Agritourism Development in Southwest Michigan: Motivations of Agritourists and Operators

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AGRITOURISM DEVELOPMENT IN SOUTHWEST MICHIGAN: MOTIVATIONS OF AGRITOURISTS AND OPERATORS

Esther Akoto Amoako, M.S.
Western Michigan University, 2020

National agricultural statistics show that the number of agritourism farms and the proportion of agritourism related revenues in the United States has steadily increased during the last ten years, especially among small family farms. The recent growth in agritourism is both demand- and supply-driven. However, there are limited studies that explore agritourism motivations from both the visitors' and operators' perspectives. This study examines what the agritourists' and operators’ motivations are and the challenges facing the industry to provide information for those currently involved and those wanting to include agritourism in their operations. Online and in-person surveys and unstructured interviews were conducted from May to September 2019. A mixed-method involving quantitative and thematic analysis of operators' motivations indicated intrinsic social factors as the primary motivation for agritourism diversification. Quantitative analysis involving the principal component factor analysis revealed three primary categories of agritourists motivations – “agricultural experiences,” “quality of life, adventure and relationships,” and “relaxation.” To relax mentally/enjoy life was identified as the primary motivation of the agritourist. The study also identifies the main generating tourists’ markets for Southwest Michigan agritourism as domestic with a significant number of regional visitors from Illinois. The development of agritourism is also facing several challenges, and support is needed from relevant institutions to sustain the industry.
AGRITOURISM DEVELOPMENT IN SOUTHWEST MICHIGAN: MOTIVATIONS OF AGRITOURISTS AND OPERATORS

by

Esther Akoto Amoako

A thesis submitted to the Graduate College in partial fulfillment of the requirements for the Degree of Master of Science Geography Western Michigan University April 2020

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CHAPTER I

INTRODUCTION

Background of the Study

Globally, many small farms struggle to remain economically viable in the face of changes in global market dynamics. The high cost of inputs, changing government support, urbanization pressures, perpetual vagaries in the weather, pest, and diseases all present themselves as constant challenges that traditional agriculture must confront (Veeck et al., 2016; Ollenburg & Buckley, 2007; Veeck et al., 2006). Following the decline in the income and revenue gained from traditional agriculture, farmers and other members of the farm household are seeking alternative avenues for additional income generation to improve their lives. In particular, small farms are integrating non-agricultural enterprises on their farms, while others seek off-farm employment to supplement their income (Joo et al., 2013; Nickerson et al., 2001). Among several forms of farm diversification, agritourism is suggested to have high economic development potential for farm families and rural communities (Barbieri, 2013). Among the compelling motivations accounting for the adoption of agritourism among farmers, especially small family farms, are that agritourism promotes employment creation, generates additional revenue, supports sustainable rural community and contributes to the management of cultural landscape and environmental conservation (Sotomayor et al., 2011; Parra López & Calero García, 2006).

Agritourism, which consists of activities that involve a visit to a farm or any agricultural setting for education and recreational involvement with agricultural, natural and heritage resources (Tew & Barbieri, 2012), has emerged as an alternative farm diversification enterprise for farms in Europe, North America and other parts of the world. While agritourism has a long-
standing history in Europe, it is relatively new in North America and is gaining momentum among U.S. farmers. In the European Union, the European Commission supports agritourism as a policy mechanism to revamp rural economies (Loureiro, 2014; Chase et al., 2008). However, development options are limited in many developing countries; therefore, these countries adopt agritourism as a policy mechanism to revive local economies as it offers an efficient utilization of farm resources (Eshun & Tettey, 2014). Many developing countries have about 70% of their population still living in rural areas and are engaged in agriculture as their livelihood. The rural landscapes offer great opportunities for agritourism development as a result. Agritourism is becoming more popular in the U.S. as a strategy to alleviate the financial burden caused by the current agricultural market conditions (Barbieri, 2010; Che et al., 2005). USDA Natural Resources Conservation Services (USDA, NRCS, 2019) has identified agritourism as a vehicle for preserving and sustaining family farms, ranches, rural communities, and conserving natural resources. According to the NRCS, agritourism has the potential to build existing relationships and expanding the future relationship between agritourism and tourism supporting industries.

Small to medium-size farms dominate the farming landscape of the U.S. in terms of land under cultivation, production value, and absolute numbers (Hoppe & MacDonald, 2018). Several scholars argue that the unfavorable condition facing traditional agriculture makes it especially difficult for small family farms to cope. Small family farms confronted with the reality of losing their farms try to find alternative ways to sustain their farm through agritourism. Again, the USDA National Agricultural Statistics Services census of agriculture indicates that the number of U.S. farms partaking in agritourism and direct sales in 2007 increased by 180 percent from 2002 representing 160,000 farms (USDA: NASS, 2014). Such growth is estimated to be sustainable in the coming years due to the increasing demand for experience-based activities.
among urban families, shorter travel by car, and the desire to support local communities and farmers (Rich et al., 2016; Carpio et al., 2008).

From the demand perspective, agritourism allows families to make more visits to agritourism locations without having to travel considerable distances (Wilkinson, 2017). Also, agritourism attracts the increasingly urban and suburban boomer and senior populations who hold nostalgic views towards farms (Che et al., 2007). In Michigan, for example, agriculture and tourism are the second and third-leading industries and contribute significantly to the local economy. According to the Michigan Agritourism Advisory Committee's report (2007), when agriculture and tourism combine through agricultural tourism, participating businesses enhance Michigan's farm gate economy and create economic diversification and a stable environment for development (Jousma-Miller et al., 2007). Many rural communities in Michigan depend on agriculture as their primary source of income. Over 24,795 Michiganders operate farms as their occupation and agriculture, food processors, agritourism, and related businesses employ over 923,000 people accounting for 22 percent of the states’ workforce (Michigan Farm Bureau, 2012).

Existing literature on agritourism often treats producers' and visitors' motivations in isolation. Although agritourism operators' and visitors' motivations are distinct, they are related and work together to shape tourism experience and agritourism product offerings. Producers cannot adequately meet the expectations of agritourists if they have limited knowledge about their motivations. Similarly, destination managers, regulatory bodies need information about producers' motivation to provide the right form of support and the required push to ensure industry growth. A demotivated operator will likely result in poor customer relationships and
hamper business growth. Therefore, this research attempts to fill in the research gap on agritourism motivation study by presenting a holistic view of agritourism motivation studies.

Though agritourism continues to receive attention from farmers and scholars, there is presently no coherent definition of agritourism, nor is there a consensus on the form of activities that constitute agritourism (Phillip et al., 2010; Flanigan et al., 2014). This study, however, defines agritourism as “visiting a working farm or any agricultural, horticultural or agribusiness operation to enjoy, be educated or be involved in activities happening there” (Wilkinson, 2017, p. 1). Thus, any recreational activity that occurs on working farms or non-working farms such as a farmer's market, farm stands, and farmhouse accommodations, among other attractions, qualifies as an agritourism activity.

Problem Statement

Agritourism, which includes various types of overnight stay and day visits to farm attractions for educational purposes and relaxation, attracts members of the public who seek an escape from the stress of urban life and enjoy nature in the countryside, has become a popular activity in the past decade. Agritourism combines elements of agriculture and tourism industries designed to attract members of the public to increase farm income, provide entertainment and recreation, and educational experience to its visitors. For most agritourism visitors, agritourism allows them to obtain fresh produce, engage in an experience-based activity, and experience nature with their families and loved ones (Veeck et al., 2016; Che et al., 2005). Understanding needs and motivations from a demand and supply perspective are crucial for the success of the agritourism business because farmers need information on visitors to improve their products. While there exist varying compelling reasons for farm diversification through agritourism
ranging from economic, education, and conservation goals, information about the agritourism market will ensure quality service delivery at agritourism attractions. Farmers can better serve and design need-oriented products for customers when they know the taste and preference of visitors. Also, regulatory authorities can provide needed support and provide guided intervention when they know the main reasons and motivations behind farm diversification through agritourism. Thus, a holistic understanding of agritourism motivation will significantly enhance the longevity of the agritourism enterprise.

However, the existing literature is still inconclusive about the primary motivations for the development of agritourism among farmers, and the research relating to agritourism visitors' motivation is equally limited. Most studies on the subject consider how agritourism business owners benefit financially from supply perspective while neglecting the nonmonetary motivation as well as the demand side for agritourism development. Again, while literature relating to demand or supply side of agritourism exist, they treat agritourism operators' and visitors' motivation in isolation. In an attempt to unpack tourists' motivations, researchers have developed motivation models and theories (Šimková & Holzner, 2014; Snepenger et al., 2006). Gao et al. (2014) focused on landscape preferences for agritourism development. Other scholars have also explored economic benefits and motivations for agritourism development, (Sandt et al., 2018; Schilling et al., 2014; Ramsey & Schaumleffel, 2006) and attribute farm operator's motivations to pecuniary benefits including generation of additional income to remain economically viable. I argue that research on agritourists and operators' motivations should be studied together to provide a holistic understanding.

Although agritourism visitors' and operators' motivations are distinct, they interact to deliver tourism experience, which contributes to industry growth. Therefore, addressing
questions such as: where agritourism visitors come from, visitors' characteristics, factors that account for agritourism participation, and the challenges that face the agritourism industry will improve understanding of agritourism motivation. Given the limitations of the literature regarding agritourism, I suggest that agritourists and operators' motivations should be examined from demand and supply perspectives to ensure a holistic study of the subject. Ultimately, this study examines the motives of agritourism visitors and farm operators for the development of agritourism enterprises. This study analyzes both the demand and supply perspectives to explore agritourism development, as well as the challenges facing the agritourism industry.

The study employs both quantitative and qualitative approaches. This approach combines interviews with survey questionnaires to address the research questions. Close-ended, open-ended, and Likert scale survey questionnaires, as well as semi-structured interview guides, were used for the study. It also employed both online and in-person surveys. I analyze quantitative data by carrying out independent sample t-test, factor analysis, and spatial analysis using IBM SPSS 26 and ArcGIS Desktop 10.6. Software packages. Also, qualitative data is analyzed using thematic analysis by searching for common themes.

Research Purpose and Questions

The primary purpose of this research examines the motivations for agritourism in Southwest Michigan. Specifically, this research seeks to determine the primary motivations of agritourism visitors and operators. It also identifies the challenges facing the agritourism industry in the region as well as explores the primary market for Southwest Michigan agritourism products and their spatial distribution. Therefore, this research has the following objectives:

➢ Examine the motivations of agritourism operators and visitors in Southwest Michigan
➢ Examine the spatial distribution of agritourists in Southwest Michigan

➢ Identify challenges facing agritourism operators in Southwest Michigan

Also, the study seeks answers to the following questions about agritourism in southwest Michigan:

➢ What are the motivations of agritourism visitors and operators in Southwest Michigan?

➢ What is the spatial pattern of agritourism visitors in Southwest Michigan?

➢ What are the challenges facing agritourism operators in Southwest Michigan?

Significance of the Study

This research significantly contributes to agritourism literature from a practical and academic perspective. Since empirical research on agritourism motivation is limited in existing literature (Schilling et al., 2014; Brown & Hershey, 2012), this study will fill in the literature gap on agritourism motivation. Information about tourists’ motivation, tourists’ experience, and what tourists look for in choosing a destination will help operators harness the economic benefits of agritourism. This research provides useful information on agritourism visitors and operators to guide relevant stakeholders and organizations in product development and promotion strategies for industry growth and development. It also could help farmers improve their product offerings to unlock new markets for their enterprises and increase their earnings. An evaluation of travel behavior and agritourism motivation provides significant insight into the market potential, promotion strategies based on identified opportunities. Effective market management enhances agritourism industry growth and expansion (Sullins et al., 2010). Furthermore, knowledge of agritourism motivations helps in designing the right message for the right customers, and this
enhances marketing communication and a more significant sales impact (Wilkinson, 2017; Srikatanyoo & Campiranon, 2010).

Study Area

Michigan is in the Midwest part of the United States (U.S.) with Lansing as its capital and bounded by four Great Lakes (Lake Superior, Lake Michigan, Lake Heron, and Lake Erie). Michigan is one of the largest states in the U.S., both in landmass and population with a total land area of 96,716 square miles (250,493 square kilometers). The major cities in Michigan include Detroit, Grand Rapids, Warren, Ann Arbor, and Flint. As of 2018, Michigan was the tenth most populous state in the U.S. with 9,995,915 residents consisting of 74.9 percent non-Hispanic white alone, 14.1 percent Black/African American alone, 5.2 percent Hispanic Latino and 5.8 percent other designation (consisting of self-identified as two or more race, Asians, American Indian, Alaska Native, Native Hawaiian, and other Pacific Islanders), (US Census Bureau, 2018).

Michigan is known for its industrial, agricultural, and tourism activities. Tourism and agriculture rank the second and third industries in Michigan. The food and agriculture industry contributes $104.7 billion to the state’s economy each year (Michigan Department of Agriculture & Rural Development, 2020). Because of the varied climate, Michigan is the second most agriculturally diverse state in the U.S., producing over 300 commodities. Figure 1 provides a quick overview of the various agricultural products produced in the state of Michigan. The importance of agriculture to Michigan residents varies widely across the state. The western Upper Peninsula is forested with little land for agriculture. However, Southern lower Michigan lies in the northern corn belt end, about 80 percent of the area is in agricultural use.
The regional pattern of agriculture in Michigan is not consistent as those in the Midwest, corn-belt, and prairie states, primarily because of more heterogeneous soils, topography, drainage, and climate and the lake effect, which determines types of farming best adapted for the particular conditions. Michigan leads in the entire U.S. in the production of blueberries, tart cherries, cranberry beans, black turtle beans, cucumbers, and red potatoes. The state also ranks among the top producers of celery, carrots, Christmas trees, apples, fresh asparagus, sweet cherries, peaches, grapes, and sugar beets.

Southwest Michigan consists of Allegan, Van Bureau, Cass, Calhoun, Berrien, Kalamazoo, Branch, Barry, Eaton, and St. Joseph Counties, as shown in figure 2. Southwest Michigan can
boast of several tourist attractions, ranging from beach towns, lively cities, to gorgeous agriculture. The agricultural areas lie along the Fruit-Belt with a unique growing area created by Lake Michigan's Lake effect that boasts peaches, apples, grapes, and blueberries. Southwest
Michigan's oldest wine region and grows Concord, Niagara juice grapes, and wine grapes. The area is one of the best destinations in the state for U-pick activities.

Organization of the Thesis

This thesis is organized into five chapters. Each chapter explores and presents different aspects of the research investigating agritourists' and operators’ motivations for agritourism development. The opening chapter has provided a general overview and background of the thesis. It places issues of agritourism in a global perspective as well as calling attention to the local level of its development while establishing the objectives and research questions. It highlights the significance of the study. Chapter two provides a theoretical foundation for the research and review of the literature to emphasize both the demand and supply motivations for agritourism development among farmers, especially small family farms and visitors. It highlights various definitions of agritourism while addressing agritourists’ motivations and buying behavior. Chapter three describes the research methodology - information on the research design, data collection procedures, tools for data analysis, the method for participants selection, and the format of the survey instrument. Chapter four presents the findings and study results of both the qualitative and quantitative study. The final chapter presents discussions and conclusions drawn from the research as well as the limitations of the study and highlights areas of importance for future research on this topic.
CHAPTER II

LITERATURE REVIEW

This study seeks to understand agritourism operators' and visitors' motivations in Southwest Michigan. It also aims to identify the challenges of the agritourism industry and assess the spatial distribution of the agritourists market. This chapter provides a theoretical and conceptual framework through the examination of relevant topics emerging from various studies, reports, and other sources of information. It examines multiple issues relating to agritourism development as well as discussions on the challenges and the location of agritourism visitors to Southwest Michigan. This chapter has several sections, including defining agritourism, trends in agritourism development, agritourism visitors' and operators' motivations from demand and supply perspectives, and the impacts of agritourism development.

