not be where farmers go to source information. There have been various attempts to reach farmers through the Internet and to make services available to them through this medium (Warren, 2004). However, Ballantyne (2009) found the Internet was not actually a suitable replacement for traditional methods of conveying information to farmers. This echoes work by Howell and Habron (2004) and Diekmann, Loibl and Batte (2009) who found that the Internet was the least desirable form of media/communication among agricultural landowners. Farmers were found to still prefer more traditional methods such as “newsletters, printed bulletins, and fact sheets” (Howell & Habron, 2004).

Farmers seeking information also place high value on social sources, and in terms of reliability, “farmers are more skeptical of the quality of the Internet as compared with that of face-to-face information diffusion” (Charatsari & Lioutas, 2013, p. 122). A plausible explanation for this is that farmers already have a social base, and gathering information from people with whom they regularly associate may be easier, even in cases where the farmer uses the Internet for other things anyway (Charatsari & Lioutas, 2013; Stenberg & Morehart, 2007).

In the specific case of FLPs, the online database and automated functions such as email have replaced the human-to-human type of interaction and information exchange that are more comfortable and familiar to farmers. As such, reliance on the electronic and usually self-served database likely deters older farmers from participating. Interestingly, various interviewees indicated that they were aware of this issue and suggested that farmers still make connections via their own networks of friends, family, or acquaintances. They accepted that using a program like an FLP is not a typical way to sell a piece of property, and that despite best efforts farmers will look to more traditional avenues than FLPs to accomplish this task.

Engaging established farmers in an FLP is crucial to the success of the program: with no farms to sell or transfer, no matches will be possible. Engaging the aging farmer

population means using the appropriate communication channels to inform them about the FLP's purpose, and to encourage farmers' participation, because "the ultimate success of a land link matching service...will depend on how well it addresses the concerns of landowners in the region and [how well it] encourages their participation" (Hubbard, 2006). It follows that FLPs may need to invest in more traditional communication methods including, ideally, more face-to-face contact. The cost could be substantially higher, but would likely result in greater success than is currently being realized by many existing FLPs.

### **3.3.3. Farmers' motivations toward development of farmland or land preservation**

The analyses of the various data suggest there is an underlying assumption on the part of FLPs that farmers prefer their farmland to be kept in production. Moreover, FLPs assume that it is only the difficulty of transferring the farm that prevents it from being used for continued agricultural production. However, this assumption is simplistic, as complex economic, personal, and geographic factors influence a farmer's decision about the future use of their farmland. Farmland serves many functions for a farmer: it is a financial asset and can be a source of income during retirement; it is a potential home during retirement; it is a place filled with sentimental value for many farmers (Mishra, El-Osta & Johnson, 2004); and in many cases it is their legacy (Duffy, 2011). One must consider these factors that can influence a farmer's decision to sell their farmland, which are quite independent of the effectiveness of an FLP and the services it offers.

#### **3.3.3.1. Financial considerations**

If a farmer considers selling his or her land, that farmer takes into account things like health, age, their children's interest in farming, opportunity for non-farm occupation, and desire to relocate (White, 1998). Financial needs are also a very strong motivator in influencing a farmer's decisions about their land. For example, in many cases, a farmer's financial needs are better served by selling the land at development prices (Zollinger & Krannich, 2002) rather than by passing it on to subsequent generations (Pitts, Fowler, Kaplan, Nussbaum, & Becker, 2009). If there are potentially unfavorable farming conditions, such as encroaching urbanization, a farmer may make different decisions

depending on whether a successor would be a family member or a non-family member (Zollinger & Krannich, 2002). The farmer may simply sell the land for non-agricultural uses (Zollinger & Krannich, 2002), or hold onto the land as long as possible (Duffy, 2011). For FLPs, this means that some decisions regarding farm sales may have little to do with the farmer finding a buyer or not, and that some farmers may not even entertain the idea of selling the farm to a new farmer who is not a family member. These tendencies of farmers who are reaching retirement age may prevent farmland from becoming available to a new farmer at all, thus limiting the rate of transfers that may be possible and resulting in less farmland being worked.

If the farm owner is interested in selling the farm to a new farmer, pricing the farmland can make selling difficult. At retirement age, selling a farm at a value that will sustain the seller throughout his or her remaining years is absolutely necessary; but in order to keep the land in production—as opposed to selling it for development—the cost asked of the successor must balance affordability and debt load (Pitts et al., 2009). Unless there is a likely family successor, the farmer may not feel it is worth the effort to find a successor if they believe that market, community, or geographical conditions are poor. Alternatively, it may simply be that a farmer will not be willing to put the farm on the market for a non-family member to purchase (Duffy, 2011). This presents a question of convenience: when faced with various options, will a farmer opt for the simplest type of sale?

### **3.3.3.2. Sentimental attachment to family farmland**

While financial issues are certainly important, farmers do also consider the impact of their decision on a wider scale. Money is not always the only important factor in the decision to sell their farmland. Farmers can have extremely sentimental feelings towards their land, and it is a factor in their personal identity (Gasson & Errington, 1993).

According to a study by Dessein and Nevens (2007), farmers often gain a great sense of pride from the family tradition of farming. To some, the possibility of their children not taking over the farm can contribute to farmers experiencing a deep sense of loss (Dessein & Nevens, 2007). Their attachment to the land and their history on it can affect how likely they are to try and keep the land in production rather than sell it for development

purposes (Kuehne, 2013). While the link between how farmers define their identity and the decisions they make about their land is poorly understood (McGuire, Morton & Cast, 2013), what is known is that farmers who choose to develop succession plans—with or without a family member—have a desire to see that their land continues to be used for agriculture (Higby, et al., 2004). The important thing to note is that altruistic motivations are not necessarily the motivational factor for a farmer’s decision about the future of their farmland. However, the absence of succession planning will likely play a key role, limiting the likelihood a farmer will be able transfer their farm, thus undermining the possibility of it continued use as farmland (Pitts, et al., 2009).

