

# **The Motivations and Barriers related to Entrepreneurs in the Farming Sector: The Case of Ontario**

**Yasser Ghoreishi  
Laurentian University**

**Yves Robichaud  
Laurentian University**

*Ontario, one of Canada's largest provinces, is a strong agricultural producer and plays an important role in Ontario's economy regarding job creation and GDP. It is therefore essential to better understand how Ontario's farmers' businesses are created and developed in order to render the economy more resilient. This research attempted to identify Ontarian farmers' entrepreneurs' motives for self-employment and which obstacles they identified as major business threats. In that perspective, a questionnaire derived from the literature was administered to a sample of 60 Ontarian farmer-entrepreneurs. Results revealed that the farmers entrepreneurs in Ontario were primarily motivated by independent goals, by opposition to extrinsic goals such as a desire to increase sales and profits. At the same time, the lack of reliable personnel and government bureaucracy were perceived as major barriers to entrepreneurial success.*

*Keywords: entrepreneurship, entrepreneurial motives, entrepreneurial motivations, business barriers, problems or threats, farmers entrepreneurs in Ontario*

## **INTRODUCTION**

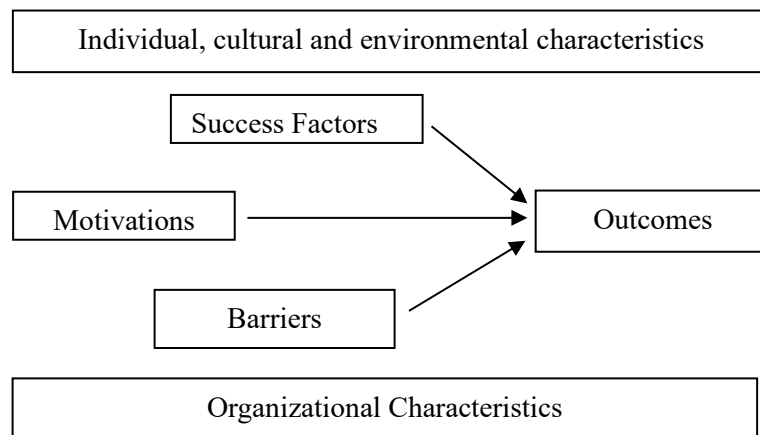
Ontario, one of Canada's largest provinces, is a strong agricultural producer. Ontarian farmers provide agricultural commodities to local and multinational markets. Ontario produces a variety of items such as meat, vegetables and fruits. In 2021, Ontario's food production formed about 46 billion Canadian dollars (Chen, 2022). Concurrently, the agricultural sector provided about 860,000 individuals with employment. Since the food products are produced in various manufacturing plants, Ontario's agricultural sector made up thirty percent of Canada's entire agricultural economic output in 2021. From 2016 to 2020, the leading commodities in Ontario were dairy, vegetables and soybeans, with earnings of 2, 1.9 and 1.6 billion Canadian dollars, respectively (Chen, 2022). There are also about 3,400 dairy farms run by families in the province. Meanwhile, two hundred products are produced across 49,000 farms in Ontario (Chen, 2022) making Ontario one of the leading agricultural producers in Canada.

Entrepreneurship has allowed Ontario's farmers to develop efficient methods of improving agricultural output and quality. Due to this, entrepreneurs venturing into the farming sector in Ontario are crucial. That being said, we don't have much information about the motivations that push an individual to start and operate a farming business and the barriers that they faced. Very few empirical studies on entrepreneurship have been conducted on farming in Ontario. Given these reasons and the importance of the contribution of

the farming enterprises to the Ontarian economy, it is crucial to better understand how they are created and developed in order to build a stronger economy. In this sense, a better understanding of their motivations, and obstacles faced by farming entrepreneurs will be helpful to policymakers in developing public policies (e.g., providing subsidies). In addition, such initiatives would reduce the level of uncertainty surrounding the creation and development of a business, making more individuals interested in a career in business. Finally, the participants will also benefit from the results, as we are expected to know more about the farming sector of the economy once the study is completed. We will use a sample of 60 respondents from Ontario to do this.

The conceptual framework used in this research (Figure 1) draws from the literature and specifically from the publications of Benzing, Chu, and Kara (2009), Chu, Benzing, and McGee (2007), and Kuratko, Hornsby, and Naffziger (1997). This conceptual framework emphasizes three dimensions: motivations, success factors, and barriers. As we said earlier, our study will concentrate on the motivations and the barriers.

**FIGURE 1**  
**THEORETICAL FRAMEWORK: ENTREPRENEURIAL MOTIVES, SUCCESS FACTORS AND BARRIERS**



This article is divided into two parts: the first one presents the situation of entrepreneurship in Ontario and analyzes the entrepreneurial motivations and barriers, while the last part includes the methodology of the study, the results and the conclusion, limits of this study and further research implications.

## LITERATURE REVIEW

### Entrepreneurship Farming in Canada and Ontario

Canada's agricultural sector makes a significant contribution to the national economic output. In 2020, the entire agricultural sector hired 2 million personnel (Government of Canada, 2021). In other words, about one out of nine people were employed in this sector. The agriculture system made about 177 billion Canadian dollars in 2020, which represents about seven percent of the nation's GDP. The agriculture sector is divided into five components: primary agriculture, food and beverage, grain, meat and dairy products, crop production and animal rearing. Primary agriculture involves the tasks that are carried out within farms or gardens. In this case, primary agriculture made 39 billion Canadian dollars in 2020, which was 2 percent of the nation's GDP. About 270,000 personnel were employed in this area. The food and beverage sector had a GDP of 32 billion Canadian dollars and provided 288,000 individuals with occupations. There are about 193,000 farms in Canada (Government of Canada, 2021). These farms take up 67 million hectares, six percent of Canada's total land area. The majority of those farms are located in provinces like Ontario and Quebec. The farm dimensions have doubled over the last fifty years due to innovation. Grains, meat

and dairy products are the major earners in Canada, with 68 billion Canadian dollars in 2020 (Government of Canada, 2021). Crop production generated about 33 billion Canadian dollars and employed 123,000 individuals. Meanwhile, animal rearing earned 5 billion Canadian dollars and hired 133,000 personnel.

Canada is heavily reliant on agriculture. In 2016, Canada's agricultural sector generated about 110 billion Canadian dollars (Phillips et al., 2019). That comprised over 6 percent of the nation's gross domestic product (GDP). During the same year, the agricultural area hired about 2.2 million individuals. In other words, one of eight individuals was involved in farming. The majority of Canada's farming items are exported. In 2020, the nation exported about 73 billion agricultural commodities (Government of Canada, 2021). The nation is the fifth most significant agricultural exporter globally, with over 200 nations as customers. The nation has increased its food exports by twelve percent since 2012.