Defining Agritourism

Agritourism has various definitions in the literature, and each study includes a specific viewpoint in their descriptions. However, studies have yet to provide a clear understanding of key features that underpin and define agritourism (Flanigan et al., 2014; Phillip et al., 2010; Nickerson et al., 2001). The literature suggests that a vital step has been missed in the systematic study of agritourism in practice despite the importance of the link between theory and practice (Nickerson et al., 2001). Studies continue to apply a wide range of definitions to capture the concept, agritourism, which results in an unclear picture (Flanigan et al., 2014; Phillip et al., 2010; Ollenburg & Buckley, 2007). One study has aimed to provide a typology for defining agritourism by identifying key characteristics currently used in literature and organize them into a framework that could have broad application in agritourism studies.
Two key phrases consistently used in the typology were 'working farm' and 'contact with agricultural farm activity.' However, Philip et al. (2010) identified three categories of contacts agritourists could have with the farm. These categories are direct, indirect, and passive contact. Direct contact may include agricultural activities such as milking a cow, U-pick crops, and similar activities. Examples of indirect contact could be purchasing or consuming food, visiting a farmer’s market, farm stands, and passive contact through participating in outdoor recreational activities provided by the farm, such as petting zoo or farm events (Philip et al. 2010).

More than one type of agritourism can occur at any one establishment (Phillip et al., 2010). Arroyo et al. (2013) argued that the existence of discrepancies in literature on agritourism is the result of three factors. These include the authenticity of agricultural experience, the type of setting, and the type of activity offered by the facility. Per the definitions, agritourism must meet these standards, including having something for visitors to see, something for them to do, and something for them to buy (Gil Arroyo, 2012). In this research, I define agritourism as a visit to a working/non-working farm or any agricultural or agribusiness operation to enjoy, learn, and engage in activities happening at the destination (Brown & Hershey, 2012).

The first category of agritourism, according to (Philip et al. 2010) is non-working farm agritourism (NWF); this consists of activities where non-working farm only serves as scenery purposes. In most cases, NWF agritourism involves visits to agricultural heritage and imagery such as accommodation in a converted farmhouse, and farmers markets. What distinguishes NWF agritourism and rural tourism is the connection made to agricultural heritage or agriculture in some other way than working farm (Phillip et al., 2010). The second classification is working farm passive contact agritourism (WFPC). Here, the working farm provides the context for
tourism. The nature of activities and products under WFPC allow farmers to utilize existing farm resources as a means of tourism without interfering with agricultural activities.

Most agritourism definitions stipulate that agritourism should be based on a working farm but do not set any requirement for the form of contact. An example of such a description is given by the University of California Small Farms Program (2011): “a commercial enterprise at a working farm or ranch conducted for the enjoyment and education of visitors, and that generates supplemental income for the owner or operator.” However, such a definition does not account for activities on non-working farms.

The third classification is working farm indirect contact agritourism (WFIC), which covers activities that relate to farm operations, although the contact with the visitor is more on the agricultural produce rather than farming practices itself (example include enjoying fresh food or meals in farm restaurant). The fourth classification is working direct farm contact staged authentic (WFDCSA) agritourism. It provides predetermined tour staged scenario agricultural experience to visitors due to health and safety factors; examples include model farm and farm tours. Working farm direct contact authentic agritourism (WFDCA) involves the direct participation of the visitor in agricultural activities in which the recreational activities is the farm itself examples include U-pick and Milking a cow. The final classification is non-working farm agritourism, such as visits to the farmers market. For this study, I rely on agritourism definition that embraces all the various forms of agritourism identified in the typology to provide a holistic meaning to the concept. Hence, I define agritourism as a visit to working/non-working farm or any agricultural, horticultural, or agribusiness operation for enjoyment and education of visitors that generate supplementary income to owners/operators.
Current Trends in Agritourism

Globally, small scale farms and family farms dominate the farming landscape. In the U.S., family farms of all sizes account for 98% of farm operations and 87% of total production (Hoppe & MacDonald, 2018). National agricultural statistics show that the number of agritourism farms and the proportion of agritourism related revenues in the United States have steadily increased over the past decade. According to the USDA’s 2017 Census of agriculture revealed that revenue from agritourism and recreational services more than tripled between 2002 and 2017. The statistics showed that agritourism revenue grew from $704 million in 2012 to almost $950 million in 2017 (USDA: NASS, 2019). Some literature suggests that the interest in this form of recreation among the public is expected to continue growing in the upcoming years (Arroyo et al., 2013). Agritourism helps U.S. farmers and ranchers generate revenue from recreational and educational activities offered on the farm and non-working farm environment (Whitt et al., 2019). It brings in additional money to the local economies through spending by visitors and trickledown effects of agritourism revenue. It also has the potential to rejuvenate rural economies through employment creation and by attracting small businesses. Additionally, agritourism offers the opportunity to educate the public about agriculture and preserve the agricultural and cultural heritage of rural communities. As a form of economic and community development strategy, agritourism has widespread appeal to governments and agencies (Wilkinson, 2017).

However, unfavorable global trade conditions, climate change, rapid urbanization, high input cost, and inadequate government support are some challenges that have rendered traditional agriculture unsustainable and unattractive. This swift turn has resulted in some farmers taking up part-time jobs in other sectors for additional income, and others have begun to
diversify their operations through agritourism and other diversification strategies. Agritourism is considered a sustainable and profitable farm diversification mechanism in North America because of its enormous economic, social, and environmental spillovers (Ainley & Smale, 2010; Barbieri, 2010). For example, an agritourism survey report in Wisconsin indicates that over 50% of tourists visit are to the farmers market, local or seasonal food festivals, farm stands, winery, and petting zoos (Brown & Hershey, 2012). This report suggests that there has been a rapid increase in the demand for farm-based recreation from both demand and supply perspectives. People want a new experience and escape from the stress of urban life visit the countryside to undertake farm base recreation. Parents want their kids to learn the processes of growing food while enjoying a vacation together at agritourism attractions. Those who visit sites often wish to engage in experience-based activities with their family, friends, and relatives on the farm. Since agritourism is often experienced in a group, rather than alone, existing literature has shown that two types of visitor groups frequently visit agritourism sites. These include young or older couples or individuals and families with one or more children (Che et al., 2007).

Demand for Agritourism: Supply Perspective

Demand for agritourism activities has increased in the last decade, and many family farms have diversified their operations through agritourism for many reasons. Considering the challenges of the agricultural sector, many small family farms, if not all, are diversifying their activities to maintain viability and relevance in business. As mentioned, agritourism serves as one of the several diversification strategies in many farms in Europe, North America, Australia, and other developing countries for economic, environmental, and social benefits. Barbieri (2013) identified agritourism as a sustainable form of farm diversification strategy common among Canadian farmers compared to other methods for its enormous economic, social, and
environmental benefits. Also, in developing countries where development options are limited, agritourism is used as an essential tool for economic development (Eshun & Tettey, 2014). According to the authors, many developing countries have their economies highly dependent on agriculture, with a high percentage of the population depending on farming as their primary occupation. Such countries capitalize on the richness of their rural landscape and agriculture to rejuvenate their economies.

As traditional agricultural production becomes unprofitable due to falling prices of agricultural produce on the world market, climate change, increase input cost, low labor due to rural-urban migration, and changing land-use policies pose a significant challenge to the agricultural sectors of virtually all nations, placing many farmers in even more precarious position. Consequently, farms have been able to rely less on traditional crop production, therefore adopting new diversification mechanisms to keep their farms viable (Veeck et al., 2016; Tew & Barbieri, 2012; McGehee & Kim, 2004). According to Ollenburg & Buckley (2007, p. 451), ‘one possible reason why farm tourism in the northern and southern hemispheres emphasize different motivations is the difference in government subsidies for farming.’ According to Nickerson et al. (2001), the loss of government subsidies in the United States provides initial motivation for agritourism development. As government subsidies fluctuate, other sources of income are necessary to make up the difference. It is essential to understand the motivations behind agritourism enterprises for relevant institutions to support farmers adequately. Also, it is crucial to know why visitors visit agritourism sites, and once this is understood, farmers can diversify their operations more efficiently and successfully.

Agritourism offers economic, social-cultural, as well as environmental benefits to rural communities. Farmers capitalize on their competitive advantage to get the best out of agritourism
operations. For instance, Michigan farmers benefit from having multiple agricultural products and being located near large urban areas to keep their agrarian land productive through agritourism (Veeck et al., 2006). According to the Michigan Agricultural Tourism Advisory Committee Report, Jousma-Miller et al. (2007), agritourism is key to economic health and diversification of the state. Thus, the combination of the two sectors enhances Michigan's farm gate, which, in turn, strengthens the state economic wellbeing.

Nickerson et al. (2001) argue that there were 11 principal reasons to adopt agritourism, with 61% of their respondents indicating they diversified for economic reasons, 23% expanded due to causes external to the operation, and 16% diversified due to social, economic, and external causes. Similarly, Barbieri & Mahoney’s (2009) assessment of a range of goals that are important in farmers' decision to diversify their operations into agritourism in Texas revealed a broad range of economic, intrinsic, and market-related goals. The highest percentage (83.7%) of farmers diversified to generate additional farm income. Also, 53.4 percent of the respondents expanded to continue farming and as a way of enhancing their family quality of life (52.4%). Others also adopted agritourism to improve the economic utilization of farm resources; including keeping farm labor employed was mentioned by 50.5 percent of agritourism operators. The results from their study confirm that farmers are motivated by different combinations of goals and assign varying degrees of importance to the same purposes, which reveals the complexity associated with motivation studies.

Much of the published research about tourism has focused on European and Canadian agriculture (Ainley & Smale, 2010; Barbieri, 2010; Ilbery et al., 1998). The research by these authors reveals that farm operators are primarily involved in agritourism for supplemental farm income, thereby making economic factors the primary motivation for agritourism.
reasons, although important, are only secondary to economic reasons. Similar studies in North America also reveal the monetary motive behind farm diversification into agritourism (Veeck et al., 2016; Barbieri, 2010; Das & Rainey, 2010; Carpio, Wohlgenant, & Boonsaeng, 2008; Ollenburg & Buckley, 2007). Several studies have classified goals driving agritourism development into four dimensions, namely, farm profitability such as increasing farm revenue and debt reduction (Tew & Barbieri, 2012; Barbieri, 2010; Ollenburg & Buckley, 2007; Nancy G. McGehee & Kim, 2004). The second goal dimension relates to market opportunity and social bonding, such as avenue for operators to interact and educate visitors (Tew & Barbieri, 2012). The third dimension refers to family goals such as keeping the family farm running, the ability to continue farming, keeping the farm within the family (Barbieri & Mahoney, 2009; Ollenburg & Buckley, 2007). The fourth category relates to personal goals, including personal hobbies, enjoyment of rural life, retirement plans, among others (Barbieri, 2010). Both economic and non-pecuniary reasons motivate the demand for agritourism. While several scholars have examined monetary drivers for agritourism development, other non-economic factors have received limited attention.

Agritourist Needs and Motivations

The increasing competition and market saturation require constant analysis and research into tourists' needs and motivations by destination managers (Yoon & Uysal, 2005). The success or failure of any business entity depends strongly on an understanding of consumer needs and motivational factors. Tourists' needs and motivations influence their buying behavior and overall satisfaction, which invariably shape future purchase outcomes, referrals, and repeat visits (Srikatanyoo & Campiranon, 2010). Information and understanding of consumer motivations and what influences their consumption of tourism products will enable agritourism operators and
relevant institutions, as well as destination marketing organizations, to design need-oriented opportunities and create an environment conducive for business growth.

Motivations consist of factors that inspire individuals, tourists, or visitors to demand tourism products and services. Pull factors include destination attributes that attract tourists to a destination, and push factors relate to personal desires and needs of tourists that created a need to be filled by travel (Yoon & Uysal, 2005). Thus, while push factors relate to personal desires, the pull factors are about the destination characteristics that attract tourists. Srikatanyoo & Campiranon (2010) identified three kinds of agritourist motivations. These include the desire to engage in agricultural experiences, to enhance the quality of life and relationships, and to experience adventure and relaxation. Personal escape from daily routine, social pressure, and the search for pristine natural landscapes in rural settings are frequently found to be the driving forces for the increased demand for nature-centered recreational activities (Barbieri et al., 2016; Šimková & Holzner, 2014; Srikatanyoo & Campiranon, 2010).

Tourists' needs and motivations vary by gender, age, race, financial status, and activity involved. While agritourism needs relate to agritourism destination appeals that serve as the pull for agritourism demand, agritourism motivations consist of the push factors that create the longing in the individual, which is satisfied through travel. The pull factors of agritourism demand include safety, accessibility, the richness of the rural landscape, friendliness and professionalism by destination managers, and many others. Srikatanyoo & Campiranon (2010), in their examination of agritourists in Chiang Mai, a city in Thailand, identified several needs that served as the pull for agritourism motivation. Their findings revealed that female agritourists were more demanding than their male counterparts. While female agritourists were concerned with safety and security at the attraction, male agritourists were concerned with the beauty of the
scenery. Also, USDA’s Agricultural Marking Resource Center (MRC) provides an outline of best management practices for agritourism businesses to enhance their business appeal. They include: 1) providing an authentic farm or ranch experience, 2) providing an educational experience, 3) providing excellent customer service, 4) providing adequate public facilities, 5) maintaining a safe and accessible environment, 6) creating good community relations, and 7) planning for your financial future. Safety, accessibility, and tourism product are paramount to the travel decision of agritourists.

Agritourism Motivation: Demand Perspective

Farms have become an increasingly attractive tourist destination because visitors are seeking escape from the hustle of city life, connect with their cultural heritage, to be together with family, to be in a natural environment and enjoy authentic leisure experience (Ainley & Smale, 2010; Veeck et al., 2006). As food production, safety and distribution become major public concerns, modern families want their children to know where their food comes from and related worries about food sovereignty have renewed public interest in experiencing the farm (Veeck et al., 2016; Ainley & Smale, 2010; Che et al., 2007). Visitors are yearning for an idealized simpler time to engage in memorable and experience-based vacation with their families at the countryside and increase in discretionary income account for the increasing demand for agritourism (Barbieri, Sotomayor, et al., 2016; Carpio et al., 2008; Catalino & Lizardo, 2004).

According to Che et al. (2007), agritourism attracts the increasingly urban and suburban clients and senior populations who hold nostalgic views towards farms. They further remarked that changes in U.S. domestic travel patterns from traditional, two-week vacations to long weekend trips and increase number of short trips in cars has also favored the growth of agritourism operations. An examination of zip code information of agritourists in Michigan
revealed that most visits were domestic travel involving an average travel distance of 22 miles. Furthermore, agritourism appeals to metropolitanites who want to reconnect with the land and have an opportunity to experience agriculture and have their children reconnect with their food sources.

Understanding visitors and knowing their preferences, behaviors, and the benefit they seek is critical to ensuring the success of the agritourism business (Wilkinson, 2017). It will also promote efficient and prosperous diversification by farmers. However, few studies focus on issues relating to agritourism motivations in Michigan. Examining travel behavior and agritourism interest at the state or local level provides essential insights into the market potential, targeted promotion strategies based on identified opportunities, and effective partnering to enhance agritourism industry growth. Destination marketing organizations, farmers, and regulatory bodies need up-to-date and accurate information about consumer behavior, preferences, and travel patterns to meet their needs. Often, research on agritourist needs is limited, and as a result, operators and management of the industry are not able to leverage their full potential. For example, agritourism operators and destination marketing organizations need to be aware of the various information channels visitors rely on most when planning their trips to market their products. Understanding how different types of travelers plan their trips is paramount to developing appropriate marketing programs for agritourism operations or networks (Sullins et al., 2010).