### **3.3.3.3. Urbanization considerations**

Research shows that there are external and indirect factors influencing the likelihood of farmland being developed for alternate purposes. Urban/suburban encroachment results in decreased output and productivity for remaining farms, and in time creates a higher amount of idle farmland (Thompson & Prokopy, 2009; Daniels & Bowers, 1997). What occurs is a phenomenon known as ‘impermanence syndrome’: as land is developed close to farmland, farmers assume that their land may also be developed and reduce their investments in soil health, and their production capacity (Olson, 1999; Daniels & Bowers, 1997). Farmers adapt to urban encroachment in what is known as “negative adaptation,” that is, attempting to maintain business as usual but with an eventual result of closure of the farm business (Sharp & Smith, 2003; Johnston & Bryant, 1987). The external pressures, then, further affect the circumstances under which farmers operate and make decisions, and thus contribute to the increased likelihood of farmland development. Expecting farmers to keep their land in production at all costs can set an FLP on the path to failure if this is a premise on which all program activities are based.

### **3.3.4. Trends and systemic influences on farm transfers**

#### **3.3.4.1. Succession process**

The importance of financial, personal, and geographical realities that retiring farmers deal with can make the succession process incredibly complicated. Arranging transfers with non-family members is a difficult, emotionally wrought endeavour; a farmer may not be

willing or able to bring a new, unknown person into their operation in a manner that is as comfortable and gradual as that same process would be with a family member. This is not to suggest that transitions with family members are simple—they too can be difficult. Such interpersonal difficulties are some of the challenges that Ingram and Kirwan (2011) describe as reasons why non-family farm transfers can be challenging and sometimes unsuccessful. The personal attachment a farmer feels toward his or her farmland makes it difficult to simply break ties to the land upon retirement (Mishra, et al., 2003). Relinquishing control of the land may also be financially worrisome for some farmers who feel the need to generate retirement income from farm assets (Keating & Munro, 1989). Any of these issues can hinder the transition process (O'Neill, et al., 2010).

Much of the motivation to modify the farm business is linked to the farmer's own children's desire to farm (Inwood, Clark & Bean, 2013). The preparation undertaken to pass on the farm often emerges from the interest of a farmer's child in taking over the farm business. There are also various steps that are usually taken on by a successor, in sequence, as a farmer gradually incorporates the next generation into the farm processes. Keating and Munro (1989) describe how younger farmers gradually prepare to take over a farm by engaging in activities of increasing responsibility in the following order: general farm work; livestock care; production management; marketing management; financial management; land holdings; and equipment holdings. Gasson, Errington and Tranter (1998) refer to this multi-stage process as the "succession ladder" and assert that it "is something shared across all farms" (p. 90). This process allows a successor to gradually learn and increase responsibility for the farm operations and be involved in decision-making, which Pitts et al. (2009) identify as an important aspect of successful farm transitions. This succession ladder is presumably facilitated when there is a long, gradual transition from farmer to successor, which is more likely with a younger family member than with an unrelated new farmer. The familiarity between a farmer and his or her child could more easily facilitate the succession ladder process; building trust with a new farmer and therefore allowing them to take over different aspects of a farm could (understandably) be more difficult.

Any good succession process—whether involving family or non-family members—typically begins long before a farmer actually sells the farm to a successor



because the mere expectation of a successor or not (family or otherwise) can affect the succession process (Pitts et al., 2009). Those who plan for succession make very different decisions for their farm business than those who do not. Potter and Lobley (1992) describe this phenomenon as ‘the successor effect’. Farmers who intend to pass on their farm business are more likely to make decisions aimed for longer-term growth rather than short-term gain (Stiglbauer & Weiss, 1999; Gasson et al., 1989). This includes decisions related to how capital is acquired and managed over time (Potter & Lobley, 1992), keeping up with changing trends, and trying to stay competitive by diversifying and innovating (Inwood et al., 2013).

The likelihood of having a successor is correlated with the size of the farm, with larger farms being more likely to have a family successor than smaller farms (Glauben, Tietje & Weiss, 2002). Smaller family farms may be at a greater risk of experiencing the ‘impermanence syndrome’. Furthermore, according to a study based in Iowa, relatively few farmers have concrete retirement plans, intending instead to use their farms for income once they retire (Duffy, 2012). This finding is congruent with other studies that indicate that as farmers without a successor age and take on ‘semi-retirement’, they expect to be able to continue drawing income from the farm in their later years (Kirkpatrick, 2013; Gasson et al., 1998; Keating & Munro, 1989). Such farmers tend to adopt static management practices or disinvest in the farm, selling off some land and assets (Inwood & Sharp, 2012) with the intention of continuing to use the remaining land to finance their retirement. This could interfere with the likelihood of a farm transfer.

#### **3.3.4.2. Leasing as a potential farm transfer option**

Leasing is a legitimate alternative to outright farm sales that can benefit landowners and beginning farmers alike. Leasing can be a more affordable and gradual way for new farmers to begin their farm business or gain valuable experience (Hubbard, 2006). Also, some farmers wanting to sell their land have more to sell than is typical for new farmers to purchase. Leasing allows new farmers to take partial control of the land, which may offer alternative retirement financing options for the land-owning farmer.

However, in terms of sales and passing the farm over to a new farming generation, leasing or renting land may impinge on the long-term productivity of the

land. Various tax structures in the U.S. incentivize farmers to rent their land to fund their retirement rather than sell it, and this may mean that the farm is not as well managed and is not as productive as it would be if it were owned by the operator farming the land (Slack, 2012). Leasing arrangements offer no guarantee that production would continue after the land-owners death (Slack, 2012). Furthermore, farmland available to rent may not be suitable to new farmers. If the land available is simply excess land on a farmer's field and does not come with a house or other buildings, it is more likely that an established neighbouring farmer would be the candidate for those land lease opportunities. The more farmland that is rented in such scenarios limits the land available for young farmers to purchase (Ilbery, Ingram, Kirwan, Maye & Prince, 2012).