Ontario had been a major agricultural province in Canada. In 2016, Ontario made up a quarter of the nation's farm production. Agricultural land expanded by one percent to nine million acres (Statistics Canada, 2017). During the same year, Ontario also led in poultry production with 33 million birds. The demographics of Ontario's entrepreneurial farmers show a male-dominated field. In 2016, women-owned about 30 percent of all farms in Ontario. However, 55 percent of the farm operators were aged greater than 55 years (Statistics Canada, 2017). In comparison, 9 percent of farm owners were individuals with years lower than 35. The overall operating age of entrepreneurs in Ontario was 55 years. The average age for farm owners has risen to 66 in 2021 (Chen, 2022). Since most of the farm owners are the elderly, it indicates that most youths do not venture into farming at a young age.

## **Motivation**

Research on human motivation attempts to identify why people think and act in various ways, within the context of external factors affecting their perceptions and their means for action (Cachon et al., 2013). Early entrepreneurship scholars have widely adopted theories developed within the organizational behavior field, until Gartner et al. (1992) observed a gap between these theories and reality. This triggered further research relative to motives and entrepreneurial goals, as described below.

Theoretical models of performance have underscored the important role of goal setting by entrepreneurs in their firm's growth (Morris et al., 2006; Blawatt, 1995; Naffziger, Hornsby & Kuratko, 1994; Herron & Robinson, 1993). The attention given to motivation variables by these scholars is based on the premise that a better understanding of entrepreneurial motives would contribute to a better understanding of the behaviors chosen by entrepreneurs and provide more detailed explanations about the impact of these behaviors on business performance.

The literature points to a wide variety of motivations for entrepreneurs that can be economic such as obtaining monetary compensation and building wealth in the business (Langan-Fox & Roth, 1995), generating additional income after retirement (Aspaas, 2004), acquiring personal wealth (Zimmerman & Chu, 2013), increasing personal income and/or increasing earnings (Kuratko et al., 1997) or non-economic reasons such as job security for oneself and one's family (Aronoff & Ward, 1995), self-actualization (Gok et al., 2021) the opportunity to create something (Aspaas, 2004), independence and autonomy (Gok et al., 2021) the control gained from being one's own boss, personal growth, recognition, challenge, and satisfaction of a need to succeed (Kuratko et al., 1997; Robichaud et al., 2001).

More specifically to the farming sector, a study by Pechrová et al. (2018) conducted in the Czech Republic has found that the main motive for venturing into entrepreneurship was to increasing financial stability and generating profit. Other motives include gaining independence and maximizing personal expertise. Another study from Australia (Stock & Forney, 2014) revealed that independence and autonomy was seen as an index of self-fulfillment regardless of disadvantages such as lower compensation or extensive working hours. The authors found that the Farm owners who incorporated autonomy had more loyal and reliable staff members who sustained their business activities.

The farming sector attracts entrepreneurs motivated by economic interests, social goals, and personal aspirations that drive their decision to start agribusiness activities. Murali and Thomas (2022) studied motivational factors for entering into agri-preneurship in Kerala, India. They established knowledge about the business, financial independence, self-satisfaction, and job creation as primary factors for agri-

entrepreneurship. Srishailam and Jirli (2021) also studied the factors motivating agripreneurs to start farm-based enterprises in Sanga Reddy District in India. Their findings identified education, family advice, self-interest, economic necessity, raw materials availability, and innovativeness as motivating factors for agri-entrepreneurship in Sanga Reddy District. Their research concluded that intrinsic motivations, social empowerment, and entrepreneurial competency enhance motivation in women.

These studies demonstrate that economic needs are the main factors that push entrepreneurs toward agricultural businesses in India. Although financial motivation exists in all regions, socio-cultural limitations profoundly affect how entrepreneurship operates in various geographic areas. To support entrepreneurs in agriculture, Murali and Thomas (2022) recommended that the government needs to take steps toward fair land distribution and provide financial resources and specific educational programs that match their needs.

### **Barriers/Constraints**

Another important dimension of entrepreneurship research focuses on the barriers or constraints entrepreneurs face. Storey (1994) defines barriers as internal or external factors that prevent the growth of firms. Entrepreneurship obstacles that affect farmers can be classified into internal and external. Ulvenblad et al. (2020) identified internal obstacles such as the shortage of equipment, inappropriate planning, insufficient expertise and financing. On the other hand, external obstacles are undesirable policies, access to financing, competition and shifts in surroundings. Ulvenblad et al. (2020) established that training in leadership skills effectively overcame internal obstacles such as inadequate communication and time utilization.

In Canada, the high age of farm owners is a problem in the farming sector. Many young individuals find it challenging to enter farming. In 2020, the average age of farm owners in Ontario was 56 years. Farm owners younger than thirty-five years decreased by fifteen percent from 2015 to 2020 (Chen, 2022). The decrease in young farmers could be attributed to several barriers. As example, only seven percent of Canada's land can be subjected to agriculture (Hein, 2023). The government restricts the utilization of agricultural land for other purposes than agriculture. In addition, some provinces, such as Alberta and Saskatchewan, have limited the number of land foreigners own to about twenty and ten acres, respectively (Hein, 2023). All these restrictions also make procuring agricultural land to be challenging.

Young people should be encouraged to venture into agricultural entrepreneurship. However, entrance into entrepreneurship depends on multiple elements. Pechrová et al. (2018) examined the aspects that impacted new young farmers in the Czech Republic. Five hundred young farmers indicated that their major incentives were to extend their family's farming practices. The respondents also preferred to be associated with nature through farming. The most considerable obstacles were procuring farming land, managing difficulties, and accumulating the required financing. Procuring farming land is indeed problematic for young farmers. A survey conducted by National Young Farmer Coalition in 2017 indicated that sixty percent of entrepreneurial farmers found gaining land to be the most significant challenge (Manning, 2019). Due to this, many aspiring farmers have to lease land during the beginning stages. Despite its affordability at the beginning, this approach lacks stability. Banks are not usually supportive of such ventures without proof of success. In addition, the farmers are not motivated to set up expensive infrastructure without guaranteeing recovery funds. Leasing land can also be challenging because some landlords lack comprehension of agricultural business.

Moreover, financial obstacles are one of the most significant issues impacting entrepreneurs. Hoogendoorn et al. (2019) indicated that an extensive survey showed that financial inaccessibility was a chief obstacle affecting entrepreneurs. Hassink et al. (2016) interviewed several care farmers. The majority of them were spouses of farmers with a background in healthcare. These entrepreneurs faced challenges such as financial constraints. Most of them succeeded in the initial stages due to their educational background and accessibility to a network.

The agricultural subsidies given to the farming sector is also problematic. Subsidies can be defined as financial assistance, such as tax reductions, to assist a certain economic sector (Gössling et al., 2017). Canada has one of the least significant degrees of agricultural subsidies and national support in the

developed nations. The nation's farming subsidies comprised 9 percent of the farm receipts in 2015. In comparison, European nations had 18 percent subsidies. Countries like Switzerland had the most extensive 60 percent subsidies.