Several studies reveal repeat visitors dominate the agritourism market, and many factors drive visitors back to the same site, including shopping opportunities, clean environment, accessibility, existing activities, and friendliness of service operators (Ainley & Smale, 2010; Srikatanyoo & Campiranon, 2010). Repeat visit intentions are essential to market growth, and
operators should endeavor to create a more extensive customer base and attract repeat visitors as well. Due to the seasonal nature of agritourism activities, attracting repeat visitors is of great importance in generating positive word of mouth and reducing the cost of marketing agritourism products (Wilkinson, 2017). Understanding visitors' behavior and motivation will help operators to design the right message and products to the right customers, which will result in more significant sales.

Agritourism in Michigan

Agriculture and tourism are leading economic drivers in Michigan, and agritourism provides ways for farmers to diversify their operations by offering value-added products and services. Michigan agritourism market includes farmers’ markets, on-farm markets, school farm tours, wineries, roadside produce stands, on-farm weddings and events, corn mazes, and much more. The nature of the Michigan agritourism market is seasonal, which runs from late May through to late October, where individuals, groups, and families make trips to agritourism attractions for recreation, education, fresh produce purchase, and for several other purposes.

The director of the Michigan Department of Agriculture and Rural Development (MDARD), Gary McDowell in an interview with MI Newswire Sielski,(2019 https://www.michigan.gov/som/0,4669,7-192-26847-509445--,00.html) said;

Agritourism opportunities are available in every county in our state, and Michigan Agritourism Month is a particular time to acknowledge and experience the vast, integrated network of family farmers, processors, wholesalers, and retailers who produce a safe and nutritious food supply, as well as so many fun and unique farm experiences.

This comment by the director emphasizes the various forms of agritourism opportunities that exist in the state. There is a history of grant opportunities supporting agritourism development in Michigan (Dentzman, 2015). For example, the formation of Michigan farmers markets and
Michigan Agritourism Association was aided by the Michigan Department of Agriculture, The Farm Bureau, Farm Bureau Insurance, and state grant funding.

The Impacts of Agritourism: Opportunities and Challenges

Agritourism is currently in the state of rapid growth and expansion in terms of supply and demand. As government subsidies fluctuate, commodity prices decrease, climatic conditions become unfavorable coupled with pests and diseases, and increase input costs, a large number of small family farms are turning to agritourism to stay viable. Through various forms of farm diversification, farmers are supplementing traditional farm operations to increase profit (Bagi & Reeder, 2012). From a demand perspective, agritourism is growing as a niche market because it meets the needs of modern families (Carpio et al., 2008). Farms are becoming an increasingly attractive destination because visitors want short distance travel, want to escape the hustles of city life and connect with nature, as food production and distribution become a significant concern, parents want their children to know where their food comes from (Veeck et al., 2016; Chase et al., 2008).

The expansion and increase supply and demand of agritourism have become the subject of most research. Agritourism is considered a viable diversification mechanism for farmers to sustain their competitive advantage (Colton & Bissix, 2005). Also, various public policies, including grants and education programs, have contributed to the surge in agritourism and another diversification initiative in Europe, the U.S., Canada, Australia, and Africa (Dasola, 2017). Various factors motivate agritourism development. Nickerson et al. (2001), for example, identify three factors driving agritourism businesses in Montana; they are economic, social, and external factors. Veeck et al. (2016) also examined the economic impacts of agritourism in Michigan.
Literature suggests that there is no single motivation factor responsible for agritourism development. Many factors and opportunities work to influence the decision to diversify farms through agritourism. Besides additional income generation, agritourism offers the following possibilities; an avenue to expand income, increase revenue without increasing acreage, provides a new way of marketing compared to the traditional commodity market, opportunity to build a business based on already existing resources, opportunity to educate the public on farming products and practices, a way to continue farming and keep the farm in the family, among others.

However, besides the success story lies setbacks, several factors hamper the growth and realization of agritourism potentials. Studies have demonstrated that agritourism contributes just a little to farm income, and several factors may explain this limitation (Sharpley & Vass, 2006). These challenges include but are not limited to, funding, marketing and quality, location, education and training, and government support (Sharpley & Vass, 2006; Colton & Bissix, 2005). According to Sharpley (2006), not all rural areas have the touristic appeal and neighborhood effect may affect the development of tourism clusters. Thus, the provision of accommodation facilities and other infrastructure at a destination does not guarantee demand. Again, individual operators may neither have the skill or resources for effective marketing of agritourism products, a vital ingredient for business success (Srikatanyoo & Campiranon, 2010). Quality is yet another factor that ensures agritourism development. The quality of the products and services offered by agritourism enterprises must meet the demand and expectations of the tourists. Lack of professionalism on the part of operators may affect destination image through negative word of mouth. Yang (2012) studied impacts and challenges in agritourism development in Yunnan, China, and identified the need for government aid to support
agritourism enterprises. Similarly, government support in the form of subsidies and enabling environments that support farm diversification is needed to support agritourism growth.

Summary

Economic, social, and environmental reasons account for farm diversification through agritourism. Specifically, farmers engage in agritourism for such purposes as the need to generate additional income, practice a hobby, educate the public on farming, continue farming, enhance the quality of life, and for conservational purposes. Also, farms have become an increasingly attractive destination for visitors who are seeking escape from the hustle of the city, connect with their cultural heritage and food system, and the rising concerns of food sovereignty. Modern parents, especially those in urban areas, want their children to connect with their food system, and spend time with their families, account for the increasing demand for agritourism.

The literature also suggests that for agritourism businesses to thrive, stakeholders need to be aware of the motivation factors that drive demand for agritourism development among visitors and operators. For effective planning, marketing, and promotion strategy design, various stakeholders must have a holistic view of visitors’ and operators’ motivations. Literature also acknowledges the multiple impacts and challenges of agritourism development. While many studies have examined demand and supply perspectives of agritourism in isolation, further research that integrates the two distinct, but interrelated aspects are required. In this regard, the present study hopes to fill in this vital gap within the agritourism literature.
CHAPTER III

METHODOLOGY

This chapter outlines the research design and methods used to conduct the research, including the study design and population, GIS methods, and description of the variables used in statistical analysis.

Study Design and Sampling

Based on the objectives outlined for the study and the specific research questions, an analysis of agritourism visitors and operators' motivations were conducted in Southwest Michigan through field observation and survey. Self-administered questionnaire (both in-person and online) together with semi-structured interviews, has been implemented as data collection tools. The fieldwork was conducted from May 15 to September 30, 2019, as most of the agritourism sites in Michigan are seasonal operating from summer to late fall.

The study population was specified to include agritourism farms within Southwest Michigan, defined as farms receiving visitors for recreational, leisure, and educational purposes and the agritourists described as individuals who visited any of the agritourism attractions in Southwest Michigan at the time of data collection. Southwest Michigan was chosen for the study because it has a great mix of agritourism products consisting of u-pick orchards, pumpkin patches, bakeries, corn maze, petting zoo, hayrides, and others, characterized by a unique growing area created by the lake effect of Lake Michigan, which has led to the development of a fruit belt that boasts the production of peaches, apples, grapes, and blueberries, making it an ideal destination for u-pick activities. The best representation of the target population sample
consisted of agritourism operators who were registered members of the Michigan Agritourism Association (MATA) and all tourists who visited the study area at the time of field observation.

Decisions concerning sample size were based on consideration of the proposed methods of analysis – factor analysis and content analysis and pragmatic consideration of time and budget constraints of the research. It was, therefore, decided to target 280 participants in total for both online agritourism operator’s surveys and in-person visitor surveys to ensure valid analysis.

As this study was exploratory, it was acceptable to employ a non-probability sampling technique to select respondents. Convenience sampling was selected based on the willingness of study participants. The researcher visited fifteen agritourism facilities (at least one per each of the ten counties in the study area) for in-person visitor surveys and individual interviews with operators.

The agritourism visitor surveys were conducted from June 1, 2019, to August 17, 2019, while agritourism operators' online studies were conducted from May 15, 2019, to September 30, 2019. The researcher assumed that the peak of Michigan agritourism season was appropriate to survey visitors and inform farmers about the ongoing survey because that is when the operations would be full of potential respondents.

Research Instrumentation

Two separate survey questionnaires - online Qualtrics survey and in-person agritourist survey were designed for the study together with a semi-structured interview. Participants completed a questionnaire that included questions on demographic characteristics, travel patterns, and motivations of agritourists as well as agritourism operators’ motivations, challenges facing their operations, and business information. Travel needs and motivations suggested by scholars such as Artuger & Kendir, (2013); Srikatanyoo & Campiranon, (2010); and Che, Veeck,
& Veeck, (2007) were adopted and modified for the study. Similarly, to adequately measure the motivations of agritourism operators and the challenges of the industry, survey instrument from the works of Barbieri, (2010), Barbieri & Mahoney, (2009), McGehee & Kim, (2004), and Nickerson et al., (2001) were adopted.

The questionnaire (Appendix B) used for the online survey was designed to determine the motivation for agritourism diversification among farmers, challenges facing their operations, and their views on how agritourism can be improved. The visitors' survey (Appendix C) measured travel needs and motivations of agritourism visitors as well as their sociodemographic characteristics to understand their travel behaviors. Participants did not have to provide their names and full addresses to ensure the anonymity of participants. Instead, zip codes of visitors were collected to enable the researcher to carry out the spatial analysis. A semi-structured interview (Appendix D & E) for agritourism operators and one official from MATA was designed to elicit detail information about their motivations and to understand the general overview of the agritourism industry from MATA’s perspective.

Both questionnaires for the in-person and online had a mixture of closed and open-ended questions. The online Qualtrics questionnaire was sent to 65 agritourism establishments within the ten counties in Southwest Michigan. The online Qualtrics survey questionnaire for agritourism operators had three sections consisting of informed consent, general information about agritourism business, operators' needs and motivations, and the challenges facing the industry. General information on agritourism business comprised of questions on how long the company has existed, business name, the importance of agritourism to owners, as well as the form of activities offered by the attraction. Operators' needs and motivations consisted of thirteen items based on a five-point Likert scale. Participants’ level of participation for each statement
ranked on a five-point Likert scale from 1 = strongly disagree to 5 = strongly agree. Also, operators were asked about the challenges facing their operations, whether they sell at the farmers market, as well as the form of support they get from relevant agritourism institutions in the state. The agritourists survey, on the other hand, asked questions about travel behavior, tourists’ motivation, and socio-demographic characteristics of participants.

Ethical Considerations

In ensuring that the privacy of study participants was protected, Western Michigan Institutional Review Board (IRB) assessed and approved all research instruments (see Appendix A). The researcher sought informed consent of participants, no names, and full addresses of participants were collected. Participants reserved the right to participate in the survey without any compulsion and threats. All processes outlined by the Institutional Review Board were duly followed. The researcher also completed the Research Ethics and Compliance Training of the CITI program.

Data Collection

The researcher employed multiple research methods, including online Qualtrics surveys, in-person survey questionnaires, and semi-structured interviews to gather information about agritourism motivations. The author conducted semi-structured interviews with thirteen agritourism operators who owned and managed agritourism businesses to ascertain their motivations for agritourism, as well as the challenges affecting their operations. Each interview took 15 to 30 minutes to complete. The conversations were recorded using an audio recorder. Additionally, a semi-structured interview consisting of five open-ended questions was sent via email to the president of the Michigan Agritourism Association (MATA) to ascertain the
organization’s views on the state of agritourism and emerging issues in Michigan. The president of MATA received an email version of the interview guide.

The author visited fifteen agritourism establishments in the ten counties within Southwest Michigan for field observation and in-person survey of agritourists and interviews with agritourism operators. From June 1 to August 17, 2019, agritourists were requested to complete the survey questionnaire after their visit to the selected farms while exiting the attraction site. Study participants received an incentive in the form of souvenirs (pens, kazoo, paper globe, and stress ball) from Western Michigan University’s Department of Geography.

An online Qualtrics survey questionnaire was appropriate to encourage high participation by the farmers. The online Qualtrics questionnaire was sent to 65 agritourism establishment within the ten counties in Southwest Michigan from May 2019 to September 2019. After the deployment of the online survey, the researcher sent out reminders to operators through phone calls, text messages, and Qualtrics reminders bi-weekly throughout data collection. The researcher interviews with thirteen agritourism operators individually as a way of eliciting in-depth information about their motivations and the challenges they face in the industry to supplement the online survey.

Analytic Design

IBM Statistical Package for the Social Sciences (SPSS Statistics) version 26 was used to generate descriptive statistics to describe general information about agritourism and respondents’ demographic information. First, frequency distribution and means of individual characteristics of the participants (age, gender, education level, and marital status) and attributes with their participation in agritourism including how they heard about the attraction, who accompanied them on the trip, the number of attractions they will visit, distance traveled, and whether or not
they were resident in Michigan were determined. Additionally, the arithmetic means and standard deviation of the participants in terms of factors they considered in deciding which attraction to visit and their motivations for participation in agritourism were examined.

Secondly, factor analysis was applied to validate the structure underlying agritourists' motives. The principal component for variable reduction analysis (PCA) with varimax rotation at eigenvalue higher than one ideal for factor extraction was utilized. The eigenvalue determines the number of factors to retain at a value greater than 1 (Costello & Osborne, 2005). PCA was ideal given a large number of scale items involved in the survey as well as the multicollinearity that exist among the variables (Warner 2008). Cronbach’s alpha reliability coefficient was calculated to test the reliability of internal consistency. The values of the Cronbach’s alpha for factor components are acceptable (>0.70) to good (>0.80), confirming that the measures are reliable (Berger & Hänze, 2015; Tavakol & Dennick, 2011). The Kaiser-Meyer-Olkin (KMO) and Bartlett's test confirms sampling at a sufficient level (p<0.05). KMO indicates the proportion of variance that might be caused by the underlying factors with values close to 1.0 as high values. If the value is less than 0.50, the result of the factor analysis may not be useful (Mertler & Vannatta, 2016). Factor analysis was used to validate the latent structure of the agritourist motivations in the study (Costello & Osborne, 2005) and Cronbach’s Alpha coefficient calculated to test the reliability of the internal consistency of the factor components expressed as a number between 0 and 1 (Tavakol & Dennick, 2011). The value of the Cronbach’s Alpha is acceptable at a value higher than 0.07 (> 0.70) to good at a value higher than 0.08 (> 0.80) (Berger & Hänze 2015). The variance explained by the variables on the individual factor element was expressed by the factor the loadings. Hair et al. (2006) postulate that factor loadings < 0.40 should be evaluated as low factor loading, and it must be removed from the analysis.
An independent sample t-test was also used to determine differences in agritourists’ needs and motivations. The spatial distribution of visitors to the Michigan agritourism market was geocoded using the “awesome table” add-on in Google sheet, and spatial analysis carried out using ArcGIS version 10.6. A choropleth map based on count values of agritourist numbers with natural breaks demonstrated the spatial distribution of agritourists to Southwest Michigan.

Audio recordings from semi-structured interviews were transcribed, coded, and analyzed by searching for common themes and individual variations. The method involved analyzing and exploring each transcript concerning the participant’s motivations, views, and concerns about various issues pertinent to agritourism. Agritourism operators’ responses from the online Qualtrics survey will follow the qualitative data analysis approach since the completed surveys (20 replies) are not adequate for a meaningful statistical analysis. The survey response mainly serves as reinforcement and provide further insight to complement the interviews.

