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Maintaining a Way of Life: Trials and Tribulations of Farmers Market Families

Authors:

Megan M. Lankford¹*, Catherine W. Shoulders², Curt Rom¹, & Jennie Popp³, ¹Department of Horticulture, University of Arkansas, 316 Plant Science Building, Fayetteville, AR 72701, ²Department of Agricultural Education, Communications and Technology, University of Arkansas, 205 Agriculture Building, Fayetteville, AR 72701, ³Department of Agricultural Economics and Agribusiness, University of Arkansas, 217 Agriculture Building, Fayetteville, AR 72701

Introduction

Never before in our nation's history have there been so many ways for consumers to purchase food. From grocery stores, to super centers such as Wal-Mart and Costco, convenience stores, online purchases, community supported agriculture (CSA), and farmers markets, Americans have a multitude of venues to choose from. Although Americans purchase their groceries from national grocery stores, a growing number buy locally at their farmers markets, and from CSAs.

Direct to consumer sales increased by 8% from 2007 to 2012 (United States Department of Agriculture [USDA], 2014c). In 2012 sales of fresh produce sold directly to consumers totaled \$1.3 billion (USDA, 2014c). The number of farmers markets had also increased. In 1994 there were 1,755 farmers markets in the United States, in 2009 there were 5,274 (Clark, et al, 2010), and by 2012 there were 8,268 farmers markets (USDA, 2014d). Additionally, in 1986 there were two CSA organizations in operation in the United States. By 2005 there were 1,144 CSAs (Clark et al., 2010), and by 2012 there were 12,617 CSAs operating in the United States (USDA, 2014c). As demonstrated by these statistics local farming, local food, and direct to consumer sales have been increasing substantially.

In 2012 there were 2.1 million-farms operating in the United States (USDA, 2014b). Of those 2.1 million-farms, 72% reported sales less than \$50,000 a year, and were considered small farms (USDA, 2014b). Approximately 46% of small farms had a positive net cash income,

leaving 54% with negligible or negative net cash income (USDA, 2014b). These data demonstrate that the majority of farms in the United States are small family farms, some have negative on-farm income, and the phenomenon of local foods is growing. Given that 72% of the 2.1 million-farms were small farms selling less than \$50,000 of produce annually, it is important to study why small, local, family farms continue to farm.

In this case study of five local farm families, the researcher sought to understand their reasons for farming and selling locally, as well as their biggest challenges and rewards. In addition, the researcher sought to fill gaps in literature, begin to develop an understanding of this phenomenon, and shed light on why these farmers chose to sell at a local level. As discussed below there existed a great deal of literature expounding upon why consumers bought local, but there was little to no literature as to why farmers sold at a local level.

Purpose and Research Questions

The purpose of this study was to gain an understanding of local farm families, local food and farming systems, local and farmers' decisions to sell at a local level. This project was a case study of five local farm families and their reasons for farming, and selling locally, as well as their biggest challenges and rewards. It also explored the perceived outcomes (motivational factors) of the farmers selling at the local farmers market. This study was guided by the following research questions:

- 1. What are farmers' reasons for farming?
- 2. Why do farmers sell at a local level, rather than at a regional or national level?
- 3. What are the biggest successes and challenges of local farm sales?

Theoretical Framework

The Theory of Planned Behavior has been used to predict human behaviors. This theory asserts that human behavior is driven by people's perceptions of self-control and personal attitudes, as well as social norms and pressures (Ajzen, 1991). As displayed in Figure 1, the Theory of Planned Behavior asserts that ability (behavioral control) and motivation (intention) determine whether or not a behavior would occur. There are six constructs in the theory: attitudes, behavioral intention, subjective norms, social norms, perceived power, and perceived behavioral control (Ajzen, 1991). All six constructs influence a person's intention regarding a particular behavior and thus the actual behavior.

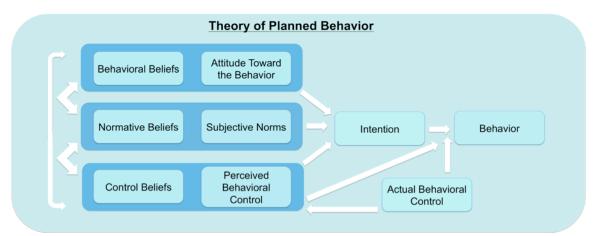


Figure 1. Theory of Planned Behavior. Adapted from Ajzen (1991).

Attitude is how a person perceives the behavior that is being examined. The person's perception as to whether the behavior is favorable or unfavorable helps to determine what the end behavior would be (Ajzen, 1991). In this study the researcher assumed the behavior of selling locally was perceived as a positive or negative.

Behavioral intentions are the factors that motivate and thus influence any given behavior. The degree to which the behavior is likely to be performed depends on the strength of the intention to perform the behavior. The behavior is more likely to be performed if the intention to perform the behavior is strong (Ajzen, 1991). This study explored the perceived outcomes (motivational factors) of selling at a farmers market. Social norms are the accepted codes of behavior in groups of people, often in a larger cultural context (Ajzen, 1991). Social norms explored in this study were the expectations of the farmers' loved ones, mentors, and culture in relation to selling at the farmers market.

Perceived power encompasses the circumstances that can deter or aid a behavior (Ajzen, 1991). In this study factors that farmers perceived as aiding or deterring their ability to sell at the farmers markets were investigated. These factors included farmers' ability to produce high quality crops for sale, as well as the possibility of additional income beyond that of off-farm income.

Perceived behavioral control is defined as whether a person perceives a behavior to be difficult or easy to perform (Ajzen, 1991). The perception of the farmer's ability to sell at the farmers market was explored in this study.