Regardless of farmers finding suitable business opportunities, most find it challenging to manage the establishment to earn profit. The excitement of beginning a new operation can prevent one from gathering sufficient knowledge on management (Manning, 2019). Even though entrepreneurial farmers know the relevance of planning, they may lack the expertise to run their operations. Internal obstacles that restrict success are mainly attributed to the farm owners. These include the personality and expertise of the farm entrepreneur. Expertise traits incorporate experience in financial management, education, marketing and the industry. On the other hand, personality traits entail openness and extraversion. Farmers have to obtain assistance from other parties to enhance their management capabilities. For instance, some online workshops provide education that ensures the success of new establishments. These workshops have guidelines on gaining income and locating the appropriate market. The internet has numerous free or paid services that provide training on developing management expertise.

The above-mentioned barriers are not only happening in Canada. The same obstacles inhibit the success of entrepreneurs globally. Rezaei-Moghaddam and Izadi (2019) depicted several hurdles that impacted entrepreneurs in Iran: finance inaccessibility, inadequate information, weak business surroundings and inadequate government supportive policies. Even though an agricultural business can gain from its short-term business tasks, its long-term is at risk. Businesses' long-term capability relies on transparency and catering to other stakeholders' interests. Likewise, the work experience of the individuals is also necessary for success. Other factors impacting success are farm location, education attainment and age. Since most farm entrepreneurs do not have access to knowledge, they do not gain the required management skills for their farms.

Qing et al. (2021) explored the instigators and obstacles for Chinese farmer entrepreneurs. Interviews and surveys were used to gather information. Three hundred seventy farmer entrepreneurs highlighted that the psychological aspect induced them. These inducements included obtaining reliable finances, marketing and enhancing their managerial expertise. In contrast, the obstacles included the difficulty in attaining finance and expertise. The implications illustrated that accessibility to finance was crucial for success.

People from minority groups face various challenges when venturing into farming entrepreneurship. Cho et al. (2019) examined numerous incentives and obstacles that impacted possible Latina entrepreneurs. The approach used information from focus groups. The respondents were Latinas aged twenty to thirty who were aiming to begin businesses. However, the majority of the respondents were university learners. The results indicated that about four types of elements impacted the respondents. These elements were culture, incentives, obstacles and other prerequisite resources. Moreover, culture and gender were one of the leading obstacles and incentives. The incentives included parental business ownership, self-reliance, reliable income and satisfaction. The obstacles entailed fear, inadequate knowledge of financial management, business area and prejudice. The successful items that allowed entrepreneurs to succeed included education, networks with reliable mentors and online sources.

## **RESEARCH METHODOLOGY**

### **Variables Measurement**

Data on entrepreneurial motivations were collected through a survey questionnaire developed and validated by Robichaud, McGraw and Roger (2001) based on a literature review identifying the major motives categories present in the extant literature. Motivational constructs were then validated among samples of entrepreneurs and through further research in various countries, including Canada (Robichaud et al., 2010), Mexico and the U.S. (Cachon et al., 2013), and Morocco (Robichaud et al., 2023).

Data on barriers were collected through an instrument developed by Chu and Katsioloudes (2001). This questionnaire has been widely used in many countries, such as Romania, Vietnam, India, Venezuela, Canada, Mexico, the United States, Nigeria, Ghana and Kenya. The barriers scale comprises 16 items. The

aforementioned measurement instrument used for entrepreneurs' motives includes 18 statements. Scales variables were measured with Likert-type scales ranging from 1 = unimportant to 5 = extremely important.

### **Sample Selection**

This article aims to monitor the perspectives of all Ontario farmers entailing their motivations and obstacles as entrepreneurs. The article used purposive sampling, meaning the samples have been selected based on specific characteristics and criteria relevant to the study (Etikan and Bala, 2017). All potential respondents were given equal opportunities to be involved in the research. According to Chen (2022), there are 48,346 farms in Ontario. A total of 863 questionnaires were sent to Ontario's farmers through emails. *Data were collected through the « SurveyMonkey » software in the province of Ontario.* From the 863 questionnaires sent, 82 questionnaires were received for a response rate of 10% (82/863). A total of 60 valid questionnaires remained after eliminating the 22 questionnaires uncompleted or partially completed.

### **Data Analysis**

Data were analyzed with the SPSS package, using the following statistics: descriptive statistics such as means and standard deviations, Mann-Whitney non-parametric tests, and principal components analysis, generally referred to as factor analysis.

## **RESULTS**

### **Profile of the Respondents**

The table 1 below summarizes the sample characteristics used to complete this study. To begin with, the sample has slightly more male respondents, as 35 out of 60 identified as male, which makes up 59% of the total. Females are still a minority, with only 25 respondents out of the total, representing 41% of the group. Considering the genders of the farmers, this analysis indicates a gender disparity, with more male farmers than female ones. Knowledge of this distribution is important for making conclusions and assessments of results of gender-oriented studies, selecting correct samples, and investigating how different gender groups are represented in the overall population.

The age distribution of the respondents indicates that the smallest group consists of those aged 20-29 (only one respondent), which means that the findings only represent some of the younger population. On the other hand, most of the respondents (50%) were aged between 30-49 years. This distribution is essential when assessing the requirements and expectations of participants of different ages in the studies.

Additionally, it can be seen that the majority, 85% of the respondents, possess at least a college diploma or university degree compared to 15% of the respondents who have a high school diploma. It is also important to note that this distribution demonstrated a sample of respondents with considerable education. Regarding marital status and spousal involvement, 85% of respondents indicate that they live with their spouse or partner, and 60% report that their spouse or partner actively participates in the farming business. Only 32% of respondents confirm that their children are involved in farming. These findings reinforce the notion that farming businesses are heavily family-oriented, with spouses playing an integral role in operations. Regarding the type of produce, as many as 60% of the respondents stated that they major in organic products, while 28% produce conventional products. However, only 12% produce both organic and conventional products.

In terms of organizational characteristics, the data suggests that the majority of businesses in this sector are small-scale enterprises, with 83% operating with five or fewer employees. In terms of revenue distribution, 42% of the respondents report annual sales below \$100,000, while only 24% generate over \$500,000. While the lower revenue figures may indicate financial constraints, it also reflects the nature of these businesses where many of which are likely owner-operated farms or small-scale enterprises focused on sustainable and locally driven production. Further, the majority of the respondents (65%) of the respondents started their farming business from scratch, while 22% started theirs through inheritance. However, the smallest proportion (13%) initiated their business through acquisition. Ownership structures further reinforce the family-oriented nature of these enterprises. 47% of businesses are run by two owners,

often family members or close business partners, ensuring continuity and shared decision-making. Additionally, 38% of businesses are solely owned, highlighting many independent operators who manage all aspects of their farms or businesses. Financial stability is another critical factor. 42% of respondents perceive their level of debt as important or very important, at the same time, 30% consider debt to be of low or very low importance, suggesting that while businesses rely on financing, they are mindful of their financial obligations. Looking at the longevity of these businesses, 37% have been in operation for more than 21 years, meanwhile, 26% are between 1 to 5 years old, demonstrating resilience and long-term viability.