A total of 184 useable questionnaires from the in-person agritourists survey accounting for 83.64% response rate, and 20 useable questionnaires from the online Qualtrics survey of agritourism operators (33.3% response rate) were used in data analysis. Again, out of the fifteen participants targeted for the semi-structured interview, thirteen interviews were conducted and used in the thematic analysis. However, these response rates were very encouraging as most similar studies in literature, including Artuger & Kendir’s (2013) study in Turkey, recorded about the same percentage of responses.

Summary

This chapter presented information about sampling procedures and techniques used in the data collection as well as research instruments and design for sample selection, methods of analysis, and software package used for data analysis. The fieldwork was conducted from May
15, 2019, to September 31, 2019. Several research methods, including semi-structured interviews, online Qualtrics Survey, and in-person surveys, were employed. The author visited the study sites during the field study and participated in U-pick activities in some of the locations to acquire insights into agritourism issues through direct participation and observation. I conducted thirteen semi-structured interviews with agritourism operators and one Non-profit agritourism association official. Closed- and open-ended questions that focused on agritourism participants' characteristics, challenges of the industry, as well as agritourism motivation issues, were employed. Each interview took 15 to 30 minutes to complete. Both the online and in-person surveys took 5 to 10 minutes to complete. A total of 184 (in-person visitor survey), 20 (online operator’s study), and 13 interviews were completed with agritourism visitors, operators, and an official of MATA. The researcher used qualitative techniques to analyze both the online survey and the interview data. Additionally, voice notes from field studies were transcribed, coded, and analyzed thematically. In-person agritourism visitor surveys were statistically analyzed using the IBM SPSS software package.
CHAPTER IV

ANALYSIS AND RESULTS

This chapter presents the analysis of the study with an emphasis on four areas. The first section covers the descriptive analysis of agritourism visitors and operators; the second part covers the statistical model used for the study, and the third section presents the results of spatial analysis. The final section provides a content analysis of qualitative data.

Demographic Characteristics of Agritourists

The demographic characteristics of respondents, as shown in Table 1, the majority (66.3%) of the visitors were women. Approximately 27% of these visitors were 61 and above years of age, with 25% between 18-30 years of age. The majority of the participants (57.9%) were married. Approximately 47% of the agritourists had a bachelor’s degree while 30% had a professional /graduate degree and 13% and 9.8% completing high school and vocational training. The demographic characteristics of agritourists reveal the significant role of women and senior citizen's age group in agritourism. The results also show that agritourism has a high appeal to married folks, as explained by the high percentage of married participants.

Agritourists Travel Behavior

Table 2 consists of a summary of agritourism visitors’ travel behavior. The majority (62.5%) of agritourists liked to engage in agritourism with friends. Most of the agritourism visitors (60.9%) were residents of Michigan, with 46.2% traveling 0-25 miles to agritourism attraction sites. Most respondents spent at least a night at the attraction site (68.7%), and most of
them visited based on word of mouth from family and friends (81.5%). The results indicate the family nature of agritourism by the accompanied person. Also, the study results revealed the domestic tourists’ market as the backbone of the agritourism industry in Southwest Michigan, explained by the high percentage (60.9%) of domestic tourists’ numbers.

Table 1. Description of Agritourists Demographic Characteristics

<table>
<thead>
<tr>
<th>Variables</th>
<th>Groups</th>
<th>Number (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
<td>122</td>
<td>66.3</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>62</td>
<td>33.7</td>
</tr>
<tr>
<td>Age (years)</td>
<td>18-30</td>
<td>45</td>
<td>24.5</td>
</tr>
<tr>
<td></td>
<td>31-40</td>
<td>30</td>
<td>16.3</td>
</tr>
<tr>
<td></td>
<td>41-50</td>
<td>30</td>
<td>16.3</td>
</tr>
<tr>
<td></td>
<td>51-60</td>
<td>30</td>
<td>16.3</td>
</tr>
<tr>
<td></td>
<td>61+</td>
<td>49</td>
<td>26.6</td>
</tr>
<tr>
<td>Marital Status</td>
<td>Married</td>
<td>106</td>
<td>57.9</td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>60</td>
<td>32.8</td>
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<tr>
<td></td>
<td>Divorced</td>
<td>15</td>
<td>8.2</td>
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<tr>
<td></td>
<td>Widow</td>
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<td>1.1</td>
</tr>
<tr>
<td>Level of Education</td>
<td>Graduate/Professional Degree</td>
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<td>30.4</td>
</tr>
<tr>
<td></td>
<td>Bachelor’s Degree</td>
<td>86</td>
<td>46.7</td>
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<tr>
<td></td>
<td>High School</td>
<td>24</td>
<td>13.0</td>
</tr>
<tr>
<td></td>
<td>Vocational</td>
<td>18</td>
<td>9.8</td>
</tr>
</tbody>
</table>

Source: author (2020)
Table 2. Descriptive Statistics of Agritourists travel Behavior

<table>
<thead>
<tr>
<th>Variables</th>
<th>Groups</th>
<th>Number (n=184)</th>
<th>Percentages (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who accompanied you?</td>
<td>Friend(s)</td>
<td>115</td>
<td>62.5</td>
</tr>
<tr>
<td></td>
<td>Spouse/family</td>
<td>46</td>
<td>25.0</td>
</tr>
<tr>
<td></td>
<td>Alone</td>
<td>22</td>
<td>12.0</td>
</tr>
<tr>
<td></td>
<td>Group Tour</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Are you a resident of Michigan</td>
<td>Yes</td>
<td>112</td>
<td>60.9</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>72</td>
<td>39.1</td>
</tr>
<tr>
<td>How far did you travel? (Miles)</td>
<td>0-25</td>
<td>85</td>
<td>46.2</td>
</tr>
<tr>
<td></td>
<td>75+</td>
<td>69</td>
<td>37.5</td>
</tr>
<tr>
<td></td>
<td>26-75</td>
<td>30</td>
<td>16.3</td>
</tr>
<tr>
<td>Time spent at the destination</td>
<td>1 night</td>
<td>125</td>
<td>68.7</td>
</tr>
<tr>
<td></td>
<td>2-3 nights</td>
<td>39</td>
<td>21.4</td>
</tr>
<tr>
<td></td>
<td>Above 5 nights</td>
<td>14</td>
<td>7.7</td>
</tr>
<tr>
<td></td>
<td>4-5 nights</td>
<td>4</td>
<td>2.2</td>
</tr>
<tr>
<td>Did you travel to visit only one attraction?</td>
<td>Yes</td>
<td>104</td>
<td>56.8</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>79</td>
<td>43.2</td>
</tr>
<tr>
<td>How did you hear about this attraction?</td>
<td>Referral</td>
<td>159</td>
<td>81.5</td>
</tr>
<tr>
<td></td>
<td>Print Media</td>
<td>22</td>
<td>11.3</td>
</tr>
<tr>
<td></td>
<td>Internet</td>
<td>13</td>
<td>6.7</td>
</tr>
<tr>
<td></td>
<td>Electronic Media</td>
<td>1</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Source: Author, (2020)
Again, study results in Table 2 indicate that the individual is more likely to visit nearby (0-20 miles) agritourism attractions more than further ones. Farmers need to incorporate proximity factor into their product planning and promotion programs.

Demand for Agritourism: Pull Factors of Agritourism Demand

Table 3. Ranking of the Mean of the pull Factors for Agritourism Demand

<table>
<thead>
<tr>
<th>Variables (n = 184)</th>
<th>Mean Statistic</th>
<th>Std. deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beautiful scenery</td>
<td>4.41</td>
<td>0.76</td>
</tr>
<tr>
<td>Clean &amp; green environment</td>
<td>4.22</td>
<td>0.85</td>
</tr>
<tr>
<td>Agricultural goods purchasing opportunity</td>
<td>4.21</td>
<td>0.89</td>
</tr>
<tr>
<td>Easy accessibility</td>
<td>4.07</td>
<td>0.94</td>
</tr>
<tr>
<td>Diversity of attractions</td>
<td>3.78</td>
<td>0.96</td>
</tr>
<tr>
<td>Safety</td>
<td>3.72</td>
<td>1.02</td>
</tr>
<tr>
<td>Attractions close to the main touring route</td>
<td>3.61</td>
<td>1.00</td>
</tr>
<tr>
<td>The convenience of restroom &amp; shower facilities</td>
<td>3.49</td>
<td>1.00</td>
</tr>
<tr>
<td>The convenience of communication facilities</td>
<td>3.38</td>
<td>0.99</td>
</tr>
<tr>
<td>Educational opportunities about agriculture</td>
<td>3.34</td>
<td>0.98</td>
</tr>
</tbody>
</table>

* Out of 5-point Likert scale. *Valid N (Listwise)*

Source: Author, (2020)

Table 3 consists of rankings of the means of pull factors that attract the agritourists to a destination and standard deviations. All the items had arithmetic mean above 3.6 except three pull factors – “convenience of washroom & shower facilities” and “convenience of communication facilities,” and “educational opportunities about agriculture.” Beautiful scenery
had the highest mean score (4.41± 0.76), followed by the clean and green environment (4.22 ± 0.85) and agricultural goods purchasing opportunity (4.21± 0.89) then easy accessibility (4.07 ± 0.94). The rest of the pull factors had mean scores below 4. The results show that the natural landscape of agritourism sites, as well as agricultural purchasing opportunities, are essential to the travel decisions of the agritourists.

Table 4. Ranking of the Mean of Agritourists Motivations

<table>
<thead>
<tr>
<th>Variables (n = 184)</th>
<th>Mean Statistic</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>To relax mentally\enjoy life</td>
<td>4.50</td>
<td>0.62</td>
</tr>
<tr>
<td>To enjoy scenery</td>
<td>4.33</td>
<td>0.76</td>
</tr>
<tr>
<td>To be together with family /build relationship</td>
<td>4.31</td>
<td>0.80</td>
</tr>
<tr>
<td>To have an adventure</td>
<td>4.28</td>
<td>0.77</td>
</tr>
<tr>
<td>To purchase agricultural goods</td>
<td>4.24</td>
<td>0.90</td>
</tr>
<tr>
<td>To discover new places and things</td>
<td>4.21</td>
<td>0.82</td>
</tr>
<tr>
<td>To escape from day-by-day stress</td>
<td>4.08</td>
<td>0.91</td>
</tr>
<tr>
<td>To improve health and well-being</td>
<td>3.97</td>
<td>0.92</td>
</tr>
<tr>
<td>To get away from city life</td>
<td>3.93</td>
<td>1.03</td>
</tr>
<tr>
<td>To be in an agricultural environment</td>
<td>3.79</td>
<td>1.00</td>
</tr>
<tr>
<td>To experience agricultural life and activities</td>
<td>3.70</td>
<td>0.97</td>
</tr>
<tr>
<td>To attend Agricultural event/festivals</td>
<td>3.48</td>
<td>1.08</td>
</tr>
<tr>
<td>To learn how to use agricultural produce</td>
<td>3.13</td>
<td>1.03</td>
</tr>
</tbody>
</table>

*5-point Likert Scale

Source: Author, (2020)
Agritourists Motivations

Table 4 shows the ranking of the mean of agritourists' motivations. The motivation with the highest mean - relaxed mentally/enjoy life (4.50 ±0.62) indicates a universal agreement of relax mentally/enjoy life as a motivation of agritourists, which is closely followed by “to enjoy the scenery,” “be together with family/build relationships,” and adventure as essential motivations. To learn how to use agricultural produce ranked the least among motivation variables. It is clear from the study results that the destination appeal interacts with the motivation variables to deliver a complete tourist experience.

Comparisons of Means Across Gender and Residential Status of Agritourists

Each of the thirteen reasons for agritourists' motivations was tested separately using the independent sample t-test for rationales relating to agritourists motivations and the pull factors influencing demand for agritourism against two variables. The variables were gender and whether the tourists were residents of Michigan or from out-of-state.

Table 5 shows the test result of the gender of respondents, male or female, at 0.05 significant level (P<0.05). For the gender of respondents, the result demonstrates that females have higher mean scores than their male counterparts in all items except for one attribute – “attend Agricultural events/festivals.” To improve health and wellbeing was equally important to both male and female agritourists indicated by both genders having the same average. The choices, however, do not portray any significant difference in mean between males and females except for five items - to be in an agricultural environment (p < .02*), improve health and wellbeing (p < .04*), be together with family/build relationship (p < .05*), discover new places and things (p < .02*), and to have an adventure (p < .01*). Female respondents recorded the
highest mean score for all the motivation variables. The findings in Table 5 indicate that female agritourists participation decisions are influenced by the desire – “To be in an agricultural environment,” improve health and wellbeing, be together with family/build relationships, discover new places and things, and to have an adventure than their male counterparts.

Table 5. Independent Sample T-Test of Agritourists’ Motivations Across Gender

<table>
<thead>
<tr>
<th>Agritourists Motivations</th>
<th>Male</th>
<th>Female</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>To relax mentally\enjoy life</td>
<td>4.45</td>
<td>4.52</td>
<td>-0.756</td>
<td>182</td>
<td>0.45</td>
</tr>
<tr>
<td>To enjoy scenery</td>
<td>4.21</td>
<td>4.39</td>
<td>-1.481</td>
<td>182</td>
<td>0.14</td>
</tr>
<tr>
<td>To get away from city life</td>
<td>3.81</td>
<td>4.00</td>
<td>-1.318</td>
<td>154.270</td>
<td>0.19</td>
</tr>
<tr>
<td>To escape from day-by-day stress</td>
<td>3.92</td>
<td>4.16</td>
<td>-1.677</td>
<td>182</td>
<td>0.09</td>
</tr>
<tr>
<td>To be in agricultural environment</td>
<td>3.56</td>
<td>3.91</td>
<td>-2.231</td>
<td>182</td>
<td>0.02*</td>
</tr>
<tr>
<td>To attend special event/festivals</td>
<td>3.53</td>
<td>3.46</td>
<td>0.468</td>
<td>149.310</td>
<td>0.64</td>
</tr>
<tr>
<td>To experience agricultural life and activities</td>
<td>3.52</td>
<td>3.80</td>
<td>-1.854</td>
<td>182</td>
<td>0.06</td>
</tr>
<tr>
<td>To purchase agricultural goods</td>
<td>4.12</td>
<td>4.30</td>
<td>-1.069</td>
<td>182</td>
<td>0.28</td>
</tr>
<tr>
<td>To learn how to use agricultural produce</td>
<td>3.10</td>
<td>3.14</td>
<td>-2.267</td>
<td>182</td>
<td>0.79</td>
</tr>
<tr>
<td>To improve health and well-being</td>
<td>4.39</td>
<td>4.39</td>
<td>-2.108</td>
<td>182</td>
<td>0.04*</td>
</tr>
<tr>
<td>To be together with family /build relationship</td>
<td>4.15</td>
<td>4.39</td>
<td>-2.004</td>
<td>182</td>
<td>0.05*</td>
</tr>
<tr>
<td>To discover new places and things</td>
<td>4.02</td>
<td>4.31</td>
<td>-2.340</td>
<td>182</td>
<td>0.02*</td>
</tr>
<tr>
<td>To have an adventure</td>
<td>4.08</td>
<td>4.39</td>
<td>-2.590</td>
<td>182</td>
<td>0.01*</td>
</tr>
</tbody>
</table>

Note: Significantly different at P<0.05

Source: Author, (2020)
The independent-sample t-test for male and female agritourists on the pull factors of demand, as illustrated in Table 6, demonstrate that females have a higher mean score in all items than male agritourists. Four of the variables measuring the pull factors of demand showed a significant difference in means between male and female agritourist, including easy accessibility (p < 0.00*), diversity of attractions (p < 0.02*), safety (p < 0.00*), and convenience of washrooms and shower facilities (p < 0.00*). The results indicate that female agritourists ascribe a high level of importance to destination appeals, including – “easy accessibility,” “diversity of attraction,” “safety,” and “convenience of restrooms and shower facilities” than male agritourists. However, they both assign equal importance to “beautiful scenery,” “agricultural purchasing opportunity,” and “clean and green environment.”