Given the limitations on the viability of leasing land on a long-term basis, FLPs should continue to nurture farmers wanting to enter into such arrangements, while also being mindful that many new farmers choose to own land as opposed to leasing (Lusher Shute, et al., 2011). As a short-term option, leasing may be perfectly acceptable, but as a long-term strategy, ownership may be a more successful option.

#### **3.3.4.3. New farmers**

It is valuable to understand the motivations of the people buying farmland and starting farm businesses. Understanding their behavior, their situations, and their needs is important when trying to create a more favorable farm transfer environment. New farmers are not all young people wanting to begin a farming career. The average age of operators of new farms in the U.S. in 2007 was 48 (USDA, 2007b), with approximately a third of beginning farmers aged over 55 years (Inwood et al., 2013; Ahearn & Newton, 2009). Some of these farmers are recreational or hobby farmers (Inwood et al., 2013). New farmers are unevenly distributed across the U.S., where concentrations of new farmers can range from as little as 10% or fewer of farmers in a region to as many as half (Ahearn & Newton, 2009). New farmers tend to start out with smaller farming operations, and "entry rates decline as farm size grows" (Ahearn & Newton, 2009, p. 20). The average size of new farms in 2007 was 201 acres, less than half the average size of all farms, which was 418 acres (USDA, 2007b). The intention to maintain a smaller farm may be propelled by the difficulty new farmers experience in accessing financing,

resources and information, as well as the intense learning curve they must manage when taking on a new farm of their own (Clark, Inwood & Sharp, 2012). Furthermore, as beginning farmers are highly likely to have off-farm employment (80%) (Inwood et al., 2013; USDA, 2007c), the need to make money solely from farming is either not necessary, or not possible, lessening the need to purchase a large land parcel. The connection between age and off-farm employment is notable: new farmers may enter into farming later in life because they have worked in other careers to save money for a farm purchase. They may also wish to continue working in other jobs as new farmers are often drawn to the farming lifestyle as opposed to the desire to pursue it as their main occupation (Ahearn & Newton, 2009). In fact, in the 2007 U.S. census, 32% of new farmers<sup>5</sup> did not report any production on their land at all (Ahearn & Newton, 2009). Understanding that new farmers are not always young, are likely to seek out smaller farms, and may choose to be employed off the farm can provide insight that may support program innovations within FLPs to alleviate the potential difficulties in transferring land caused by these realities.

#### **3.3.4.4. Incongruent needs: retiring vs. new farmers**

As alluded to throughout this section, the behaviors, needs and trends attributed to beginning farmers are often mismatched with those of established farmers wishing to sell their land. This creates a problem in farm transitions: retiring farmers who may have planned for a successor—whether a family successor or otherwise—likely have reasonably large farming operations. The problem is that these established farmers may have much more land and a larger farm business than a beginning farmer can afford or manage (Inwood et al., 2013). New farmers already face high start-up costs (Ahearn & Newton, 2009), and if land values are increasing, then it becomes even more difficult to buy large parcels of farmland (Lobley & Baker, 2012).

#### **3.3.4.5. Importance of social networks**

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<sup>5</sup> The USDA defines ‘beginning farmers’ as someone operating a farm for 10 years or less regardless of how much income they derive from their farm. These farmers may not have a goal of producing agricultural commodities and may simply be living on the farmland (Ahearn & Newton, 2009).

Existing social networks—both within farming communities and between individual farmers—create both opportunities and barriers. Obtaining farmland is of course essential to actually being a farmer, but strong social networks is also important for farmers just starting out in a farm business (Malifert, 2007). In terms of acquiring land, it is more likely for farms to be exchanged between friends, family members, and neighbors due to “the location-specific nature of farmland, [and] the size and infrequency of the transaction” (Robison, Myers & Siles, 2002, p. 45). Furthermore, the price of farmland will typically be lower if the seller knows the buyer—if the recipient is a friend, a family member, a community member, or a neighbor—demonstrating that “relationships do matter in farmland exchange” (Robison et al., 2002, p. 57). If renting farmland is desirable for a new farmer, the prospective renter may find themselves competing against more established farmers in the area who want to rent land to expand their business (Ingram & Kirwan, 2011). Accordingly, new farmers wanting to enter into a short-term arrangement with an established farmer to learn or to gain experience—or even to begin a slow transition to ownership of the farm—may find it difficult.

Participants in this study emphasized that they are equally interested in helping farmers find opportunities as well as explicitly facilitating farm sales. Recalling what was discussed earlier about incorrect assumptions of how farmers value their farmland, the understanding that farmers have strong social bonds can be an advantage to FLPs. It is suggested that time and energy spent building social networks among retiring and new farmers could result in more favorable outcomes in terms of farm transfers later on.

### **3.3.5. Recap of FLP challenges**

Table 3.1 (below) summarizes all the challenges to FLPs identified during this research (column 1). Possible solutions have been proposed (column 2) based on research presented here in Chapter Three on family farms and succession processes. Being able to acknowledge and address these challenges, problems, and common mistakes of FLPs is a foundational component in developing a more effective FLP. The information has been divided into two sections: the challenges specific to how the programs operate, and external challenges that are more systemic and institutionalized within the agriculture sector. By understanding the problems with current FLPs, one can integrate mechanisms

and strategies into newly developed programs to address such issues before they become problematic.