**TABLE 1**  
**RESPONDENTS' PERSONAL AND ORGANIZATIONAL CHARACTERISTICS (N=60)**

Personal Characteristics		Organizational Characteristics	
	%		%
Age		Type of produce	
20 to 29 years	2	Organic produce	60
30 to 49 years	50	Conventional products	28
50 +	48	Both	12
Education		Sales	
High School	15	Under \$100,000	42
College/university degree	85	\$100,001- \$500,000	34
		\$500,001 and +	24
Gender		Number of employees	
Male	58	1 to 5 employees	83
Female	42	6 to 10 employees	12
		11 + employees	5
Status and spousal involvement		Start-up process	
Living with spouse/partner	85	Created by owner	65
Spouse/partner involved in business		Acquisition	13
Children involved in business	60	Inherited	22
	32		
Past experience in business sector		Age of the business	
None	33	1-5 years	26
1-5 years	20	6-10 years	25
6-10 years	17	11-20 years	12
11+ years	30	21 years and +	37
Past management experience		Number of owners	
Yes	28	1 owner	38
No	72	2 owners	47
		3 owners and +	15
Weekly hours worked in firm		Importance of debt	
0-20 hours	12	Low/very low	30
21-40 hours	25	Medium	28
41-55 hours	38	Important/very important	42
56 hours and over	15		

### Motivation Factors and Barriers

#### Motivations

The descriptive statistical results of entrepreneurial motivations (Table 2) show the following: the motive “for my satisfaction and growth” yields the highest mean score of 4.43, followed by ‘to make my

own decisions' with a mean of 4.12, and 'to be my own boss' with a mean score of 4.05. On the contrary, the analysis has revealed that 'to gain public recognition' is the lowest motivating factor, with a mean score of 2.41, which means that it is the least important motive. Others with slightly low means are "to provide jobs to my family" (2.73) and "to build a business to pass on" (3.03), which also do not depict emphasis on the external or future goals in business.

The standard deviations based on the responses show the dispersion and the factor with the highest standard deviation is 'to provide jobs for family members' (SD = 1.21943). It shows that the responses regarding this factor are quite diverse. Contrarily, the responses "for my own satisfaction and growth" (0.8520) and "to make my own decisions" (0.640) have particularly low standard deviations, which show that opinions are less varied among the participants.

Therefore, the results seem to indicate that independence factors (be my own boss and make my own decisions) were the most important motives, while public appreciation and providing jobs to family are less important.

**TABLE 2**  
**ENTREPRENEURIAL MOTIVATIONS SCALE MEANS AND STANDARD DEVIATIONS**

Motivation Variables	Means	Standard deviations
For my own satisfaction and growth	4.43	.852
Make my own decisions	4.12	.640
Be my own boss	4.05	.852
Have fun	3.97	.956
Maintain my personal freedom	3.82	1.033
Meet the challenge	3.73	.918
Create my own job	3.62	1.059
Be closer to my family	3.57	1.063
Prove I can succeed	3.45	1.141
Acquire a comfortable living	3.45	.988
Increase sales and profits	3.35	.939
Build up equity for retirement	3.23	.9457
Increase my income	3.13	.982
To always have job security	3.11	1.121
Maximize business growth	3.08	.944
Build a business to pass on	3.03	1.206
Provide jobs to my family	2.73	1.219
Gain public recognition	2.41	1.093

A factor analysis (varimax principal component analysis) of the respondents' motivations was conducted to determine motivational factors. The criterion for factor retention was Kaiser's, i.e. all factors with an eigenvalue superior to 1 may be retained. As recommended by Hair et al. (2006), we retained statements whose communalities between variables were greater than 0.50 with a factor loading exceeding 0.50. The application of these criteria resulted in the elimination of the following statements: " For my own satisfaction and growth ", "Build up equity for retirement" and " Gain public recognition ". The main observations derived from Table 3 are as follows:

- Five motivational factors resulted from the principal components analysis: Extrinsic motives (three statements), Intrinsic motives (three statements), Independence motives (three statements), Security and well-being goals (three statements) and Family and autonomy (three statements).



- The total percentage of variance explained was 73.08 per cent.
- The internal consistency of the four scales calculated by Cronbach's alpha ranges from 0.60 to 0.82 which indicates a good internal consistency taking into account the number of statements. On this subject, Nunnally and Bernstein (1994) mention that for an instrument composed of small scales of three to four statements, an alpha coefficient of 0.70 or more is considered satisfactory and indicates that items forming the scales are likely to measure the same construct.

Principal component analysis reduces a larger set of variables to a few general dimensions, thus providing an overall picture of the factors instead of an individual consideration of each variable. Eigenvalues obtained for each factor indicate its relative importance by explaining the proportion of total variance associated with a factor's component variables. For example, the "extrinsic motives" factor explains most of the total variance (29.87 per cent), followed by the "intrinsic motivations" factor with 14.14 per cent and by the "independence", "security and well-being", "family and autonomy" factors, with 11.04 per cent, 10.54 per cent and 7.49 per cent respectively.

It is important to understand that factor analysis results do not inform us about the relative importance of each factor from the respondents' perspective. For example, although the factor extrinsic motivations" ranks first in the percentage of variance explained in the factor analysis with 29.87 per cent (Table 3), Table 4 shows that its cumulated score ranks fourth out of five in the importance attributed to factors by respondents, with a cumulative average score of 3.31. Moreover, the factor "independence motivations" was found to be the most important factor according to respondents' scores, with a cumulative average of 3.92. Other factors "family and autonomy", "intrinsic factors" and "family security and well-being" ranked third and fourth respectively with mean scores of 3.42 and 3.31 while " Security and well-being" factor finish last with a score of 2.96.

**TABLE 3**  
**MOTIVATIONS – FACTOR ANALYSIS**

Variables	Extrinsic Motives	Intrinsic Motives	Independence	Security and wellbeing	Family and Autonomy	Communalities
Acquire a comfortable living	0.779					0.691
Increase sales and profits	0.730					0.711
Increase my income	0.815					0.748
Maximize business growth		0.707				0.692
Meet the challenge		0.836				0.752
Prove I can succeed		0.748				0.662
Be my own boss			0.799			0.763
Create my own job			0.659			0.654
Make my own decisions			0.750			0.696
Provide jobs to my family				0.743		0.768

Build a business to pass on				0.732		0.797
To always have job security				0.572		0.810
Have fun					0.738	0.686
Be closer to my family					0.699	0.755
Maintain my personal freedom					0.688	0.776
Eigenvalues	4.481	2.122	1.655	1.581	1.123	
Explained Variance	29.87	14.14	11.04	10.54	7.49	
Cronbach's Alpha	.82	.73	.64	.76	.60	

**TABLE 4  
MEAN SCORES – MOTIVATION FACTORS**

Factors	Mean	Standard Deviation
Independence	3.92	.65553
Family and Autonomy	3.78	.75121
Intrinsic Motives	3.42	.80924
Extrinsic Motives	3.31	.85891
Security and well-being	2.96	.97055