Table 7 also compares responses from the residential status of respondents (Michiganders or out-of-state). The test results indicate that domestic agritourist has higher mean scores of all the motivation elements except for three factors - enjoy the scenery, to get away from city life, and escape from day-by-day stress. However, six of the items - get away from city life (p < 0.03*), attend agricultural event/festivals (p < 0.00*), experience agricultural life and activity (p < 0.00*), purchase agricultural goods (p < 0.00*), learn the use of agricultural products (p < 0.01*), and improve health and wellbeing (p < 0.00*)” revealed significant difference in means. The results indicate that while local visitors have higher motivation for the factors – “to be in an agricultural environment,” “to attend agricultural event/festivals,” “to experience agricultural life and activities,” to purchase agricultural goods,” “to learn how to use agricultural produce,” and “to improve health and well-being,” the out-of-state visitors’ are motivated by the desire to get away from city life. However, both the
domestic and regional visitors assign the same level of importance to the factors – “to relax mentally/enjoy life” and “to enjoy the scenery.”

Table 6. Independent Sample T-Test Across Gender for Pull Factors of Demand

<table>
<thead>
<tr>
<th>Variables (n = 184)</th>
<th>Male</th>
<th>Female</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beautiful scenery</td>
<td>4.32</td>
<td>4.46</td>
<td>-1.216</td>
<td>143.752</td>
<td>0.22</td>
</tr>
<tr>
<td>Agricultural goods purchasing opportunity</td>
<td>4.08</td>
<td>4.27</td>
<td>-1.497</td>
<td>154.069</td>
<td>0.14</td>
</tr>
<tr>
<td>Clean &amp; green environment</td>
<td>4.06</td>
<td>4.30</td>
<td>-1.815</td>
<td>182</td>
<td>0.07</td>
</tr>
<tr>
<td>Easy accessibility</td>
<td>3.66</td>
<td>4.27</td>
<td>-4.362</td>
<td>182</td>
<td>0.00*</td>
</tr>
<tr>
<td>Diversity of attractions</td>
<td>3.55</td>
<td>3.89</td>
<td>-2.324</td>
<td>182</td>
<td>0.02*</td>
</tr>
<tr>
<td>Attractions close to main touring route</td>
<td>3.47</td>
<td>3.69</td>
<td>-1.417</td>
<td>182</td>
<td>0.16</td>
</tr>
<tr>
<td>Safety</td>
<td>3.39</td>
<td>3.89</td>
<td>-3.220</td>
<td>182</td>
<td>0.00*</td>
</tr>
<tr>
<td>Educational opportunities about agriculture</td>
<td>3.34</td>
<td>3.34</td>
<td>-0.036</td>
<td>182</td>
<td>0.97</td>
</tr>
<tr>
<td>convenience of communication facilities</td>
<td>3.29</td>
<td>3.42</td>
<td>-0.875</td>
<td>143.177</td>
<td>0.38</td>
</tr>
<tr>
<td>convenience of restroom &amp; shower facilities</td>
<td>3.18</td>
<td>3.66</td>
<td>-3.460</td>
<td>159.486</td>
<td>0.00*</td>
</tr>
</tbody>
</table>

Source: Author, (2020)
**Table 7. Independent Sample T-Test of In-State and Out-of-State Agritourists**

<table>
<thead>
<tr>
<th>Variables (n = 184)</th>
<th>Are you a resident of Michigan?</th>
<th>Yes</th>
<th>No</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>To relax mentally\enjoy life</td>
<td></td>
<td>4.5000</td>
<td>4.5000</td>
<td>0.00</td>
<td>182</td>
<td>1.00</td>
</tr>
<tr>
<td>To enjoy scenery</td>
<td></td>
<td>4.2857</td>
<td>4.3889</td>
<td>-1.96</td>
<td>178.800</td>
<td>0.34</td>
</tr>
<tr>
<td>To get away from city life</td>
<td></td>
<td>3.8036</td>
<td>4.1389</td>
<td>-2.18</td>
<td>182</td>
<td>0.03*</td>
</tr>
<tr>
<td>To escape from day-by-day stress</td>
<td></td>
<td>4.0000</td>
<td>4.1944</td>
<td>-1.42</td>
<td>182</td>
<td>0.16</td>
</tr>
<tr>
<td>To be in agricultural environment</td>
<td></td>
<td>3.9464</td>
<td>3.5556</td>
<td>2.62</td>
<td>182</td>
<td>0.01*</td>
</tr>
<tr>
<td>To attend agricultural event/festivals</td>
<td></td>
<td>3.6786</td>
<td>3.1806</td>
<td>3.14</td>
<td>182</td>
<td>0.00*</td>
</tr>
<tr>
<td>To experience agricultural life and activities</td>
<td></td>
<td>3.8661</td>
<td>3.4444</td>
<td>2.93</td>
<td>182</td>
<td>0.00*</td>
</tr>
<tr>
<td>To purchase agricultural goods</td>
<td></td>
<td>4.4286</td>
<td>3.9583</td>
<td>3.57</td>
<td>182</td>
<td>0.00*</td>
</tr>
<tr>
<td>To learn how to use agricultural produce</td>
<td></td>
<td>3.2768</td>
<td>2.8889</td>
<td>2.56</td>
<td>182</td>
<td>0.01*</td>
</tr>
<tr>
<td>To improve health and well-being</td>
<td></td>
<td>4.2054</td>
<td>3.6111</td>
<td>4.49</td>
<td>182</td>
<td>0.00*</td>
</tr>
<tr>
<td>To be together with family /build relationship</td>
<td></td>
<td>4.3304</td>
<td>4.2778</td>
<td>0.43</td>
<td>182</td>
<td>0.67</td>
</tr>
<tr>
<td>To discover new places and things</td>
<td></td>
<td>4.2679</td>
<td>4.1250</td>
<td>1.16</td>
<td>182</td>
<td>0.25</td>
</tr>
<tr>
<td>To have an adventure</td>
<td></td>
<td>4.3304</td>
<td>4.2083</td>
<td>1.06</td>
<td>182</td>
<td>0.29</td>
</tr>
</tbody>
</table>

**Note:** Significantly different at P < 0.05

Source: Author, (2020)
Exploratory Factor Analysis of Agritourists Motivations

Since each customer has their own set of goals with different levels of importance, a principal component analysis (PCA) with varimax rotation was used to confirm the dimensions of the underlying patterns of relationships among the motivation goals. Table 8 shows that the varimax-rotated factor analysis resulted in three factors (eigenvalue of 1 and factor loadings over 0.5), accounting for 61.08% of the variance. Reliability analysis (Cronbach’s alpha) produced coefficients higher than 0.7 (threshold value for acceptable reliability), indicating internal consistency among the variables of the three factors. The overall reliability was 0.863, and no item was removed from the analysis as they all had factor loadings above 0.5 (Hair et al., 2006). Each of the three factors was assigned a label based on the nature of the motivational goals that loaded on each factor component.

The factor dimensions are as follows: agricultural experiences – Factor 1, quality of life, adventure, and relationships – Factor 2, and relaxations – Factor 3. Table 8 shows the three labeled factors obtained, the motivational goals that loaded on each element and their corresponding loadings, and the Cronbach’s alpha reliability coefficients, eigenvalues, the percentage of variance explained by each component.

The six motivational goals which loaded on the agricultural experiences factor (F1) relate to the desire to enjoy agricultural lifestyle and wellbeing including “experience farm life and activities,” “purchase agricultural produce,” “to improve health and wellbeing,” “to learn how to use agricultural produce,” “to be in a farming environment,” and “to attend agricultural events.” This factor explained 39.390% of the total variance.
<table>
<thead>
<tr>
<th>Variables</th>
<th>Factor Loadings</th>
<th>Alpha</th>
<th>Total</th>
<th>% of variance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factor 1: Agricultural Experience</strong></td>
<td></td>
<td>0.808</td>
<td>5.121</td>
<td>39.390</td>
</tr>
<tr>
<td>To experience agricultural life and activities</td>
<td>0.762</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To purchase agricultural goods</td>
<td>0.745</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To improve health and well-being</td>
<td>0.689</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To learn how to use agricultural produce</td>
<td>0.645</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To be in an agricultural environment</td>
<td>0.635</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To attend Agricultural event/festivals</td>
<td>0.539</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Factor 2: Adventure, Quality of Life and relationships</strong></td>
<td>0.747</td>
<td>1.689</td>
<td>12.994</td>
<td></td>
</tr>
<tr>
<td>To have an adventure</td>
<td>0.799</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To discover new places and things</td>
<td>0.720</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To be together with family /build relationship</td>
<td>0.660</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To relax mentally\enjoy life</td>
<td>0.612</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Factor 3: Relaxation</strong></td>
<td>0.810</td>
<td>1.131</td>
<td>8.699</td>
<td></td>
</tr>
<tr>
<td>To get away from city life</td>
<td>0.876</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To escape from day-by-day stress</td>
<td>0.816</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To enjoy scenery</td>
<td>0.639</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Kaiser-Meyer-Olkin Measure of Sampling Adequacy. KMO= .839, Bartlett's Test of sphericity X^2= 989.207, P<0 .000*

*Source: Author, (2020)*
The second factor, adventure, quality of life, and relationships (Factor 2), explained 12.994% of the variance in the data with an eigenvalue of 1.689 and an alpha reliability coefficient of 0.747. The four motivational goals loading on this factor (F2) include: to have an adventure, to discover new places and things, to be together with family/build relationships, and to relax mentally/enjoy life. The relaxation factor (F3) is associated with goals relating to an escape from the daily routine and the hustles of life. This factor explained 8.699% of the variance, had an eigenvalue of 1.131, and a reliability coefficient of 0.810. The goals loading on this factor component are “to get away from city life,” “to escape from day-by-day stress,” and “to enjoy the scenery.”

According to the results of the factor analysis, the three-factor dimension provided the most credible insight into agritourists' motivations.

The results from the factor analysis, including the factor components and the variables loading under each factor, are similar to the elements found in Turkey and Chiang Mai, Thailand (Artuger & Kendir, 2013; Srikatanyoo & Campiranon, 2010).

Agritourist Flow Pattern

To understand the movement of agritourists to Southwest Michigan and determine where they come from, a spatial analysis was conducted using ArcMap 10.6.1. The investigation was initiated by first looking at the distribution of agritourism in the contiguous U.S. with a focus on locations that recorded a significant amount of tourist numbers, hence focusing on the Great Lakes Region, as illustrated in Figure 3. The final part focused on the domestic market flow, as shown in Figure 4. It should, however, be noted that the results displayed on the map reflect the data from the field study based on the zip codes of respondents.
Figure 3. Southwest Michigan's Agritourism Market: Where the Tourists Are From.
Source: Author, (2020)

Figure 3 is a contiguous U.S. Counties map showing the distribution of agritourists to the Southwest Michigan agritourism market, focusing on the Great Lakes States excluding New York. The dark brown represents areas on the map that recorded between twenty-two to fifty-five agritourist numbers. A good number of tourists also came from neighborhoods with light brown colors, and the cream colors region represent areas recording one to five agritourists. The hollow portion had no tourists visiting. Most of the participants in the survey were Michiganders,
who were mainly from Kalamazoo, Van Buren, and Kent County. However, there were a considerable number of out-of-state visitors from the Cook County of Chicago, Illinois area.

Figure 4: The Distribution of Southwest Michigan's Domestic Agritourists Market. Source: Author, (2020)

On the other hand, Figure 4 shows the distribution of the domestic agritourism market in Southwest Michigan. As shown in Figure 4, most of the local tourists are from Kalamazoo County, Kent County, and Van Buren county – represented by the dark brown and light brown colors. The distribution of the domestic agritourists concentrated in Southwest and Southeast Michigan, with few numbers coming from Central Michigan. There are no tourists flow from the
rest of the regions in Michigan. The domestic agritourism market cluster around Southwest Michigan, the very area with a large concentration of agritourism attractions.

Supply Perspective of Agritourism Demand: Overview of Michigan Agritourism

Michigan Agritourism Association (MATA), which functions as a non-profit organization, is one major stakeholder that actively promotes the Michigan agritourism industry. The association undertakes the statewide promotion of agritourism by connecting the public to the various agritourism destinations within the state through Discover Michigan Farm Fun Directory and a responsive website – michiganfarmfun.com. The association also reaches out to new members who are opening their farms for agritourism. Besides the statewide promotion of agritourism, MATA also supports farmers through education in the form of workshops as well as a webinar on relevant topics to help farmers stay up to date. They also provide a platform for farmers to engage with one another and advocate at the local and state level on issues relating to zoning and liability laws and ordinances.

The official who I interviewed from MATA indicated that, through their website, social media platform, and the Discover Michigan Farm Fun Directory, they work to reach out to people in the surrounding Great Lakes regions. The directory contains information on all agritourism destinations and opportunities within the state, which is in high demand in Michigan Welcome Centers especially in New Buffalo, Monroe, Menominee, Sault State, Marie, and Port Huron, which reach visitors coming from Chicago, Indiana, Ohio, Wisconsin, and Canada. As part of the statewide promotion mechanism, MATA shares information with Pure Michigan, which is one of the most visited tourist websites in the nation, to help educate travelers from afar about agritourism opportunities in the state. According to the MATA official, “Pure Michigan
has a direct link of our website on theirs, and they have placed a number of our videos about how
to pick various u-pick fruits, and we’ve also been guests on the Pure Michigan Radio Show.”

Despite the significant role played by the organization, funding is a substantial challenge
to their work. Their source of finance is from membership contributions and donations from the
public. However, with limited membership numbers, they can gather just a limited amount of
funds, which is most often inadequate to carry out projects. As indicated by the informant,

As a small, statewide, membership-based nonprofit association, funding is limited for the
work that we do; farmers have limited budgets, too, so we try to keep costs reasonable
while continuing to seek additional funding streams to do the work necessary to provide
support and promotion.

Funding from the state and individuals within the country will go a long way to help MATA carry
out its mandate.

Characteristics of Agritourism Businesses in Southwest Michigan

Michigan is one of the largest agritourism states in the country due to the tremendous
diversity of crops that are grown, as displayed in Table 9. Some farms welcome in visitors with
many agritourism opportunities for the public to enjoy, including cider mills, farm markets, u-
pick farms, petting farms, educational farms, wineries, cideries, farmers markets, and farm stays.