Table 3.1. FLPs: Existing problems and potential solutions

	<b>Problem</b>	<b>Solution</b>
<b>Program Challenges</b>	Heavy reliance on internet to recruit farmers with land	Face to face recruitment Hard copy / mail-in registrations for program Staff to more actively facilitate matches Educate farmers on Internet use and online security
	Unclear long-term goals	Clarify long-term goals and develop viable strategy
	Short-term goals do not match long-term strategy	Determine whether other initiatives should be undertaken alongside FLP (lobbying for better policies/legislation, find secure funding, build and strengthen farming networks, etc.)
	Under-staffed programs	Better align staffing with program tasks/actions known to have the greatest influence to optimize staff impact Where possible, hire more staff
	Unstable funding leads to lack of long-term planning	Secure long-term funding <sup>1</sup>
	Not connected to ready and affordable farm transition specialists (lawyers, real estate agents, etc.)	Establish connections with professionals that are willing to support/facilitate major parts of the farm transition, possibly including “counselors” to help with personal stresses experienced by farmers
<b>External Challenges</b>	Mismatched farm size to sell/rent/buy	Enhance cooperative farming opportunities to create more flexible options
	Farmers with land renting to established farmers rather than beginning farmers	Create and foster strong mentorship programs and farmer networks
	Farms are too expensive for beginning farmers	Work with alternative/innovative financing regimes to create better financing options for beginning farmers
	Weak networks for beginning farmers	Create more mentorship opportunities, farm community integration programs, and networking opportunities for new and established farmers
	Farmers often unprepared for farm-transfers / Succession plans made too late to maintain viable farm business	Education on succession planning for all farmers at all ages and stages of their farming career
	Lack of trust between farmers selling and new farmers buying land	More opportunities for incorporating new farmers into the farming world Networking opportunities
	Family farms are potentially sold after each generation	Create a culture of farm succession planning for non-family members

Note: <sup>1</sup>The difficulty of this task is fully recognized, but it must be stated here because adequate funding is imperative to the long-term planning and implementation of a well-functioning FLP.

The revised theory of change (Table 3.2) draws from the evaluation work completed here in Chapter Three. Instead of revising the contribution story, it seemed

more appropriate to revise the theory of change. The reason is that from the development of the contribution story it became clear that the original theory of change is flawed—i.e. the programs’ activities seem to be based on flawed assumptions. Therefore, it is more useful to revise the theory of change to better reflect the conditions that can ensure the success of an FLP. The hope is that this new theory of change can be used by an FLP wanting to update and revise their program, or be used by a new FLP starting out. Essentially it takes the basic structure of FLPs as they are, and modifies their approach based on more factually based assumptions. The modified theory of change, then, is a more robust theory of change than what was presented in Chapter Two as it is based on a fuller understanding of the activities, and approaches that may contribute to more success for an FLP. Stage 1 of Table 3.2 focuses on what the FLP may actually do on a day-to-day basis, the reasoning behind particular activities and possible risks that may prevent those actions from being successful. If the actions taken by the FLP as outlined in Stage 1 are successful, certain short-term outcomes would be expected. Stage 2 outlines these short-term expected outcomes, what new assumptions are created based on the outcomes as well as any risks that may be present that would affect the assumptions from being correct. Stage 3 focuses on more long-term outcomes that may result from the program outputs (Stage 1) and the short-term outcomes (Stage 2).

This proposed theory of change can be a useful starting point for a new FLP being designed, and can also serve as a starting point for an evaluation of existing FLPs. As the agricultural sector changes and the context in which FLPs operate, this theory of change should be revised to take into account modifications to government policies, programs, and the work of other relevant farm organizations or programs.

Table 3.2. Revised Theory of Change for an FLP

Description	Assumption	Risk
<b>Stage 1: Program Outputs – Specific activities done by FLP / day-to-day program activities</b>		
Heavy focus on succession planning education for all farmers: hold workshops, provide literature, etc.	Succession planning is essential to foster farm transfers, and is the foundation of successful farm transfers	Succession planning has not happened yet; farmers do not prepare for the emotional or social challenges that accompany farm transfers
Personal outreach by staff to all farmers approaching retirement age without a successor	Personal connections are the most effective way of bringing retiring farmers into the program	Farmers are not interested or are skeptical of the service
Offer Internet database as a supplementary tool, targeted to young farmers	Young farmers are more likely to use the Internet to find information and connect to farming opportunities and communities	Relying on the database to attract new farmers may not be the most effective form of engagement
Partner with and utilize farm transition specialists (lawyers, real estate agents, etc.) to facilitate farm transfers	This will help the FLP meet the specific needs of farmers who will use the program	Could be difficult to bring in these partners on a reliable basis
Connect young farmers with loan and financing opportunities	The FLP should help with all aspects of farm transfers, and this includes helping young farmers secure funding	There are funding bodies in place, and may not be possible for the FLP to offer more funding
Host localized networking opportunities – farm tours or work parties	This can help broaden a farmers network, provides opportunities for older and young/new farmers to mingle and establish trust	Farmers may not want to participate in these types of events and will still choose to develop their own networks
<b>Stage 2: Immediate Outcomes</b>		
Farmers are better prepared for retirement and succession	The information given is appropriate and applicable	Improper planning and lack of education is not what prevents farmers from selling their land to a new farmer
Stronger networks in the farming community	Strong networks build trust between different farming generations	Trust and confidence in the abilities of new farmers may not actually improve chances for succession
Begin matching retiring and new farmers	Farmers are interested in using the FLP services	Farmers are not served by the FLP and choose not to participate
<b>Stage 3: Indirect (Long-term) Outcomes</b>		
Farm transfers are arranged and completed	FLP was able to meet the needs of farmers to facilitate a farm transfer	Farmers still have difficulty transferring their farm to a non-family member
Farms continue to be productive	New owners continue to use the land for food production	Farms turn into hobby farms, and are not overly productive
Farm transfers become a regular part of farm businesses	Family succession decreases and farmers need to sell the farm upon retirement	Farm transfers to non-family members remain difficult and rare
Farmland is protected from urban development	Farmers will choose to keep their land in farming if they can	Farmers are able to financially benefit from selling their land for development, and prefer this option to fund their retirement

### **3.4. Contribution of FLPs: Discussion**

Steps four through six of CA all focus on building the contribution story of the FLPs. The information needed to build the contribution story is presented in the previous sections, facilitating a better understanding of how the FLP program delivery mechanisms work, how effective they are and why, as well as how deeply institutionalized beliefs, expectations, behaviors, and trends affect and influence the success of FLPs. The final task within the contribution story is to make a statement of contribution, which is a short summary of how well the programs meet—or in this case did not meet—their intended outcomes (Mayne, 2011). In the context of this research the following statement is offered: FLPs are well intentioned programs aimed at addressing real concerns in the farming community, but in their current form are not able to effectively facilitate large numbers of farm transfers.