Scales' means were computed by averaging all the statements' scores composing each factor. For example, the mean score equal to 3.92 obtained for the « independence » factor equals the average score for the statements forming that factor. (see table 3)

### *Barriers*

Agricultural business owners face challenges that hinder the way they run their businesses and restrict business development in the farming industry. The descriptive analysis (table 5) reveals several critical issues as follows. The top-ranked statement for all respondents was " too much government regulation/bureaucracy " with a total mean score of 3.36. It is the most significant challenge as it shows how elevated regulation reduces economic activity fluidity and discourages enterprise. The second highest ranked statement is "unreliable and undependable employees ", with a mean score of 3.12, indicating the problem of having a steady supply of a pool of employees who could work without much deviation from the expected behavior given the labor-oriented demand of agriculture. The third highest ranked statement is "complex and confusing tax structure" with a mean score of 2.96, followed by "weak economy", "obtaining long-term financing" and "lack of marketing training" (mean scores of 2.90, 2.88 and 2.80 respectively). On the other hand, the two choices least favored by respondents are, in order: "poor roads - transportation" and "foreign trade limitations" with average scores of 1.76 and 1.31. These are the only two statements, among the 13 statements in the barriers' measurement instrument, that obtain a mean of less than 2.00. This result was expected since our sample's entrepreneurs do not rely on transportation or exportations due to the small-scale enterprises we are dealing with. The small scale diminishes the need for long transportation while at the same time limits exportations.

In conclusion, farming entrepreneurs fight multiple challenges that are related to the available workforce, bureaucracy, funding, education, and overall economy. These present complex policy solutions that need enhanced legislation to work, better access to finance, better-prepared training, and institutional development to facilitate the farming business improvement in the country.

**TABLE 5**  
**ENTREPRENEURIAL BARRIERS SCALE MEANS AND STANDARD DEVIATIONS**

Barriers Variables	Means	Standard deviations
Too much government regulation/bureaucracy	3.36	1.389
Unreliable and undependable employees	3.12	1.341
Complex and confusing tax structure	2.96	1.261
Weak economy	2.90	1.258
Obtaining long-term financing	2.88	1.290
Lack of marketing training	2.80	1.146
Obtaining short-term financing	2.78	1.276
Inability to maintain accurate accounting records	2.75	1.269
Too much competition	2.68	1.112
Lack of management training	2.48	1.033
Complicated business registration process	2.26	1.162
Poor roads - transportation	1.76	1.411
Foreign trade limitations	1.31	.812

The data on entrepreneurial barriers were also subjected to a principal component analysis to determine their factor structure. The statements "weak economy" and "too much competition" were eliminated. Table 6 presents the results of the factor analysis, suggesting four groupings as follows: Factor 1 represents the lack of training (3 statements); Factor 2 represents the external environment (4 statements), while Factor 3 encompasses the access to quality labor and the government bureaucracy (2 statements) and Factor 4 focuses on registration process and tax structure. The lack of training scale was found to be the strongest in the analysis (percentage of variance explained of 36.12 and an eigenvalue of 3.973) followed in order by the external environment factor (percentage of variance explained of 17.27 and an eigenvalue of 1.900), the access to quality labor and bureaucracy factor (percentage of variance explained of 10.82 and an eigenvalue of 1.190) and the registration process and tax structure factor (percentage of variance explained of 9.64 and an eigenvalue of 1.060). The total percentage of variance explained was 73.85 per cent. The internal consistency of the 4 scales calculated by Cronbach's alpha varies from 0.68 to 0.82, indicating good internal consistency.

**TABLE 6**  
**BARRIES – FACTOR ANALYSIS**

Variables	Lack of training	External environment	Access to quality labor/ bureaucracy	Registration process and tax structure issues	Communalities
Inability to maintain accurate accounting records	.772				.651
Lack of marketing training	.696				.572
Lack of management training	.818				.770
Obtaining short-term financing		.838			.879

Obtaining long-term financing		.801			.877
Foreign trade limitations		.560			.619
Poor roads/ transportation		.587			.599
Unreliable and undependable employees			.859		.774
Too much government regulation/bureaucracy			.784		.706
Complex and confusing tax structure				.757	.790
Complicated business registration process				.925	.886
Eigenvalues	3.973	1.900	1.190	1.060	
Explained Variance (%)	36.12	17.27	10.82	9.64	
Cronbach's Alpha	.73	.77	.68	.82	

Table 7 presents those factors most important to respondents. The 'access to quality labor/bureaucracy' factor ranked first with an average score of 3.24, while 'lack of training', 'registration process and tax structure issues' and 'external environment' ranked second, third and fourth, with cumulative average scores respectively equal to 2.68, 2.61 and 2.18.

**TABLE 7**  
**MEAN SCORES – BARRIERS FACTORS**

Factors	Means	Standard deviations
Access to quality labor/bureaucracy	3.24	1.18783
Lack of training	2.68	.90607
Registration process and tax structure issues	2.61	1.11753
External environment	2.18	.90388

Scales' means were computed by averaging all the statements' scores composing each factor. For example, the mean score obtained for the « Access to quality labor/bureaucracy » factor equals the average score for the statements forming that factor. (see table 6).

## DISCUSSION

In this section, the results obtained on motivations and barriers are discussed in view of the reviewed literature to gain more insights regarding farmers' entrepreneurs.

### Motivations

First, statistical analyses of the results reveal that entrepreneurs in our study are primarily motivated by independence and autonomy goals, as six of the top eight choices are independence/autonomy motivated. Only the first choice "for my own satisfaction and growth" and the sixth choice "meet my challenge" are intrinsic in nature. On the other hand, all the extrinsic motives arrive late in the list meaning that the extrinsic motivations were less important for the respondents. Therefore, the entrepreneurs in the sample are seeking, through their business, to achieve mainly independent and autonomy objectives and to help their personal development.

From the factor analysis, several motivating factors have been revealed. Notably, this study's findings align with other previous studies on entrepreneurial motivations. This study's findings are consistent with previous research on entrepreneurial motivation, especially those described by Robichaud et al. (2010), Robichaud et al. (2023), Kuratko et al. (1997), Murali and Thomas (2022), Srishailam and Jirli (2021), Zimmerman and Chu (2013), and Benzing et al. (2009) which have resulted in four factors: an independence factor, a family security factor, an income factor and an intrinsic factor. However, there is a slight exception. Contrary to these previous studies, this study uncovered five distinct motivating factors related to entrepreneurs in the farming sector: extrinsic and intrinsic factors, security and well-being factor, family and autonomy factor, and independence factor. Nonetheless, the difference comes from the fact that the "independence and autonomy" factor from these previous studies has been divided, in our study, into two separate dimensions, "independence" and "family and autonomy." The motivations for the latter include "be closer to my family", "maintain my personal freedom" and "have fun". This division between "independence" and "family and autonomy" is significant because it implies that more subtle motivations related to autonomy have been considered. Contrary to earlier studies this study's findings show that entrepreneurs may distinguish between professional independence and personal autonomy. In contrast, independence is found to be more related to professional decision-making and autonomy with family and lifestyle.