A total of twenty (20) businesses responded to the online Qualtrics survey. Out of the
total number of 20 respondents, the results indicated the majority (70%) agritourism operators
have been doing agritourism for more than ten years, and only 30% of the participants sell their
products in the farmers market. The result is fascinating because in Michigan, there exists in
every county and most city a farmers’ market.
Table 9. Characteristics of Agritourism Operations

<table>
<thead>
<tr>
<th>Variables (n=20)</th>
<th>Frequency</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>How many years involved in agritourism?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than 10 years</td>
<td>14</td>
<td>70.0</td>
</tr>
<tr>
<td>6 to 10 years</td>
<td>4</td>
<td>20.0</td>
</tr>
<tr>
<td>Less than 5 years</td>
<td>2</td>
<td>10.0</td>
</tr>
<tr>
<td><strong>Importance of Agritourism to you?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very Important</td>
<td>14</td>
<td>70.0</td>
</tr>
<tr>
<td>Important</td>
<td>3</td>
<td>15.0</td>
</tr>
<tr>
<td>Somewhat Important</td>
<td>2</td>
<td>10.0</td>
</tr>
<tr>
<td>Not Important</td>
<td>1</td>
<td>5.0</td>
</tr>
<tr>
<td><strong>Do you sell at Farmers Market?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>6</td>
<td>30.00</td>
</tr>
<tr>
<td>No</td>
<td>14</td>
<td>70.00</td>
</tr>
<tr>
<td><strong>Would you like publicity by relevant agritourism institutions?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>19</td>
<td>95.00</td>
</tr>
<tr>
<td>No</td>
<td>1</td>
<td>5.00</td>
</tr>
<tr>
<td><strong>Type of Agritourism Business</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U-Pick other fruits/Vegetables/Flowers</td>
<td>11</td>
<td>25.00</td>
</tr>
<tr>
<td>Roadside Stand/Farm Markets</td>
<td>7</td>
<td>15.91</td>
</tr>
<tr>
<td>Farmers Market /Roadside Stands</td>
<td>5</td>
<td>11.36</td>
</tr>
</tbody>
</table>

Source: Author, (2020)
<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of Agritourism Business - Continued</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pumpkin Patch</td>
<td>4</td>
<td>9.09</td>
</tr>
<tr>
<td>Wine Tours/Tasting</td>
<td>3</td>
<td>6.82</td>
</tr>
<tr>
<td>Education/ Demonstrations farms</td>
<td>3</td>
<td>6.82</td>
</tr>
<tr>
<td>Weddings/Festivals and Special Events</td>
<td>3</td>
<td>6.82</td>
</tr>
<tr>
<td>Brewing beer/ Cider Mills</td>
<td>2</td>
<td>4.55</td>
</tr>
<tr>
<td>Ranch or Farm tours</td>
<td>2</td>
<td>4.55</td>
</tr>
<tr>
<td>Bed &amp; Breakfast/Guest house/Farm stays/Bakery/Restaurant</td>
<td>2</td>
<td>4.55</td>
</tr>
<tr>
<td>Christmas tree</td>
<td>1</td>
<td>2.27</td>
</tr>
<tr>
<td>Corn maze/hay</td>
<td>1</td>
<td>2.27</td>
</tr>
</tbody>
</table>

Source: Author, (2020)

For most agritourism operators, relevant institutions on agritourism, most notably, MATA, Pure Michigan, the Farm Bureau, among others, carry out the statewide promotion of their activities and business. Farmers appreciate media highlights of their operations by MATA and Pure Michigan on their online and social media platforms. Both internal and outreach programs outside of the state serve as a significant pull of a new set of customers. Among other support is the Discover Michigan Farm Fun directory as well as training and workshop programs offered by the institutions. 95% of the respondents would like these efforts and supports to continue.
Motivations of Agritourism Operators

The results reveal a broad range of economic, intrinsic, and market-related motivations for farm diversification through agritourism. The results in Table 10 indicate that the majority (4.55 ± 0.51) diversify to interact with customers as this goal recorded the highest mean with the least standard deviation on a five-point Likert scale. Many respondents also diversified to educate customers with a mean and standard deviation of (4.50, ± 0.95). All thirteen motivational goals had a significant influence on respondents' decisions for agritourism as each item had values above the average of 3.0. The result confirms that different combinations of goals motivate farmers and that they assign different levels of importance to the same goals.

When asked to elaborate on the motivations for farm diversification through agritourism during the interviews, some of the respondents identified several factors related to personal and social goals. Informants indicated that they enjoy working the land and continue in what they love to do. For example, an informant remarked, “I always like to get my hands dirty and stay away from the computers and stuff.” Other operators also feel the sense of pride and satisfaction that comes from telling visitors what they love to do as a motivation for agritourism. A young agritourism operator who has been working with an agritourism enterprise since age sixteen remarked: “like it makes me proud to be like, yeah, we grew this, I planted that hanging basket there, I get to put my hands in the dirt and then get to see it what it blooms into like a few months later, that’s satisfaction.”

Another essential motivational goal that came up in the interview was the opportunity to educate the public about farming. Respondents expressed happiness and satisfaction that agritourism affords them to share with families, especially kids, about their food source. To many farmers, there is a significant disconnection between modern families and the farm and
hence feel the need to educate and inform the public about how food is grown, where they are
grown, etc., and help them to reconnect to their food system.

Table 10. Motivations for Farm Diversification Through Agritourism

<table>
<thead>
<tr>
<th>Items (n = 20)</th>
<th>Mean Statistics</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interact with customers</td>
<td>4.55</td>
<td>0.51</td>
</tr>
<tr>
<td>Educate customers</td>
<td>4.50</td>
<td>0.95</td>
</tr>
<tr>
<td>Generate additional income</td>
<td>4.40</td>
<td>0.68</td>
</tr>
<tr>
<td>Enhance personal/family quality of life</td>
<td>4.35</td>
<td>0.81</td>
</tr>
<tr>
<td>Enhance ability to meet financial obligations</td>
<td>4.35</td>
<td>0.75</td>
</tr>
<tr>
<td>Provide Current Customers with new products</td>
<td>4.35</td>
<td>0.59</td>
</tr>
<tr>
<td>Continue farming/ Maintain family farm</td>
<td>4.30</td>
<td>0.80</td>
</tr>
<tr>
<td>Get the best out of interest or hobby</td>
<td>4.05</td>
<td>0.69</td>
</tr>
<tr>
<td>Offset fluctuation in farm revenue</td>
<td>4.05</td>
<td>0.76</td>
</tr>
<tr>
<td>Income diversification/ Minimize risks</td>
<td>4.00</td>
<td>1.08</td>
</tr>
<tr>
<td>Employment for family members</td>
<td>3.90</td>
<td>0.72</td>
</tr>
<tr>
<td>Generate revenues during the off-season</td>
<td>3.80</td>
<td>0.83</td>
</tr>
<tr>
<td>Tax incentives</td>
<td>3.30</td>
<td>1.03</td>
</tr>
</tbody>
</table>

* 5 - points Likert-scale (5 = Strongly agree to 1 = Strongly disagree

Source: Author, (2020)

An informant reported, “So our goal here is just to help families and kids to understand that their
food doesn’t come from the grocery store.” Another operator remarked, “modern-day, there’s not
access to farms like there used to be, so I think visiting a farm is a unique experience nowadays,
just the experience for the first time, this is where my peaches come from that I see in the store.”
Another social reason cited relates to the privilege of working with the family daily. According to an informant, “it is nice because I work with my other twin brother and then my dad,” another one mentioned that, “I love being part of a family business, I love working with my mother and my family daily.” A combination of personal and social goals explains the intrinsic satisfaction that agritourism provides to operators.

Table 11. Importance of Agritourism to the State

<table>
<thead>
<tr>
<th>Variable (n = 20)</th>
<th>Mean</th>
<th>Std Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintaining the viability of agriculture in the state</td>
<td>4.75</td>
<td>0.44</td>
</tr>
<tr>
<td>Heritage and cultural preservation</td>
<td>4.60</td>
<td>0.60</td>
</tr>
<tr>
<td>Environmental/farmland conservation</td>
<td>4.50</td>
<td>0.83</td>
</tr>
<tr>
<td>Education</td>
<td>4.45</td>
<td>0.76</td>
</tr>
<tr>
<td>Out of state income/revenue</td>
<td>4.40</td>
<td>0.75</td>
</tr>
<tr>
<td>Employment generation</td>
<td>4.30</td>
<td>0.66</td>
</tr>
</tbody>
</table>

* 5-points Likert-scale (5 = Strongly agree to 1 = Strongly disagree)

Source: Author, (2020)

Economic reasons are often cited as the primary motivation behind farm diversification through agritourism in most studies in North America and Europe. Although participants from both the survey and interview did mention economic factors, they were only secondary to personal and social motivation factors. Some farmers said that agriculture was their principal occupation, and it is only logical to expect some economic reward from their operation, although economic reasons are not the main reason behind agritourism participation. An informant indicated during the interview that: “it is just what we do, we are farmers, so we just opened up
because it was a retail, it was another avenue for income, and it's not like this is a sideline, this is our occupation.” Another operator remarked: “...That spring last year, right about this time maybe earlier, I quit my full-time job, so this is my full-time job.” The economic goals behind agritourism from the online survey include- enhancing the ability to meet financial obligations, offset fluctuation in farm revenue, income diversification/ Minimize risks, and employment creation for family members.

Impacts of Agritourism

Both the online Qualtrics survey and the interviews with agritourism operators indicated that agritourism has many positive effects in the State of Michigan. Agritourism provides various forms of socio-cultural, environmental, and economic impacts that benefit local communities, agriculture heritage, and the conservation of natural resources. It has a positive effect on farms, especially those struggling in the current agricultural environment, which is characterized by higher input costs and lower prices for agricultural products to remain viable. Table 11 displays the perceived benefits of agritourism, as expressed by operators in the study area. All the benefits of agritourism outlined in the table are all important, with each having an arithmetic mean above 0.3. The survey results indicate that agritourism maintains the viability of agriculture in the state (Mean = 4.75), cultural and heritage preservation, as well as conservation outcomes.

The economic benefit that agritourism brings to farms includes direct revenues derived from fees for the recreational activities offered on the farm or indirectly through cross-marketing other farm products. Agritourism benefits local economies by drawing tourists to the region, providing employment opportunities, and increasing visibility and revenues of local businesses. Agritourism also provides a way for many rural communities to capture tourism dollars, provide
jobs, boost domestic tax, and allow local farmers to stay in business. To many agritourism operators, the development of agritourism in the region creates more jobs, much investment, and an additional dollar from regional visitors to the local economy. Agritourism has become a significant part of their livelihood, and it has provided a new farm diversification outlet for farmers to generate additional revenue streams to balance out fluctuation in market value for their products. The informants revealed that in some cases, the revenue they report from agritourism is higher than the income from their products alone. Quintessentially, agritourism help farmers in Michigan to be economically viable and stay in business, which helps them to maintain their family farms.

There are many benefits beyond economics. Agritourism also benefits agriculture by increasing its visibility, educating visitors about the importance of rural life and production, increasing demand for local agricultural products, bringing potential customers to rural areas, and building support for agriculture. Again, agritourism preserves the rural landscape and prevent excessive farming on marginal land by allowing farmers to generate income on small acreage. Since agritourism utilizes the already existing farm resources, it ensures that the rural landscape and agricultural land are protected from over-farming, which preserves fauna and flora and maintains balance in the ecosystem.

The socio-cultural impacts of agritourism relate to education and heritage/cultural preservation. Agritourism provides the general public and families the chance to experience rural life and heritage through outdoor recreation. Agritourism offers the opportunity for cultural exchange between farmers and visitors through close interactions, which ensures knowledge transfer from one generation onto the other. For example, an informant indicated that:

Yeah, I'm not going to entertain as much as to educate; I think that pretty much goes for a lot of what we do because people want to engage. I mean, it used to be that people pick
blueberries because they wanted cheap food. Now they shop with their kids; they want all my family; they want to tell me about their family. Then they ask a lot of questions about how things are raised.

Agritourism, therefore, helps in cultural exchange and heritage preservation by ensuring that the culture and rural heritage of the host community is passed on to the next generation through interaction between the agritourists and the operators.

Challenges of Agritourism

Despite the enormous benefits of agritourism, the informants also expressed some concerns. The effect of the weather/climate change is a primary concern of most operators, as illustrated in Table 12. The majority (33.33%) of the respondents in the online survey identified climate change as the main challenge facing their operations. The second challenge relates to inadequate labor to assist farmers, followed by zoning laws and ordinances.

Table 12. Challenges of Agritourism

<table>
<thead>
<tr>
<th>Variables (n = 20)</th>
<th>Frequency</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate Change</td>
<td>15</td>
<td>33.33</td>
</tr>
<tr>
<td>Labor/Customers</td>
<td>9</td>
<td>20.00</td>
</tr>
<tr>
<td>Zoning laws/Ordinances</td>
<td>6</td>
<td>13.33</td>
</tr>
<tr>
<td>Insurance</td>
<td>5</td>
<td>11.11</td>
</tr>
<tr>
<td>Government Support</td>
<td>5</td>
<td>11.11</td>
</tr>
<tr>
<td>Farm size</td>
<td>3</td>
<td>6.67</td>
</tr>
<tr>
<td>Signage Regulations</td>
<td>2</td>
<td>4.44</td>
</tr>
</tbody>
</table>

Source: Author, (2020)
To get further insight into the challenges facing Southwest Michigan’s agritourism industry, farmers were asked through interviews to share their problems, and many of them confirmed the effect of the weather on their activities. For example, the polar vortex of 2019 especially posed considerable damage to farmers leading to severe losses, delays, and late start of the season. Many U-pick operations had a significant decline in 2019 due to the extreme weather condition. One informant indicated that “with our production this year, we are looking at like a 75% or 80% loss because of the polar vortex freeze that we had.” Another orchard farmer remarked, “bad weather has affected our crops horribly, we have next to few, if any, peaches, out of one hundred and fifty acres, maybe an acre is all that we have.” The effect of the weather cannot be overemphasized, and farmers may also have limited control over it.

There were also concerns relating to local laws and ordinances and the fear among neighbors that agritourism will replace their serene atmosphere with noise and disturbances. As a result, some agritourism operators are currently in legal battles against municipal authorities regarding zoning laws and ordinances regarding agritourism operations. In some cases, the farmers have to employ an attorney to defend them, which increases their financial burden and slow down business. However, some operators commended MATA for their tremendous effort and support in ensuring that operators who are involved in legal issues relating to local ordinances receive the needed support and hope to get continuous support from them.

Another major challenge expressed by farmers is that they find it challenging to communicate with the general public on where their food comes from. Notably, a lot of people get nervous about the pesticides and herbicides that are used on the farm to control bugs and enhance crops. Farmers find it difficult to communicate how they take care of their products to visitors, especially with non-organic farms. Additionally, operators mentioned difficulty in
dealing with demanding clients without offending them, especially when clients fail to respect what they do, including damaging crops, a serious problem in U-pick farms.

Accessibility relating to signage and the location of the business was mentioned as a hindrance to their business. An informant said that because the enterprise is not on any major highway and major routes, they have to advertise to get public attention. Some informants said that their establishment did not have signage directing traffic to their business because of the cost involved and inadequate knowledge about permit procedure.

Another challenge relates to labor, as indicated by informants. For example, a respondent mentioned in the interview that they are not sure about the future of their business, as most of them were getting closer to retirement. In many cases, their children are either not interested in farming and or unwilling to leave the city to take over the farm. According to the informant, “we have been working with succession planners to help us figure out how to let our children take over; I think the longevity of the business is a lot stronger than sometimes I even think our children understand.” Agritourism operators sometimes rent out part of their farmland so that they have manageable acreage. Difficulty in getting labor also relates to the minimum wage as well as getting individuals who know about farming. An operator mentioned, “trying to find someone that knows how to work on a farm, people have no work ethic anymore. It's hard to find someone who knows what to do without having to teach them.” Another operator remarked, “… labor wages, because we're just a small business, as the minimum wage goes up, we cannot afford to be open anymore. If the minimum wage goes to $15 an hour, were done.” Some agritourism operators in the region cannot pay workers the minimum wage and hence must depend on family labor, which is sometimes not sustainable.
Summary

This chapter presented findings from the statistical, spatial, and qualitative analysis of data as well as the analytical models that helped the researcher identify the motivations of agritourism visitors and operators in Southwest Michigan. Mainly, descriptive statistics together with Multivariate analysis of the mean (t-test) with principal component factor analysis were ideal for the statistical analysis. Qualitative data were thematically analyzed by searching for common themes. This research has identified three groups of agritourism motivations as well as the significant agritourism generating market for Southwest Michigan’s agritourism industry. Social and personal factors were identified as the primary motivation of agritourism operators. The challenges facing the agritourism industry in the study area have been highlighted.
CHAPTER V

DISCUSSIONS, LIMITATIONS, AND FUTURE RESEARCH

Discussions

The purpose of this study was to examine the primary motivations of both agritourism operators and visitors in Southwest Michigan and identify the main tourists’ concerns as well as the challenges that limit the agritourism industry growth and development. In many cases, a one-sided viewpoint does not offer a holistic perspective on the study of agritourism. The findings of this research emphasize the importance of looking at agritourism from both the demand and supply perspectives as each component cannot exist without the other.