This statement is supported by the fact that FLPs have not demonstrated their ability to successfully, reliably, and routinely facilitate farm transfers on a large scale. This is not to say that their efforts have been entirely in vain; some FLPs have been effective at helping farmers find new farming opportunities, hosting educational and networking events and in some cases working with farmers to fully transfer farms to a new owner, but considering the steady rate of farmland development each year and the number of sales that continue to occur suggest that FLPs influence/facilitate only a small minority of these transfers. Furthermore, it is unclear if the FLPs were actually instrumental in creating successful matches and thereby preventing the sale of farmland for development, or if the FLP simply capitalized on a farmer's commitment to finding a new farmer by providing them one avenue to do so.

Consider the main challenges that FLPs struggle to adequately address through their programming: the heavy reliance on the Internet by FLPs who are trying to engage older farmers; the small staff complement who cannot provide all of the legal, financial, and professional assistance required; farms often remain too expensive for new farmers who have trouble accessing the capital necessary; the relatively weak farming networks of new farmers; and the mis-matched requirements of new and retiring farmers. For



greater success, FLPs need to carefully assess each of these challenges and determine their capacity to overcome them. Importantly, they must be addressed simultaneously—these are essential components of a farm transfer, and they work synergistically. To improve FLPs and their ability to encourage and facilitate farm transfers, FLPs should consider several improvements to their structure, programming, and skill set. Although recommendations are not necessarily a component of CA, this research has identified several recommendations that may help mitigate the problems experienced by FLPs. They are discussed in below.

### **3.4.1. Strengthening networks**

FLPs should not operate in isolation; as noted many of the FLPs do function as one project within a bigger organization that may focus on education for farmers, education for consumers, networking opportunities, professional development and so on. Networks are vital for farmers, especially new farmers as they learn, share knowledge, help each other, and most importantly build trusting relationships with other farmers. Similarly, FLPs should consider partnering with other organizations as well; connecting with local, state, or even the federal government, education centres and universities, financial institutions, and real estate and legal professionals should be a priority of FLPs. Having strong support from these types of institutions can strengthen the resources that FLPs could offer, such as legal advice and real estate negotiations. In this way, FLPs would not only serve to link new and retiring farmers, but may be a hub for others involved in various aspects of land transfers, linking the bigger players that affect the success of land transfers.

Affiliation with other farming organizations may result in more opportunities to connect with farmers who have land to sell. Farmers may already be connected with other programs or support organizations and by bridging those relationships with the FLPs, it is possible that FLPs will become more familiar and trustworthy to potential land sellers. Relying on land-owning farmers to register with an online database to list their land is unrealistic and has not proven successful; finding other ways to foster participation in FLPs is necessary. More direct interaction with older farmers may help to encourage participation in FLPs, and help them feel more confident about the transfer process.

### **3.4.2. Normalize succession planning**

FLPs will be required to expand in order to do the necessary networking described above; more staff and funding will be required in order to continue to strengthen programming and support for farmers wanting to sell or purchase land. Actively encouraging farmers early on to begin thinking and planning for their succession is essential, particularly as family transfers are increasingly not the norm. Farmland may leave a family unit each time a farmer who has worked the land retires, making succession planning a necessary part of business planning for new and aging farmers alike.

### **3.4.3. Improve financial support**

Of the many challenges that new farmers face, funding a new farming venture is one of the most onerous. FLPs could expand their support services and offer assistance with some of the financial challenges that new farmers face. This type of approach is exemplified in the California Farm Link program. California Farm Link was not one of the FLPs that participated in this research, but the structure of their program appears to meet many of the recommendations stated above. They have more staff than any of the FLPs in this study, and they become very involved in the transfer process. California Farm Link also has its own loan program and the ability to help with financing for new farmers by offering loans of up to \$25,000 for infrastructure, equipment, and operations (California Farm Link, 2013). Additionally, they have connected with alternative financing sources to further provide assistance to new farmers (California Farm Link, 2013). They have provided assistance to over 3000 farm businesses and have been successful in arranging 125 farm leases, or other partnerships (California Farm Link, 2013). The hands-on, and practical approach to finding solutions for farmland, especially the capacity to provide loans and assist with financing demonstrates an understanding of the main challenges wrapped up with farm transfers. FLPs could serve as a distribution broker for things like farm start-up grants and other funding that supports new farmers, thus combining the efforts of finding land and funds for new farmers.

#### **3.4.4. Evaluation processes**

Regardless of the FLP structure or specific programming, regular and systematic evaluation of the activities is essential. Part of the evaluation should be to clearly and specifically articulate the goals of the FLPs. Perhaps the goal is to educate farmers on succession planning, or to connect them with professional financial or legal assistance. Whatever the goals, they must be clearly articulated and understood; all activities must explicitly contribute to the realization of those goals. Success will be linked to an FLP's ability to address both farmers' values and their financial needs in a manner that is comprehensive and professional. Understanding the link between each initiative and the FLP's end goal, the internal capacity to deliver on such initiatives, and the results of each should help inform any changes or improvements to the FLP on an ongoing basis. Those working in FLPs must also recognize that there are many outside contributing factors that influence farm transfers, and those factors must be accounted for in the FLP programming as much as possible. CA could serve as a useful framework for individual ongoing FLP evaluations. The next section details how an FLP could integrate an evaluation plan into its operation.

#### **3.5. Equipping the FLP with an imbedded evaluation plan**

The initial motivation for this research was to try and find out if FLPs actually work: are they successful in matching farmers with land to sell with new farmers? To do this, program evaluation approaches and techniques were applied, namely a type of program analysis called Contribution Analysis. This evaluation type is both a method and a process, and was used as a guide to gather, present, and evaluate information related to FLPs. Evaluations that are structured well can identify weaknesses and possible areas of change for a program to be more effective. They are absolutely necessary for any program committed to making real change.