In addition, the independence motivations factor ranked first with a mean of 3.92 followed closely by the family and autonomy motivations factor with a mean of 3.78, and by intrinsic motivations with a mean of 3.42. The importance of independence is also consistent with a great deal of entrepreneurship research (Kuratko et al., 1997; Stock and Forney, 2014; Cachon et al., 2013; Murali and Thomas, 2022; Srishailam and Jirli, 2021). Indeed, one of the reasons why many become entrepreneurs is to escape the structured corporate life, enjoy personal freedom, and make all the decisions without interference from the outside. This also aligns with Robichaud et al.'s (2010) finding that Canadian female entrepreneurs veered towards independence and autonomy in seeking self-employment for personal growth and the ability to make decisions without external constraints. In particular, Pechrová et al. (2018) pointed out that independence is highly pertinent in the context of the farming sector, as it provides greater organizational flexibility, control over the amount of work done at a specific time, and the ability to perform strategic decision-making. Robichaud et al. (2023) further support this finding, arguing that Moroccan entrepreneurs are looking to be independent, but they also tend towards financial motives.

In conclusion, despite the difference in their orientation towards entrepreneurial action, this study reveals that entrepreneurs are motivated primarily by independence and family/autonomy motives followed by intrinsic motives, extrinsic and security and well-being motives. It definitely shows, with the caution required in the context of such a sample, that entrepreneurs in the farming industry in Ontario are privileging independent and family/autonomy motivations over extrinsic motivations.

## **Barriers**

As shown by the mean scores in Table 5, the six most critical problems faced by Ontario farmers entrepreneurs are (1) too much government regulation and bureaucracy; (2) the inability to attract and retain good employees; (3) a complex and confusing tax structure; (4) a weak economy; (5) the inability to obtain long-term financing and (6) the lack of marketing training. While these factors are critical for this study, only of these four barriers have been extensively discussed in this section.

Excessive government regulation and bureaucracy were found to be the most significant barriers to entrepreneurship in the farming sector in Ontario, with a mean score of 3.36. This challenge describes how increased regulations stifle the flow of economic activity, causing impediments to the arbitrariness of agricultural business. The observations by Ulvenblad et al. (2020) corroborate the above findings by asserting that the existence of external obstacles, such as undesirable policies, causes hindrances to entrepreneurship. For example, in Canada where government controls the amount of foreign land ownership, this is a particular hindrance to young industry entrepreneurs because they cannot purchase land (OECD, 2017). The results suggest that bureaucracy also needs to be streamlined, and agriculture processes

streamlined. This is similar to the findings of Benzing et al. (2009), who found that excessive government regulation is a big issue for small businesses in Turkey.

The lack of reliable and dependable workers is another barrier to entrepreneurship, with a mean score of 3.12. This points towards the difficulty of keeping such employees stable and consistent. This barrier is most apparent during peak periods when the productivity risk is high. Open comments received by participants also echoed this problem. They mentioned that they have problems with accessing skilled and seasonal workers, high labor costs, and dependence on offshore workers. Productivity is affected by the challenge of finding dependable employees, particularly during peak seasons. In addition, staff shortages and unpredictable labor results in inefficiencies in farm operations. These constraints reflect the sensitive nature of the sector to a stable workforce and the need for supporting policies to maintain the availability of agricultural labor.

The inability to attract and retain good employees are also revealed by Benzing et al. (2009) to be a barrier to entrepreneurship. Qing et al. (2021) found that the main bottleneck to efficiency is unreliable labor, which corroborates this claim. In addition, Ulvenblad et al. (2020) also stated that keeping leaders trained to overcome these internal obstacles such as labor management is important. Finally, this barrier stresses that the programs can be further fortified to help employees reach the pre-established performance standards.

The results also show that the complex tax structure (mean score: 2.96) is another barrier to agricultural entrepreneurship in Ontario. Taxation systems are complicated for business development as they create some hurdles for new market ventures to grow. The findings of Benzing et al. (2009) support the above results by affirming that tax-related issues are a key barrier to the spread of entrepreneurship in Turkey. According to Rezaei-Moghaddam and Izadi (2019), weak environmental conditions for business activity restrict entrepreneurship. Tax systems should be simple, and financial education should be for the actual agricultural principles if business advances for agricultural entrepreneurs will be productive and would boost entrepreneurship.

Finally, the lack of marketing training (with a mean score of 2.80) was identified as another barrier to agricultural entrepreneurship in Ontario. The variables that can account for the lack of training being a barrier to agricultural entrepreneurship include lack of management training and inability to maintain accurate accounting records. Benzing et al.'s (2009) findings on the problems entrepreneurs face in Turkey also mentioned the lack of market training, management training, and an inability to have accurate accounting records, which align with this finding. In both cases, entrepreneurs face difficulty in marketing products effectively, managing the business, or accounting for finances when they are affected by inadequate training. Ulvenblad et al. (2020) disagreed with Benzing et al. (2009) sentiments that areas like marketing and modern management can assist in surmounting internal barriers. Training programs aimed at agricultural entrepreneurs might help to bridge the gap between agricultural entrepreneurs and knowledge and improve marketing capabilities.

The factor analysis conducted on barriers suggests four groupings: "lack of training," "external environment", "access to quality labor/bureaucracy" and "registration process and tax structure issues". The four factors generated by the factor analysis appear to be fairly consistent since barriers of the same nature were grouped together. For example, the "external environment" factor includes the statements "foreign trade limitations," and "obtaining short- and long-term financing," while the "lack of training" factor includes the statements "inability to maintain accurate accounting records," "lack of marketing training," and "lack of management training. The "access to quality labor/bureaucracy" factor rank first in the calculation of the cumulative factor averages with averages of 3.24 followed by "lack of training" (average of 2.68). The gap obtained between the mean score of the first two factors (3.24 versus 2.68) really shows that the inability to attract and retain good employees seems to be the major problem of our respondents

In conclusion, the identified barriers are worthy criticisms pointing to major challenges, which can only be tackled with policy intervention, institutional support, and better training programs. The resolution of these issues could substantially enhance the conditions of agricultural entrepreneurship while increasing economic growth in the farming industry.

## CONCLUSIONS AND IMPLICATIONS FOR FURTHER RESEARCH

### Conclusions

The findings from this study are valuable in understanding the motivations and barriers to entrepreneurship in the farming sector in Ontario. The results show that independence is the most important motivation to farmers. Based on the factor analysis, the independence factor which include being my own boss, create my own job and make my own decisions dominates the other motivations factors such as intrinsic and extrinsic. Obviously, Ontario's farmers are not in business primarily for the money. The only difference in our findings on motivation when compared to previous studies is the division of the "independence and autonomy" factor found in previous studies on motivations into two separate dimensions, "independence" and "family and autonomy." Despite the fact that previous studies grouped "independence" and "autonomy" together, their division (as observed in this study) is significant because it pinpoints distinct entrepreneurial motivations for farmers, thus reflecting broader trends in entrepreneurship. To that effect, independence seems to be more related to economic decision-making while autonomy is link with family and lifestyle.