The results of the study indicate that different combinations of goals drive agritourism participation by farmers and visitors and that they assign different levels of importance to the same motivational variable. The study results also reveal a broad range of intrinsic, market-related, and economic goals accounting for agritourism participation among farmers. Again, the study identified three primary groups of agritourists motivations – “quality of life, adventure and relationships,” “relaxation,” and “agricultural experience.” The primary motivation of agritourists was to relax mentally/enjoy life. Also, agritourists exhibited different motivations based on travel behaviors and demographic characteristics.

The agritourists in Southwest Michigan during this study was dominated by the age group of senior citizens above the age of 60 years, and women dominate the tourism market. Also, Southwest Michigan agritourists prefer to travel with friends and family, indicating the family nature of agritourism. However, the age categories identified by this study are slightly different from similar research conducted by (Che et al., 2007) in the same state but on a larger
scale, which was dominated by the age group between 35 and 49 years. Agritourism promotion should, therefore, target the age groups of 31-40 and 40-50 who were underrepresented. Perhaps, agritourism operators may consider providing weekend fun activities to attract this market segment. Operators should endeavor to maintain the existing market of senior citizens who hold nostalgic views of farms and wish to reconnect to nature as this market is vital for business success. Since the age group of senior citizens has both the disposable income and time to undertake travel, agritourism operators should provide settings that allow for relaxation and less exhaustive activities that will keep senior citizens at the destination longer.

Female agritourists seem to be more demanding than their male counterpart, similar to other studies findings, and they prioritize easy accessibility in their travel decisions. However, beautiful scenery and agricultural purchasing opportunities were vital to both male and female agritourists. These findings do confirm some elements of best management practices of agritourism outlined by USDA’s Agricultural Marketing Resource Centre, which highlights the importance of a safe and accessible environment as an ingredient for the success of the agritourism industry. Implementation of the best management practices by farmers and agritourism operators will ensure the success of the agritourism industry.

This research employed factor analysis to identify the latent structure that explains agritourists' motivations. The result of the factor analysis illustrates three categories of agritourists motivations – “agricultural experiences,” “Adventure, quality of life and relationships,” and “Relaxation.” Most of the attributes within those factors confirm the findings of the previous studies by (Artuger & Kendir, 2013; Srikatanyoo & Campiranon, 2010; Pan & Ryan, 2007). Additionally, the ranking of the means of motivation variables revealed that the agritourists in Southwest Michigan were similar to those in Thailand and Turkey (Artuger &
Kendir, 2013 and Srikatanyoo & Campiranon, 2010). The results of this study revealed “to relax mentally/enjoy life,” to enjoy scenery’ and “to get away from city life” as the primary motivations of Southwest Michigan agritourists. Thus, agritourists' participation in agritourism is motivated by the desire to be in touch with nature and to relax mentally or enjoy life. However, while out-of-states visitors were highly motivated by the need to-get-away from city life, local tourists on the other hand were influenced by the desire to be in an agricultural environment. To relax mentally/enjoy life, to enjoy scenery, were important to both local and out-of-state tourists. A study carried out by (Che et al., 2007) in the entire state of Michigan discovered that the main motivation of agritourists to participate in agritourism was to buy fresh fruits and vegetables. The difference in the results from both studies may be attributed to the scale of analysis, this study only focuses on a section of the state (Southwest Michigan) and different agritourism businesses.

Regarding agritourists’ motivations, the factors identified in this study provide not only a fundamental understanding of travel behavior but also an insight into the reason behind their consumption of agritourism products. This information will help both agritourism operators and policymakers to formulate and implement marketing and promotional strategies that target the specific motivational goals identified. The motivations and factors influencing demand identified in the study can help operators segment the agritourists market and develop customized agritourism products for specific agritourists market segment. Furthermore, the knowledge of agritourists' motivations can help in designing promotional messages that appeal to visitors, which will help raise sales. Also, relating to the pull factors of demand, agritourism operators can use the information to improve upon their destination appeal.

Regarding the origin of the agritourists and the primary market for Southwest Michigan’s agritourism industry, the study findings revealed the local Southwest Michigan market as the
backbone of the industry. However, potential agritourism markets exist in the surrounding Great Lakes States (Chicago, Ohio, Wisconsin, Illinois, and Indiana). The popular notion of most agritourism operators suggests that their clientele mostly comes from Wisconsin, Ohio, Indiana, Chicago, and Illinois besides their bread and butter being local markets. However, the survey results of the spatial analysis deviate from this notion, Chicago seems to be the only Great Lake State that generated a considerable number of agritourists visiting. Agritourism operators and relevant institutions can attract more regional visitors by designing a promotion strategy that emphasizes Michigan’s competitive advantage. Getting the word out about what the region can offer in terms of specific agritourism products and services that is unique, like Michigan wineries and blueberry patches, etc. can boast agritourism in Southwest Michigan.

This study also examined motivations driving agritourism entrepreneurship among farmers in Southwest Michigan. Both the survey and interview results revealed that intrinsic/social goals and market-related goals (e.g. “to interact with customers,” “to educate the public,” “to improve personal/family quality of life,” “to continue farming/ Maintain family farm,” and “ to get the best out of interest or hobby”) and economic reasons (“to generate additional income” and “to enhance the ability to meet financial obligations”) as an essential reason for agritourism among farmers. Contrary to the findings in existing literature (Magnini et al., 2017; Barbieri & Mahoney, 2009; McGehee & Kim, 2004), which identified economic goals as the primary motivation for agritourism. In this study, however, the economic motives were secondary to social/intrinsic motivations.

This study, however, was consistent with the findings by Barbieri (2010), which revealed that Canadian agritourism operators were motivated by inherent factors (social/personal) rather than economic reasons. It also identified intrinsic social motivations (to interact with customers
and educate customers) as the primary motivation for agritourism entrepreneurship among farmers in the study area. Although economic factors (e.g., to generate additional income and enhance the ability to meet financial obligations) was the secondary reason for farm diversification through agritourism, it influences agritourism operators in a significant way. Informants, during the interviews, noted that their motivations for agritourism came from inner satisfaction, which comes from interactions with the general public and practicing their hobby. Some farmers mentioned that their goal for agritourism is to educate the public about agriculture and to help society reconnect with their food system. It is interesting to note that farmers in Southwest Michigan exhibit similar attributes as their fellows in other places around the United States. These findings suggest that extension and development efforts encouraging the adoption of agritourism should not solely emphasize economic returns, but also need to incorporate benefits associated with lifestyle, an avenue to give back to society through education, meet a market and customers’ needs.

The study also revealed that agritourism in Southwest Michigan is faced with challenges that need collaborative and institutional effort to address. The impact of the weather is a significant challenge to the industry. While farmers have less control over the effects of the weather, extension services efforts should be targeted at providing social support in terms of counseling to farmers who suffer a significant loss to the weather. Also, extension services should educate farmers on how to secure their investment to limit the impacts of the weather. Another major challenge identified by farmers was that they find it challenging to communicate what they do to customers in a way they could understand. Institutions such as MATA, Farm Bureau, USDA, and other relevant institutions responsible for organizing workshops and training
programs for farmers should incorporate public speaking into their plan to help build farmers’ capacity in this regard, which will go a long way to enhance agritourists' experience.

Another challenge relates to city laws and ordinance as well as neighbor complaints. Public education is needed to guide farmers through laws and ordinances regarding agritourism operations. There should be constant interaction between city authorities and farmers to clarify issues that may arise, which will ensure that farmers operate their businesses within the limits of the law and ordinance. Another challenge facing the industry is inadequate funds to carry out promotional activities and pay wages. Farmers, due to financial constraints, rely on family labor, which, in most cases, is not sustainable because they are unable to afford other types of labor. Furthermore, Michigan Agritourism Association, a significant agritourism organization, is limited by financial difficulty and not able to adequately promote the industry. Financial support in the form of individual donations and government grants are needed to help them discharge their duties to unlock the many potential that exists in Michigan’s agritourism industry.

Overall, this study sheds light on the motivations for agritourism from demand and supply perspectives. This study also identified the main generating markets for Southwest Michigan’s agritourism markets and suggested ways of attracting more regional visitors from the Great Lakes States. The challenges facing agritourism development in the region has been discussed with measures to reduce the impacts. The findings of this study suggest that Southwest Michigan has a lot of potentials that can be tapped through intentional and aggressive marketing and promotional strategies to attract more tourists from far and near.

Limitations of the Study

A couple of limitations of this study should be considered when discussing and interpreting study results. First, the use of a non-random sample for semi-structured interviews
suggests that their inputs and suggestions should be taken with caution when seeking
generalization to a larger population. Also, the study employed a convenience sampling design in
sample selection, which means only those who were willing to participate in the survey and the
sample that the researcher could reach were included in the study. Hence, the generalization of
the result is only applicable to the study area. Also, time constraints limited the number of farms
and participants engaged in the study. The unwillingness of operators to participate in the survey
yielded low turnout. However, accounting for these limitations, study results provide an essential
understanding of agritourism motivations in Southwest Michigan.

Implications for Future Research

This study has not only provided an overview of the agritourism industry in Southwest
Michigan and fundamental knowledge about demand and supply perspectives of agritourism but
also the implication for future research. First, the study was conducted in Southwest Michigan; it
will be useful to replicate this research for the entire state of Michigan and compare the result.
Furthermore, since this study explored both domestic and out-of-state visitors' motivations
together, further research is needed to identify Michigan’s competitive advantage in agritourism
over its neighboring states and develop a marketing strategy to generate regional visits. There is
also a need for further research into the challenges facing the agritourism operators in Michigan.
Future research may explore the challenges of the sector and identify a pragmatic way of
resolving them. Finally, since the study only used surveys and interviews, other qualitative
methods such as focus groups and in-depth interviews with more stakeholders will provide more
insight into agritourism motivations from both demand and supply perspectives. Additionally,
different quantitative research designs like random sampling could be employed to allow for
generalization of the study result.
BIBLIOGRAPHY

http://journals.brandonu.ca/jrcd/article/view/359


APPENDIX A

Informed Consent Letter

Western Michigan University
Department of Geography

CONSENT FORM

You are invited to participate in a Western Michigan University research project entitled “Agritourism Development in Michigan: Motivations of Agritourism consumers and Operators”. The study is designed to analyze the motivations of agritourists and operators in Southwest Michigan, the challenges facing the agritourism industry and travel patterns of agritourists. Information may help farmers, Michigan Agritourism Association, Michigan Department of Agriculture and Pure Michigan understand your needs and motivations and the best way to improve agritourism products and services to best serve you and influence future planning initiatives. This study is being conducted by Dr. Lucius Hallett and Ms. Esther Akoto Amoako from the Department of Geography of Western Michigan University. The research is being carried out for part of the thesis requirements for Ms. Esther Akoto Amoako and will be completed in April 2020.

The attached Questionnaire will ask you questions regarding your travel patterns, motivations for agritourism, ways to improve agritourism offerings, and your demographics. There are no risks associated with completing this survey and you will be given WMU geography department souvenir for your time. Your participation will help agritourism stakeholders understand your needs for planning purposes to improve agritourism industry.

Your responses will be completely anonymous, please do not put your name or address anywhere on this form. You may choose not to answer any question by leaving the question blank. If you do not want to participate in the survey, please tell the researcher and return the survey. Returning the completed survey indicates your consent for the use of the answers you supply. If you have any questions, you may contact Dr. Lucius Hallett at (269) 387-3407 or lucius.hallett@wmich.edu, Ms. Esther Akoto Amoako at (269) 808-6271 or estherakoto.amoako@wmich.edu, the Western Michigan University Institutional Review Board (269-387-8293) or the vice president of research (269-387-8298).

This consent document has been approved for use for one year by the Western Michigan University Institutional Review Board as indicated by the stamped date and signature of the board chair in the lower left corner.

Contact information:

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Survey Flow
Standard: Informed Consent (2 Questions) Standard: Demographics Base/Universal (5 Questions)
Standard: Needs and Motivation for operating agritourism Business (5 Questions)
Agritourism Business (1 Question)
Start of Block: Informed Consent

Q1
CONSENT FORM You are invited to participate in a Western Michigan University research project entitled “Agritourism Development in Michigan: Motivations of Agritourism consumers and Operators.” The study is designed to analyze the motivations of agritourists and operators in Southwest Michigan, the challenges facing the agritourism industry, and travel patterns of agritourists. Information may help Michigan Agritourism Association, Michigan Department of Agriculture and Pure Michigan understand your motivations, challenges facing your operations, as well as the best way to support your business to succeed. This study is being conducted by Dr. Lucius Hallett and Ms. Esther Akoto Amoako from the Department of Geography of Western Michigan University. The research is being carried out for part of the thesis requirements for Ms. Esther Akoto Amoako and will be completed in April 2020.

The online survey will ask you questions regarding business information, challenges facing your business, and your needs and motivations for participating in agritourism business. There are no risks associated with completing this survey. Your participation will help agritourism stakeholders understand your motivations, challenges, and the best way to support your business and the agritourism industry.

Your responses will be completely anonymous, and please do not provide your name or address anywhere in this survey. You may choose not to answer any question by leaving the question blank. If you do not want to participate in the study, select the “do not assent” option of the consent form, and leave the webpage. Completing the online survey indicates your consent for the use of the answers you supply. If you have any questions, you may contact Dr. Lucius Hallett at (269 387-3407 or Lucius.hallett@wmich.edu), Ms. Esther Akoto Amoako at (269 808-6271 or estherakoto.amoako@wmich.edu), the Human Subjects Institutional Review Board (269-3878293) or the vice president of research (269-387-8298).

This consent document was approved for use by the Western Michigan University Institutional Review Board on March 28, 2019.

Q2 Do you consent to participate in this research project?
  o Yes, I consent
  o No, I don’t consent

Skip To: End of Survey If Q2 = No, I don’t consent

Start of Block: Demographics Base/Universal
Q3 What is the name of your agritourism business?

Q4 What is your business ZIP code?