Though FLP staff people interviewed were not specifically questioned about evaluation processes, it was apparent that many of them were not able to spend much time planning or implementing one given the small staff and the often very basic way the programs were delivered. However, it was very clear that for many of them, periodic

evaluations might have helped identify weaknesses and needs, and could have served as a catalyst for changing the approach to be more effective. What is presented below is some guidance on how an FLP may begin to plan an evaluation of their programs in order to assess and find areas for improvement in their specific program. As there is a great deal of literature on evaluations, this offering is modest, but does consider aspects of evaluation that are relevant to most FLPs. Much of the approach is taken from CA developed by Mayne (2001), as well as the work of Posovac (2011) who provides a broad overview of the skills and perspectives that are useful when conducting evaluations of both private and public programs.

It is important to state that everything presented here on evaluations is subject to change; stakeholders—farmers, FLP staff, and others who may be involved with farm transfers in another capacity—should be involved in an evaluation process in order to validate the process and the data. A great deal of program evaluation literature emphasizes the importance of including stakeholders in the evaluation (Bryson, Patton & Bowman, 2011; Posovac, 2011; Caruthers, Shulha & Hopson, 2010; Pawson & Tilley, 1997), as they would have unique but important perspectives on the program and its delivery. What is presented here is a guide with some important points and suggestions to integrate ongoing program evaluation into the operation of the program.

Posovac (2011) explains important components of evaluations and breaks down what a good evaluation can accomplish. The use of CA (Mayne, 2011; Mayne, 2008) provides more step-by-step instructions for conducting an appropriate program evaluation. Both will be considered here in parallel. There does remain quite a bit of flexibility to structure evaluations as a program sees fit. Using CA does not require great expertise in program evaluation, but considering Posovac alongside Mayne's approach can enhance some important features of CA. They are discussed here, together, to provide an approach useful for an FLP wanting to integrate an on-going internal program evaluation into their operations. We will begin by restating the steps of CA, presented above in Table 2.1 and then bring in some important specifics of program evaluation offered by Posovac.

The steps of CA are suggested as a guideline for an evaluation process. The process is designed to assess what the program offers, what the observed outcomes are,

and how outside factors may contribute to those outcomes. In this way, we can see how the program contributes to the end results and thus assess the effectiveness of the program. Within this process there is room for interpretation and modifications in order to suit the needs of the evaluator. Posavac (2011) explains some essential evaluation components that are easily incorporated into the CA process outlined above.

According to Posavac, any evaluation should have three things: a theory model developed with staff of the organization; clearly defined short, mid, and long-term goals that act as markers of success (2011); and clearly defined criteria for success that directly reflect the program's aims and objectives as developed by staff, and stakeholders. In terms of a theory model, in CA, the evaluation is largely based around the theory of change model, and it is central to the evaluation process. Posavac places emphasis on different types of goals such as implementation goals, intermediate goals, and outcome goals, and suggests an evaluation be able to assess the goals in each of these stages (Posavac, 2011). Therefore, in the context of an FLP, staff should be clear what they intend to accomplish, how they know when they have accomplished it, and use the theory of change as a guide to evaluate the utility and appropriateness of their program activities. These three things work together to provide the base of an evaluation.

There are things an evaluation should be able to accomplish. Evaluations should first estimate unmet needs of the program's target group (Posavac, 2011). By conducting the evaluation it should become clear where there are gaps and deficiencies in the program delivery. Second, evaluations should be able to verify that the program is indeed providing services to the target population (Posavac, 2011). Additionally, evaluations should carefully examine the outcomes of the program, and not merely the services because "providing a service is not the same as serving people in a way that benefits them" (Posavac, 2011, p. 4). It is important that throughout the evaluation the focus remains on maintaining or improving quality of service, and the information gathered and analyzed will need to be done so to this end (Posavac, 2011). Finally, evaluations should be monitoring any side effects that may be occurring as a result of the program and the services it offers (Posavac, 2011). If there are unintended consequences, they should be made clear and acknowledged in the evaluation findings.

Posavac purports that meeting all of these essential components of an evaluation is possible by regularly gathering feedback from program participants (2011). Those using the program can tell you if it has worked for them (has been able to meet their needs), that the services were useful, whether or not the outcomes were in line with the stated goals, and what improvements might be made (Posavac, 2011). Participants may also provide information on unintended things that happened (the side effects), which can then be incorporated back into the program delivery, or can indicate a need to modify what the program is doing (Posavac, 2011). In CA, it is not explicit when this data gathering from the participants would take place, but it is sensible to be regularly collecting information from participants. Gathering all of that together and deriving meaning from it would occur during the development of the contribution story. This part of CA helps create the big story telling what the program is doing, and what else may be affecting the story.

An FLP will need to decide how to go about collecting data to be used for evaluation. There are many options for how to gather information, and a great deal of program evaluation literature is dedicated to the tools that may be used when conducting an evaluation. A good starting point is to determine what types of data are already being collected, in what form, and by whom so as to not waste scarce resources collecting data that already exist. Data collection is a topic worthy of close investigation and is too vast to be discussed in great detail here, but Posavac suggests that whichever methods are chosen, whether they are surveys, interviews, checklists, or any other type of record, more than one should be used (Posavac, 2011). It is good evaluation practice to use different measures, and different sources of information in order to corroborate the findings (Posavac, 2011). Based on the criteria for success of the FLP, the program should incorporate data collection of various forms into the regular operations of the program.

Program evaluations can target particular components of a program or how a service is offered within a program. Some evaluations will focus on how successful the program is at assessing the needs of its users; others on how the services are delivered and whether they are running as planned; and what the final outcomes are (Posavac, 2011). An FLP evaluation should be looking at all three of these as it plans for and

conducts an evaluation. Each of these evaluation foci can be considered independently, but should also be considered together as part of a cohesive and all-encompassing evaluation. The contribution story development stage is about understanding what the program has been able to do but also includes a robust assessment of what other external factors, trends, or circumstances may have also contributed to the outcomes. These all must be acknowledged and accounted for in CA. If using CA, the contribution story would include each of these target areas. Collaboration between farm-focused organizations may prove to be an important component of evaluations and this approach may allow for a range of access points to the farming population, and better opportunities to assess the outcomes of an FLP.