Finally, the analysis of the barriers indicates that he farmers entrepreneurs in Ontario are most concerned about the following problems: excessive government regulations, access to quality employees, complex tax structures, economic challenges, financing difficulties, and inadequate marketing training. Policy reform should address these barriers, improving training programs and financial access, in order to promote entrepreneurship among farmers in Ontario and thereby expand the economic activity in the province as a whole. The findings are important for understanding the dynamics between motivations and immobilizers in agricultural entrepreneurship and suggest a number of ways in which such interventions might support the viability and sustainability of farming enterprises in the region.

### Limitations

While this study provides useful information regarding the motivations and barriers of farming entrepreneurs in Ontario, it is worth noting that it has several limitations. First, the survey used for collecting data was self-reported, which may induce a bias due to social desirability or inaccurate recall. Second, the number of valid responses for the sample size was small (60), such that the findings could not be generalized. This limitation can be addressed by using a larger and more diverse samples. Third, the selection of the respondents through purposive sampling may increase the likelihood of selection bias as the respondents were chosen according to preset criteria, which may not have covered all the other views in the farming sector. However, future researchers can adopt a simple random sampling technique since it gives everyone a fair chance of being selected. Fourth, the research is cross-sectional; the data were collected at only one point in time, regardless of whether self-motivation or barriers have changed over time. To address this limitation, future research should adopt longitudinal designs. Fifth, the focus of the study is generally on Ontario, thus limiting the applicability of the findings to other regions or contexts without further validation. Future studies should cover different regions to enhance generalizability of study findings.

### Implications For Further Research

The results of this study have important implications for future research designed to understand and foster entrepreneurship in the agricultural area. First, the distinction between independence and autonomy as separate motivational factors implies that further refined studies need to be done to understand the role of these aspects in shaping entrepreneurial behavior and decision-making. Second, further research could also examine how family involvement in the farm business motivates, resists, and sustains business. Third, more research is needed on the effectiveness of policy interventions like removing bureaucratic barriers and providing access to financial resources and training programs targeted at agricultural entrepreneurs. Fourth, longitudinal studies on motivations and barriers to entrepreneurship better inform us about how entrepreneurial motivations and barriers evolve, mostly as farmers gain experience as they adjust to changes in the economic and environmental landscape. The same could be done by comparing entrepreneurial

motivations and barriers across different provinces or countries, as it would give a better understanding of how regional and cultural factors contribute to the same. Fifth, future research should also discuss other potential innovative models of financing and training that can be adapted to the needs of agricultural entrepreneurs. Finally, interdisciplinary research integrating economics, psychology, and agricultural science perspectives may lead to total frameworks supporting farming entrepreneurship. Such efforts can provide input for policies and programs that help attract new entrants to the sector, improve the level of farm productivity, and play a role in agricultural industry growth and development.

## REFERENCES

- Aronoff, C.E., & Ward, J.L. (1995). Family-owned businesses: A thing of the past or a model for the future? *Family Business Review*, 8(2), 121–130. <https://doi.org/10.1111/j.1741-6248.1995.0012>
- Aspaas, H.R. (2004). Minority women's microenterprises in rural areas of the United States of America: African American, Hispanic American and Native American case studies. *GeoJournal*, 61, 281–289. <https://doi.org/10.1007/s10708-004-3689-0>
- Benzing, C., Chu, H.M., & Kara, O. (2009). Entrepreneurs in Turkey: A Factor Analysis of Motivations, Success Factors, and Problems. *Journal of Small Business Management*, 47(1), 58–91. <https://doi.org/10.1111/j.1540-627X.2008.00262.x>
- Blawatt, K. (1995). Defining the entrepreneur, a conceptual model of entrepreneurship. *CCSBCECPME Proceedings*, p. 1337.
- Cachon, J.C., Codina, J.B., Eccius-Wellmann, C., McGraw, E., & Myers, D.A. (2013). Entrepreneurial motives and performance: Evidence from North America. *Journal of Management Policy and Practice*, 14(3), 50–77. Retrieved from [http://www.nabusinesspress.com/JMPP/CachonJC\\_Web14\\_3\\_.pdf](http://www.nabusinesspress.com/JMPP/CachonJC_Web14_3_.pdf)
- Chen, Z.J. (2022). Canadian Agriculture at a Glance: Ontario is an agricultural powerhouse that leads in many farming categories. *Statistics Canada*. Retrieved from <https://www150.statcan.gc.ca/n1/pub/96-325-x/2021001/article/00006-eng.htm>
- Cho, E., Moon, Z.K., & Bounkhong, T. (2019). A qualitative study on motivators and barriers affecting entrepreneurship among Latinas. *Gender in Management: An International Journal*, 34(4), 326–343. <https://doi.org/10.1108/GM-07-2018-0096>
- Chu, H.M., & Katsioloudes, M.I. (2001). Cultural Context and the Vietnamese-American Entrepreneurial Experience. *Journal of Transnational Management Development*, 7(2), 37–46. [https://doi.org/10.1300/j130v07n02\\_04](https://doi.org/10.1300/j130v07n02_04)
- Chu, H.M., Benzing, C., & McGee, C. (2007). Ghanaian and Kenyan Entrepreneurs: A Comparative Analysis of their motivations, success characteristics, and problems. *Journal of Developmental Entrepreneurship*, 12(3), 295–322. <https://doi.org/10.1142/S1084946707000691>
- Etikan, I., & Bala, K. (2017). Sampling and sampling methods. *Biometrics & Biostatistics International Journal*, 5(6), 215–217. <https://doi.org/10.15406/bbij.2017.05.00149>
- Gartner, W.B., Bird, B.J., & Starr, J.A. (1992). Acting as If: Differentiating Entrepreneurial from Organizational Behavior. *Entrepreneurship Theory and Practice*, 16(3), 13–32. <https://doi.org/10.1177/104225879201600302>
- Gok, K., Kara, O., Lakshman, S., Demirtas, O., & Chu, H.M. (2021). A Factor Analysis of the Entrepreneurial Success, Motivation and Problems Faced: The Case of Chinese Entrepreneurs. *Journal of Entrepreneurship and Innovation in Emerging Economies*, 7(2), 165–193. <https://doi.org/10.1177/23939575211019591>
- Gössling, S., Fichert, F., & Forsyth, P. (2017). Subsidies in Aviation. *Sustainability*, 9(8), 1295. <https://doi.org/10.3390/su9081295>
- Government of Canada. (2021). 2020–2021 *Departmental Results Report: Agriculture and Agri-Food Canada*. Retrieved from <https://agriculture.canada.ca/en/departement/transparence/departemental-results-report/2020-2021-departmental-results-report>