Q5 How long have you been engaging in agritourism business?
- Less than 5 years
- 6 to 10 years
- More than 10 years

Q6 Please indicate the level of importance of agritourism to you.
- Very Important (4)
- Important (3)
- Somewhat Important (2)
- Not Important (1)

Q7 What agritourism activity is offered by your farm? Please, select not more than three.
- U-Pick other fruits/Vegetables/Flowers
- Christmas tree
- Brewing beer/ Cider Mills
- Dairy, milking, and cheese-making
- Horse/Wagon rentals, hayrides
- Education/ Demonstrations farms
- Weddings/Festivals and Special Events
- Ranch or Farm tours
- Corn maze/hay
- Pumpkin Patch
- Petting Zoo
- Roadside Stand/Farm Markets
- Wine Tours/Tasting
- Bed & Breakfast/Guest house/Farm Stays/Bakery/Restaurant
- Farmers Market /Roadside Stands

Start of Block: Needs and Motivation for operating agritourism Business

Q8 Please indicate the level at which you agree with the following statements on your motivations for engaging in agritourism operations.
<table>
<thead>
<tr>
<th>Variables</th>
<th>Strongly agree (5)</th>
<th>Agree (4)</th>
<th>Neutral (3)</th>
<th>Disagree (2)</th>
<th>Strongly disagree (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Get the best out of interest or hobby</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Enhance personal/family quality of life</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Enhance ability to meet financial obligations</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Income diversification/ Minimize risks</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Generate additional income</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Generate revenues during off-season</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Offset fluctuation in farm revenue</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Tax incentives</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Provide employment for family members</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Continue farming/ Maintain family farm</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Interact with customers</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Educate customers</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Provide Current Customers</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Customers with new products</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>
Q9 Please indicate the level at which you agree with the following statements on the benefits of agritourism to the state of Michigan.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Strongly agree (5)</th>
<th>Agree (4)</th>
<th>Neutral (3)</th>
<th>Disagree (2)</th>
<th>Strongly disagree (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintaining the viability of agriculture in the state</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Heritage and cultural preservation</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Employment generation</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Out of state income/revenue</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Environmental/farmland conservation</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Education</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Q10 Would you like your operations to be included in print publications, websites promoting Michigan agritourism by the Michigan Department of Agriculture & Rural Development as well as the Michigan Agritourism Association or Pure Michigan?
   o Yes
   o No

Display This Question:
   If Q10 = Yes

Q11 How much would you be willing to pay annually for this service per year?
   _______________________________________________________

Q12 What challenges confront your agritourism business operations? Select all that apply.
   o Zoning laws
   o Consumer Insurance
   o Government Support
   o Farm size
   o Climate change

Start of Block: Information About Agritourism Business

Q13 Do you sell at a farmers market?
   o Yes
   o No

Display This Question:
   If Q13 = Yes
Q14 Please provide the name(s) of the market

Q15 Are you currently a member of Michigan Agritourism Association (MATA)?
   o Yes
   o No

Display This Question:
   If Q15 = Yes

Q16 How long have you been a member?
   o Less than 5 years
   o 6 to 10 years
   o More than 10 years

Display This Question: If
   Q15 = No

Q17 Are you interested in becoming a member of the Michigan Agritourism Association?
   o Yes
   o No

Start of Block: Information About Agritourism Business

Q18 How can agritourism in Michigan be improved?
APPENDIX C

Survey Questionnaire (Agritourists)

Thesis Title: Agritourism Development in Southwest Michigan: Assessment of Agritourists’ and Operators’ Motivations

Section 1: Travel Behavior/Pattern

Q1 Who accompanied you on the trip?
   ○ Alone
   ○ Spouse
   ○ Family/Friend (s)
   ○ As part of a group tour

Q2 Are you a resident of Michigan?
   ○ Yes
   ○ No

Q3 How far did you travel today from your home?
   ○ 0-25 miles
   ○ 25-75 miles
   ○ 75 miles or more

Q4 Did you travel to visit only one attraction?
   ○ Yes
   ○ No

Q5 If the answer to Q5 is No, please list other attractions you will visit as part of your trip.
   __________________________________________________________

Q6 How did you hear about this agritourism attraction? (Select all that apply)
   ○ Pure Michigan Ads & Brochure
   ○ Michigan Farm Fun Website Social Media
   ○ Television
   ○ Radio
   ○ Newspaper

Section 2. Agritourists Expectations & Motivations for Travel

Q7 Please indicate the degree at which you agree with each of the following motivations for your visit to agritourism attraction.
<table>
<thead>
<tr>
<th>Reason for visiting</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>To relax mentally/enjoy life</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>To enjoy scenery</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>To get away from city life</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>To escape from day-by-day stress</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>To be in agricultural environment</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>To attend special event/festival</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>To experience agricultural life and activities</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>To purchase agricultural goods</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Learn how to use agricultural product</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>To improve health and well-being</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>To be together with family/build relationship</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>To discover new places and things</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>To have an adventure</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>
Q8 Please indicate the degree at which you agree with the influence of the following factors in your choice of agritourism attraction to visit.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Strongly agree</th>
<th>Somewhat agree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beautiful scenery</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Safety</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Clean and green environment</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Convenience of restroom and shower facilities</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Diversity of attractions</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Convenience of communication facilities</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Attractions close to main touring routes</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Educational opportunities about agriculture</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Agricultural goods purchasing opportunities</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Easy accessibility of the attraction</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>
Q9 How likely would you engage in the following agritourism activities?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Very likely</th>
<th>Likely</th>
<th>Neither likely nor unlikely</th>
<th>unlikely</th>
<th>Very unlikely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Seasonal food/fruit festivals</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Winemaking/tasting/Tours</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Animal demonstration/petting zoo</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Cider Mills</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Horse/Wagon rentals, hayrides</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Christmas tree purchase</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Special Events/Farm Weddings</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Pumpkin patches/Orchard visit</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Education/demonstrations farm tours</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Bed &amp; breakfast/guest house/farm stays</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>

Q10 How much time will you spend at this agritourism attraction?
   - One Night or less
   - 2 to 3 Nights
   - 4 to 5 Nights
   - Above 5 Nights

Section 3: Demographics
Q11 Gender
  o Male
  o Female

Q12 Marital Status
  o Single
  o Married
  o Divorced
  o Widow

Q13 Educational Level
  o High School or less
  o Vocational
  o Bachelor’s degree
  o Graduate/professional degree

Q14 Age
  o 18 to 30 years
  o 31 to 40 years
  o 41 to 50 years
  o 51 to 60 years
  o 61 + years

Q15 Please, suggest ways to improve agritourism services and products to enhance your experience

_________________________________________________________________________

Q16 Zip Code: ______________________

Thank you for your participation
APPENDIX D

Interview Guide for Agritourism Operators

1 What does agritourism mean to you and your family?

Q2 Can you recall how you got involved in agritourism business and the process leading to your subsequent years of the establishment?

Q3 Tell me about your operations on a typical day and the significant challenges facing your business and the measures you have employed to resolve them. Any suggestions on how to address the problems?

Q4 What do you think could be done to enhance the agritourism industry?
APPENDIX E

Interview Guide for Michigan Agritourism Association (MATA)

Q1 What is the general overview of agritourism in Michigan, in terms of product development, marketing, promotion, and the current state of agritourism industry?

Q2 Tell me about any new development MATA is making to support the agritourism industry.

Q3 What are some of the challenges affecting MATA in the discharge of your duties and carrying out your mandate?

Q4 What is MATA doing to promote Michigan as an agritourism destination to attract more out-of-state tourists?

Q5 What is the Vision of MATA for the next five years as far as the agritourism industry is concerned?

Q6 One major challenge of most agritourism businesses is the misunderstanding between operators’ local authorities, such as zoning officials as a result of zoning ordinances and local laws. What measures are being taken by MATA to resolve this issue?
APPENDIX F

HSIRB Approval Letter

Date: March 28, 2019

To: Lucius Hallett, Principal Investigator
    Esther Amoako, Student Investigator for thesis

From: Amy Naugle, Ph.D., Chair

Re: IRB Project Number 19-03-15

This letter will serve as confirmation that your research project titled “Agritourism Development in Michigan: Motivations of Agritourism Consumers and Operators” has been approved under the expedited category of review by the Western Michigan University Institutional Review Board (IRB). The conditions and duration of this approval are specified in the policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note: This research may only be conducted exactly in the form it was approved. You must seek specific board approval for any changes to this project (e.g., add an investigator, increase number of subjects beyond the number stated in your application, etc.). Failure to obtain approval for changes will result in a protocol deviation.

In addition, if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the IRB for consultation.

The Board wishes you success in the pursuit of your research goals.

A status report is required on or prior to (no more than 30 days) March 27, 2020 and each year thereafter until closing of the study. The IRB will send a request.

When this study closes, submit the required Final Report found at https://wmich.edu/research/forms.

Note: All research data must be kept in a secure location on the WMU campus for at least three (3) years after the study closes.
**Principal Investigator:** Dr. Lucius Hallett  
**Student Investigator:** Esther Akoto Amoako  
**Title of Study:** Agritourism Development in Michigan: Motivations of Agritourism Consumers and Operators.

You have been invited to participate in a research project titled "Agritourism Development in Michigan: Motivations of Agritourism Consumers and Operators". This project will serve as Esther Amoako Akoto thesis requirement of Master of Science in Geography. This consent document will explain the purpose of this research project and will go over all the time commitments, the procedures used in the study, and the risks and benefits of participating in this research project. Please read this consent form carefully and completely and please ask any questions if you need more clarification.

**Study Summary**  
This project is to investigate motivations of agritourism consumers and operators in Southwest Michigan and Lansing. This proposed research would permit a detailed and comprehensive assessment of agritourism industry as a way of obtaining information about existing market condition for agritourism development and promotion within the state of Michigan. Issues relating to agritourism motivations, challenges facing businesses and socio-demographics of consumers and producers will be examined. The project includes online and mail back survey of registered agritourism operators in Michigan, self-administered questionnaire of agritourism consumers as well as interview with agritourism operators, Director of Local Growers association, Director of Pure Michigan and Director of Michigan and Agritourism Association (MATA).

The project includes field interviews at 15 agritourism attraction, the use of internet survey of at least up to 100-150 operators and face to face self-administered survey of up to 100-200 agritourism consumers. The field interview will include discussions with government officials working at Michigan Agritourism Association (MATA) and Pure Michigan as well as visits to farms as well as farmers market and roadside farm stands. The focus of these discussions will be to identify existing problems in agritourism business, understand importance of agritourism to them as individuals and the state, what can be done to improve agritourism market, understand travel patterns of consumers.

The goal of online/mail back and self-administered survey is to collect adequate sample for statistical analysis to understand their views on what brings them to agritourism attraction, their travel patterns in terms of who accompanied their travel, how often they visit the sites, how they heard about the particular attraction as well as operators’ motivations and the challenges that confronts their activities in Southwest Michigan and Lansing. Survey data will be kept confidential and no names will be used in any publication and the final work. The proposed thesis has been defended and received necessary approval from committee members in Geography department.
Survey will be conducted during summer and fall 2019 (May through to October 2019) as these are main season of the industry but the project will extend through to next year where final evaluation and defense of result will take place. Result will be presented in 2020 Association of American Geographers (AAG) meeting and hopefully to Michigan Agritourism Association as well as journal publication and publication on WMU library website.

**Future Use of Data**
After information that could identify participants has been removed, de-identified information collected for this research may be used by or distributed to investigators for other research without obtaining additional informed consent from participants.

**What are we trying to find out in this study?**
Agritourism creates opportunity for farmers to diversify their operation to remain viable in the face of unfavorable conditions arriving from crop failure, unstable commodity prices to remain viable. Also, consumers are presented with outlet of escape from urban life, opportunity to purchase fresh farm produce in a well hospitable manner as well as an avenue for non-farmers to learn about agriculture. Destination managers and promoters require accurate information about the motivations of actual and potential markets to design personalized services and products for consumers. The study wants to find out the motivations of agritourism consumers and operators in Southwest Michigan to provide information about actual and potential markets for proper targeting and segmentation.

**Who can participate in this study?**
Anyone who is 18 years old or older can participate in this study. Also, for research purposes participants must be registered agritourism business operator and consumers must be visitors who spend at least 3 hours or more at agritourism attraction where the study is been conducted.

**Where will this study take place?**
The survey will be distributed to consumers who visit agritourism attraction within Southwest Michigan and Lansing and agritourism Business operators within the study area.

**What is the time commitment for participating in this study?**
If you choose to complete the online survey designed for agritourism business operators, your time commitment will be about 10-20 minutes and about 15-25 minutes for a brief interview. For agritourism consumers your time commitment for survey questionnaire is between 10-20 minutes without any further obligations. The study will be conducted anytime between 9:00 am – 4:00 pm during summer and fall 2019.

**What will you be asked to do if you choose to participate in this study?**
This research will only involve your participation in the completion of a survey questionnaire (consumer) and brief interview (producers) which will be given online and in hard copy.
Completion of this survey should not take more than 10-20 minutes in total and not more than 15-25 minutes for the interview.

**What information is being measured during the study?**
Throughout the survey, you will be asked to select answers about motivational factors, challenges facing your business or how best agritourism can be improved, socio demographics and travel patterns.

**What are the risks of participating in this study and how will these risks be minimized?**
There are no known risks to the subjects. The only inconvenience will be the time it takes each participant to complete the survey. Findings of the study will be posted on WMU Library Website for easy access by operators and all other stakeholders.

Only aggregated data will be reported. Respondents will not be required to fill in the name field in the online survey as well as field survey. Each respondent will be assigned numeric codes (001, ...) for easy identification. There are no controversial topics incorporated in the study. It is applied and intended to identify new strategies to improve agritourism industry in Southwest Michigan and the state at large.

**What are the benefits of participating in this study?**
You will not gain any direct benefit from the study. Your responses will help us understand how to better improve services at agritourism destinations in Michigan and the best way to serve you.

**Are there any costs associated with participating in this study?**
The only cost associated with this research will be the time you spend to fill out the survey questionnaire. Other than this, there are no monetary costs for participating in this research.

**Is there any compensation for participating in this study?**
Since there will be no monetary costs associated with the participation of this study, no further compensation will be made.

**Who will have access to the information collected during this study?**
The information you include in this study will NOT be shared with anybody outside the team involved in this research and nothing will be attributed to you by name. The discoveries and knowledge from this research will be shared with you and stakeholders involved to benefit the state. We will share the results in a form of thesis so that others interested in academia and the state may learn from them. Your name or other individual identifying information will not be shared in any publications or presentations resulting from this study.
What if you want to stop participating in this study?
Your participation in this research is entirely voluntary. You can choose to stop participating in the study at any time for any reason. You will not suffer any prejudice, penalty by your decision to stop participation. There are no consequences if you stop participation in this study. The researchers can also decide to stop your participation in the study without your consent.

Should you have any question prior to or during and after the study, you can contact the principal investigator, Lucius Hallett at Lucius.Hallett@wmich.edu. You may also contact the Chair, Human Subjects Institutional Review Board at +1-269-387-8293 if questions arise during the study.
This study was approved by the Western Michigan University Institutional Review Board (WMU IRB) on (approval date).

Participating in this survey online indicates your consent for use of the answers you supply.

Informed Consent
Be assured that the information you provide will kept with strictest confidentiality and NOT be shared with anybody outside the team involved in this research and nothing will be attributed to you by name. The discoveries and knowledge from this research will be shared with you and stakeholders involved to benefit the state. We will share the results in a form of thesis so that others interested in academia and the state may learn from them.

Your participation in this survey is voluntary. You can choose to stop participating in the survey at any time for any reason and not suffer any penalty or prejudice whatsoever by your decision to stop. You will experience No consequences either academically, work-related, or personally if you choose to withdraw from this study. The investigator can also decide to stop your participation in the survey without your consent.

Should you have any question prior to or during and after the study, you can contact the principal investigator, Lucius Hallett at Lucius.Hallett@wmich.edu. You may also contact the Chair, Human Subjects Institutional Review Board at +1-269-387-8293 if questions arise during the study.

This consent document has been approved for use for one year by the Western Michigan University Institutional Review Board (WMU IRB) as indicated by the stamped date and signature of the board chair in the upper right corner. Do not participate in this study if the stamped date is older than one year.