Evaluations can be done many different ways, but this section has pointed out some important aspects that should help develop an evaluation process for an FLP. Incorporating this thinking into the evaluation structure will help with ensuring that the proper and most useful data is regularly and systematically collected as the FLP delivers its services. Collaboration between organizations, government, and academia could help establish robust data sets in both quantitative and qualitative form. Regular assessments of an FLP will help strengthen it and ensure that the best and most useful services are being offered.

### **3.6. Conclusions**

While FLPs have potential to help farmers find reasonable and appropriate farmland arrangements suitable to their own personal circumstances, several of the FLPs involved in this study have not yet experienced much success in terms of transfer numbers or in facilitating other types of land arrangements. The more successful programs have in place some of the essential criteria for success, though each program is strong in different areas. Certain strengths were common, such as having established networks, spending time and attention on recruiting landowners, and offering strong support in terms of legal and financial guidance. This research has helped to position the work of FLPs within a broader context, and with that comes a better understanding of the contribution that FLPs can make towards preservation of farmland, helping farmers retire financially secure, and assisting new farmers with start-up costs and access to land. FLPs can be an important

resource for farmers, but need to understand their own goals and limitations to deliver such support. Presently, providing an Internet database and a website is not sufficient to significantly encourage farm transfers. More work needs to focus on helping to build and strengthen networks between organizations that can help with farm transfers, and between farmers and those new to farming.

As very little research has been done focusing on the effectiveness of FLPs, this research merely scratches the surface. CA is a useful framework to use in future research on FLPs because it requires analysis and incorporation of outside factors in the evaluation; farm real estate pricing, food pricing, government programs and funding, and attitudes and beliefs about farmland are all extremely powerful influencing forces over which FLPs have very little control. Each of these factors are worthy of specific study in the context of farm transfers and FLPs. Changing trends in farm ownership is also an important and useful research area of focus. It appears the U.S. could be on the brink of an end to multi-generational family farming if farmers' children continue to seek off-farm careers; if so, farms sales and rentals are likely going to become a much more common phenomenon. Understanding how buyers, sellers, and renters of farmland are supported is important if one is to keep farmland in production.

It was beyond the scope of this research to interview or survey farmers who have used FLP services, but further research could focus on the experiences of these farmers. How useful the FLP had been in meeting their needs and expectations could identify more specific criteria for success for FLPs. Additionally, it would be useful to research the experiences of farmers who have sold their farmland for development; their motivations, struggles, and experiences going through such a process would certainly be valuable in trying to find ways to limit the loss of farmland to urban development.

Understanding the role of FLPs is a relatively new area of study that can be an important component in the discussion about farmland preservation, and how to better support transitioning farmers (new or established). Although these programs have met with limited success, specific changes including a greater focus on establishing networks, and being able to create access to financial resources, FLPs can play an important part in keeping farmland in production. While there is more to know, and many opportunities for



future research, this study has, for the first time, used an evaluation framework to assess their effectiveness in facilitating farm transfers.

This research has made a strong case for FLPs to include formal evaluations regularly as a way to find practical ways to improve on the program offerings. As external conditions change and more farmers find they have difficulty transferring their farms, FLPs will need to adapt and change as well. Knowing where change is necessary in their program operations can be highlighted by rigorous evaluations and thus improve prospects for FLP success.

## **CHAPTER FOUR:**

### **Conclusions**

#### **4.1. Reviewing the research goal**

Transferring a family farm business between familial generations is no longer a reality for many farmers in North America. Hence, there is an ever-present need for assistance, guidance, and services that focus on transferring farm businesses from farmers wishing to retire to new farmers embarking on a farming career. The personal and professional planning that is required for these types of transitions is not necessarily obvious to farmers, and yet farmers require a significant amount of self-awareness and preparedness in order to be successful in a farm transfer. Countless external factors also make farm transfers incredibly difficult, especially the high cost of farmland and the difficulty for new farmers to finance an established, large, farming operation.

This research set out to evaluate the effectiveness of twelve U.S. Farm Link Programs (FLPs) to help facilitate farm transfers. Of the very little research that has been done on FLPs, there has not been any substantive analysis done that would determine if these programs are actually effective. While they exist in many states and appear at the outset to meet a clear need in the agriculture sector, there is no proof that they are successful in their goals. This research sought to a) determine the impact that FLPs have on farm transfers in the U.S.; and b) identify challenges and barriers that may affect the ability for FLPs to carry out their work.

#### **4.2. Research outcomes**

This research used a program evaluation method developed by Mayne (2001) called Contribution Analysis (CA) to guide the assessment of the FLPs. CA helped to structure the analysis of the data collection to assess how much FLPs, on the whole, contribute to the end cause—facilitating farm transfers. By first developing a generic theory of change for FLPs and then assessing the theories and approaches used by FLPs, it became clear that there are a number of flaws in program design and implementation, as well as strong influential factors that limit the effectiveness of FLPs. This conclusion was reached by assessing the budgets, program operations, and the primary tool—mostly self-served

Internet databases—as well as reviewing scholarly and grey literature. Aside from some notable exceptions, most FLPs are limited in what they are able to offer in terms of farm transfers.

After identifying and acknowledging some of the major impediments to FLP success, a series of alternative approaches were suggested (see Table 3.1) which, if applied, might reasonably improve the outcomes of FLPs and their goal of facilitating farm transfers. A revised theory of change (Table 3.2) was also developed that recognized the challenges uncovered by this research, that can also be applied by existing FLPs or any new FLPs that might be formed in North America. An overview of the benefits of incorporating an evaluation process into an FLP's operations was also provided to encourage and enable FLPs to seek improvement in their operations in order to better meet the needs of retiring and new farmers.