- Hair, J., Black, W., Babin, B., Anderson, R., & Tatham, R. (2006). *Multivariate Data Analysis* (6th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- Hassink, J., Hulsink, W., & Grin, J. (2016). Entrepreneurship in agriculture and healthcare: Different entry strategies of care farmers. *Journal of Rural Studies*, *43*, 27–39. <https://doi.org/10.1016/j.jrurstud.2015.11.013>
- Hein, T. (2023). *Agriculture in Canada*. In *The Canadian Encyclopedia*. Retrieved from <https://www.thecanadianencyclopedia.ca/en/article/agriculture-in-canada>
- Herron, L., & Robinson, R.B. (1993). A structural model of the effects of entrepreneurial characteristics on venture performance. *Journal of Business Venturing*, *8*(3), 281–294. Retrieved from <https://www.sciencedirect.com/science/article/pii/088390269390032Z>
- Hoogendoorn, B., van der Zwan, P., & Thurik, R. (2019). Sustainable Entrepreneurship: The Role of Perceived Barriers and Risk. *Journal of Business Ethics*, *157*(4), 1133–1154. <https://doi.org/10.1007/s10551-017-3646-8>
- Kuratko, D.F., Hornsby, J.S., & Naffziger, D.W. (1997). An Examination of Owner's Goals in Sustaining Entrepreneurship. *Journal of Small Business Management*, *35*(1). Retrieved from <https://search.proquest.com/openview/a6cf211c0fcb53e8a16b9732d4ed1665/1?pq-origsite=gscholar&cbl=49244>
- Langan-Fox, J., & Roth, S. (1995). Achievement motivation and female entrepreneurs. *Journal of Occupational and Organizational Psychology*, *68*(3), 209–218. <https://doi.org/10.1111/j.2044-8325.1995.tb00582.x>
- Manning, L. (2019). Beginning farmers identify three barriers. *Successful Farming*. Retrieved from <https://www.agriculture.com/news/business/barriers-for-beginning-farmers>
- Morris, M.H., Miyasaki, N.N., Watters, C.E., & Coombes, S.M. (2006). The Dilemma of Growth: Understanding Venture Size Choices of Women Entrepreneurs. *Journal of Small Business Management*, *44*(2), 221–244. <https://doi.org/10.1111/j.1540-627x.2006.00165.x>
- Murali, S., & Thomas, K.V. (2022). Motivational Factors for Entering into Agri-preneurship: A Study among Successful Agri-preneurs of Kerala. *Journal of Extension Education*, *34*(1), 6784–6787. <https://doi.org/10.26725/JEE.2022.1.31>
- Naffziger, D.W., Hornsby, J.S., & Kuratko, D.F. (1994). A Proposed Research Model of Entrepreneurial Motivation. *Entrepreneurship Theory and Practice*, *18*(3), 29–42. <https://doi.org/10.1177/104225879401800303>
- Nunnally, J.C., & Bernstein, I.H. (1994). *Psychometric Theory* (Third Edition). New York: McGraw-Hill.
- OECD. (2017). *SME and Entrepreneurship Policy in Canada*. OECD Publishing, Paris. <http://dx.doi.org/10.1787/9789264273467-en>
- Pechrová, S.M., Šimpach, O., Medonos, T., Spěšná, D., & Delín, M. (2018). What are the motivation and barriers of young farmers to enter the sector? *AGRIS on-line Papers in Economics and Informatics*, *10*(4), 79–87. <https://doi.org/10.7160/aol.2018.100409>
- Phillips, P.W.B., Relf-Eckstein, J.-A., Jobe, G., & Wixted, B. (2019). Configuring the new digital landscape in western Canadian agriculture. *NJAS - Wageningen Journal of Life Sciences*, *90–91*, 100295. <https://doi.org/10.1016/j.njas.2019.04.001>
- Qing, P., Li, C., Chan, S.H.J., & Deng, S. (2021). Farmer entrepreneurs in China: An empirical investigation of their motivations, success factors, and challenges faced. *Journal of Small Business & Entrepreneurship*, *33*(3), 349–369. <https://doi.org/10.1080/08276331.2020.1818539>
- Rezaei-Moghaddam, K., & Izadi, H. (2019). Entrepreneurship in small agricultural quick-impact enterprises in Iran: Development of an index, effective factors and obstacles. *Journal of Global Entrepreneurship Research*, *9*(1), 1–21. Retrieved from <https://link.springer.com/article/10.1186/s40497-018-0133-3>
- Robichaud, Y., Cachon, J.C., & Haq, R. (2010). Motives, success factors, and barriers among Canadian female entrepreneurs: The case of Greater Sudbury. *Entrepreneurial Practice Review*, *1*(2), 36–65. Retrieved from <https://api.semanticscholar.org/CorpusID:167928866>

- Robichaud, Y., Cachon, J.C., Assaidi, A., & Ahmed, N.B. (2023). Entrepreneurship in Morocco: An Empirical Study of Motives, Barriers, and Determinants of Success. *Journal of Management Policy and Practice*, 24(3), 1–27. <https://doi.org/10.33423/jmpp.v24i3.6489>
- Robichaud, Y., McGraw, E., & Roger, A. (2001). Toward the Development of a Measuring Instrument for Entrepreneurial Motivation. *Journal of Developmental Entrepreneurship*, 6(2), 189–201. Retrieved from <https://www.proquest.com/docview/208438787?sourcetype=Scholarly%20Journals>
- Srishailam, B., & Jirli, B.P. (2021). Motivating factors of farm based agripreneurs to start farm-based enterprises in Sanga Reddy District of Telangana State India. *International Journal of Current Microbiology and Applied Sciences*, 10(3), 502–507. <https://doi.org/10.20546/ijemas.2021.1003.066>
- Statistics Canada. (2017). Number of farm operators by sex, age and paid non-farm work, historical data. *Statistics Canada*. Retrieved from <https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=3210016901>
- Stock, P.V., & Forney, J. (2014). Farmer autonomy and the farming self. *Journal of Rural Studies*, 36, 160–171. <https://doi.org/10.1016/j.jrurstud.2014.07.004>
- Storey, D. (1994). *Understanding the small business sector*. Routhledge, London. Retrieved from <https://www.taylorfrancis.com/books/mono/10.4324/9781315544335/understanding-small-business-sector-david-storey>
- Ulvenblad, P., Barth, H., Ulvenblad, P.O., Ståhl, J., & Björklund, J.C. (2020). Overcoming barriers in agri-business development: Two education programs for entrepreneurs in the Swedish agricultural sector. *The Journal of Agricultural Education and Extension*, 26(5), 443–464. <https://doi.org/10.1080/1389224X.2020.1748669>
- Zimmerman, M.A., & Chu, H.M. (2013). Motivation, success, and problems of entrepreneurs in Valenzuela. *Journal of Management Policy and Practice*, 14(2), 76–90. Retrieved from <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=902a0fab12595be4d6e621b60daa623cd331d664>