### **4.3. Next steps and further research**

The outcomes of this research suggest that there are two things to be done going forward. The first is for FLPs to implement the findings of this research, and the second is to conduct further research in a number of areas.

#### **4.3.1. Implementation of findings**

A number of recommendations have been suggested for already existing FLPs that will likely improve their ability to facilitate farm transfers in a more permanent way. These are briefly listed below, and more detailed explanations can be found in Chapter Three. These recommendations for FLPs are:

- (1) Strengthen their networks as a way to improve their ability to offer a range of specialized services to farmers;
- (2) Work to normalize succession planning in the agricultural sector so that farmers are better prepared for the difficulties they will inevitably face when transferring their farm;
- (3) Find ways to improve the financial support for the program so that more staff can be hired and more outreach work can be accomplished; and

- (4) Implement regular evaluation processes so that successes can be built upon and failed tactics can be changed or improved.

Finding more secure financial resources is undoubtedly one of the most important, yet arguably most difficult, of these tasks as the other recommendations depend heavily on acquiring and utilizing more resources. However, simply having more funding will not necessarily improve success rates. Solid programming that directly responds to needs of farmers, as well as having strong educational programs on succession planning are absolutely essential. Ensuring that communication channels are effective is another area of focus for FLPs, and reducing the heavy reliance on the online database would likely yield better results. Not all FLPs will need to focus on the same issues and areas for improvement; each program should, however, pursue some type of individual evaluation in order to determine their weak points and areas where they can improve their services. This research has helped frame the big picture of farm transfers, and individual evaluations of FLPs will pick up on the specific factors and conditions that may need to be altered, eliminated, or drastically expanded as the case may be.

#### **4.3.2. Areas of further research**

The subject of farmer retirement and land transfers is broad and complex, yet increasingly important and relevant in today's agricultural sector. This research honed in on one mechanism aimed at addressing these issues, but there are other valuable areas of study that would augment the study of FLPs. First, having a better understanding of the personal circumstances of landowning farmers—their expectations for their farm, or the emotional and practical difficulties they experience in transferring their farm to a non-family member—would help FLPs better understand their clientele and provide relevant services to them.

A second area of research would focus on how government policies could encourage and enable farm transfers in a way that benefits retiring farmers, new farmers, and a changing agricultural sector. As it stands, FLPs operate within established parameters determined largely by government policies, and some of these policies do not foster or encourage farm transfers in a way that enables efficient transfers to a new

farming generation (Slack, 2012). As farm transfers to non-family members increase in prevalence, having sound government policies and tax structures that support this will reduce the difficulty that farmers face, and will make the work of FLPs much easier. Comparative research could be conducted on regimes that appear to be more supportive and successful; it may be worthwhile to look to places like the EU and their Early Retirement Scheme for options of how to encourage and enable farmers to retire and transfer their farm before production is substantially reduced.

A third area of research would focus on how to develop (or re-develop) FLPs in jurisdictions where challenges exist related to maintaining the amount of farmland in productive use. Ideally, this would include governments, funding agencies, farming organizations, farmers, and researchers working together to better understand the particular conditions of the jurisdiction that affect (positively or negatively) the likelihood of non-family successors taking over farms. Identifying specific barriers to non-family succession, and ways to practically address the needs of farmers—in the form of an FLP—could help improve the prospects of maintaining farmland for agricultural use.

#### **4.4. Final thoughts**

The food and agricultural system in which family farms participate is extremely vast and complex. Important areas of inquiry, research, and improvement all related to ‘agriculture’ include: global competition; diverse and competitive food markets; discussions about conventional and organic farming methods; environmental considerations including climate change; as well as health, hunger and adequate distribution. In light of these large and daunting agriculture-related issues, farmer retirement, succession planning, and land transfers can reasonably be forgotten. As it stands, it appears that few governments have truly prioritized keeping agricultural land productive by supporting smaller farm operations and farmers. This research has not revealed any governments or industry partners that have been deliberate and strategic about fostering and protecting productive agricultural land in any comprehensive way. Land trusts, and other land protection mechanisms are used, as well as FLPs, but the

support and attention that these approaches receive seem to be minimal in the grand scheme.

It is not assumed that well-functioning FLPs will solve all problems related to land transfers and succession planning, but it is clear that they are attempting to serve a need that is very real. Valuing the work that farmers have done throughout their career, and supporting new entrants, should be a major component of any government or industry agriculture, food security, or land-use strategy. FLPs could be a useful tool in these efforts, but they must be effective. This research has pointed to some of the ways that these programs could be improved, and going forward, FLPs should feature in discussions of the future of agriculture abroad.

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## APPENDIX A: Questions for Participants

### Questions:

1. How long has this program been running?
2. What is the annual budget of this program?
3. What are the program's sources of funding?
4. Is there a fee for farmers to use your matching services? If so, how much is that fee?
5. Are farmers permitted/encouraged to contact potential matches themselves, or are potential matches contacted via program staff?
6. What professional assistance is available to farmers experiencing a farm transfer through this program? (Financial advisers, real estate agents, etc.)
7. How many paid staff does this program employ?
8. Are there any volunteer staff working for your program?
9. What is your relationship with the state government? (Does the government provide funding, do you work together with government partners, are they supportive of this program, etc.?)
10. Since the beginning of this program, how many successful farm transfers have been made by farmers using this program?
11. Since the beginning of the program, have there been any matches made that didn't end up working out in the long run? How many?
12. What is the nature of follow-up (if any) with farmers who have been involved in a farm transfer through this program?
13. Besides matching farmers and farmland, does this organization provide other services? What are those services?
14. In your experience, what are the essential 'ingredients' needed for farmers to successfully engage in a farmland transfer? In other words, what factors need to be in place to enable long-term farmland transfers between non-family members?
15. In your experience, if a farmland transfer begins but is not successful in the long-term, what factors contribute to this unsuccessful farmland transfer?



**APPENDIX B: Citations for Table 2.3: Stated objectives of FLPs involved in this study**

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