The actual behavioral controls of the farmers studied included the resources and skills that were necessary to sell at the farmers market. The intention implied in this study was that the farmer intended to sell at the farmers market. The behavior being studied was the farmer selling at the farmers market (See Figure 2). Items in white are those defining the population of interest, and those in green are the subject of examination within the study.

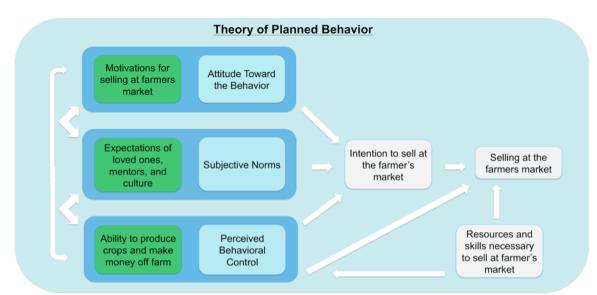


Figure 2. Theory of Planned Behavior, applied to this study.

Literature Review

According to the Congressional Research Service, in 2013 off-farm income was forecasted to account for 82% of total farm income (Schnepf, 2014). Although this was a decrease from the peak of off-farm derived income at 95% in 2002 (Schnepf, R, 2014), off-farm work still accounted for a majority of small farmers' incomes. Additionally, median household income for farmers with a gross cash farm income (GCFI) between \$10,000 and \$349,000 a year was slightly above the average household in the United States (Kassel, 2013). At that time the United States median household income was \$51,017 and the aforementioned farmers' median household income was approximately \$55,000 (Kassel, 2013).

As reported by the USDA Census of Agriculture, 45% of farms in the United States had two operators (USDA, 2014b). Of those operators 67% were female (USDA, 2014b). Of that number, 90% were the principle farm operator's spouse (USDA, 2014b). Additionally, on a majority of small farms, 59% of either the farm operators or their spouses worked off-farm (Hoppe, Korb, & MacDonald, n.d.). There are a variety of ways to define local foods; however, there is currently no official consensus on the definition. According to the *Food, Conservation, and Energy* act of 2008 and the United States Congress local food can be defined by distance: "the total distance that a product can be transported and still be considered a 'locally or regionally produced agricultural food product' *is less than 400 miles from its origin, or within the State in which it is produced*" (Clark et al., 2010, iii). Other definitions for local food include market arrangements such as direct-to-retail, direct-to-foodservice, and direct-to-consumers via farmers markets, on-farm stores, and roadside stands (Clark, et al, 2010). Local food definitions can also refer to supply chain or social aspects, such as urban gardens and farms, and family farms. Finally, local foods can be defined by the belief that local farmers use more environmentally safe practices, and that consumers support their local farmers and economy by buying local (Aussenberg, Cowen & Johnson, 2013). In this study "local foods" was defined as direct-to-consumer sales at a local farmers market.

In 2012 total agriculture sales totaled \$394.6 billion, \$1.3 billion of that was from directto-consumer sales (USDA, 2014c & 2014e). From 2007 to 2012 direct-to-consumer sales rose by 8% (USDA, 2014c). Farms with annual sales of less than \$5,000 accounted for 11% of direct-toconsumer sales (USDA, 2014e). Where as farms selling \$50,000 or more in direct-to-consumer sales accounted for 58% of total direct-to-consumer sales (USDA, 2014e).

According to a survey by Kearny reported in *Buying into the Local Food Movement* consumers had various reasons as to why they purchased locally produced food. Forty-five percent responded that they purchased local foods because those products provided a healthier alternative, and 19% said they did so to help improve their carbon footprint (Kearny, 2013). Additionally, 19% of respondents chose to purchase locally to increase organic or natural

production, 66% did so to help their local economy, and 60% purchased local produce to deliver a better and broader assortment of products (Kearny, 2013). Another survey conducted by the supermarket industry association found that consumers purchased local food for other reasons as well. Fifty-six percent of respondents purchased foods locally because the taste was better, and 83% said that it was the freshness of the produce (USDA, 2015).

In addition to individual consumer actions there was a push by foodservice establishments to purchase local foods. These establishments included restaurants, schools, and hospitals. Many of the reasons individual consumers cited for buying local carried over into the foodservice sector. These included freshness, to support local farmers/businesses, and higher quality food (Clark et al., 2010). In addition, the foodservice industry bought local produce because customers wanted it, it differentiated them from their competition, and they could acquire unique specialty items only available from local farmers that were highly valued by customers (Clark et al., 2010). According to *Local Food Systems: Concepts, Impacts, and Issues* grocery store managers and owners saw local foods as a growing trend (Clark et al., 2010). In accordance with consumers' reasons for buying local food, the managers and owners of these establishments "perceived that consumer interest derives from their preference for high-quality fresh produce, and concerns about the local economy, food safety, chemical use, and genetic engineering" (Clark et al., 2010).

Methods

To obtain the required data, five local farm families were interviewed using a structured interview. The information was obtained at a time and place convenient for each farm families. The interviews were on a one-to-one basis and an audio recording was utilized. Transcription and translation took place once the interviews were complete by using the audio recordings. The constant comparative method of data analysis was used and is discussed further below.

Data Collection

In order to collect data, the researcher initially contacted a local farmers market manager who agreed to assist in introductions to the farmers. The local farmers market had a Hmong population, thus a translator for the Hmong farmers was also contacted and assisted in translation and introductions. First contact with the five farm families (participants, see Table 1) was made at the Fayetteville Farmers Market in the spring of 2014.

Farmer	Ethnicity	Gender	Education Level
One	Hmong	Male	Bachelors degree
Two	Caucasian	Male	Masters degree
Three	Caucasian	Female	Not Applicable
Four	Caucasian	Male	Masters degree
Five	Hmong	Female	Not Applicable

Table 1. Farmers by ethnicity, gender, and level of education.

The researcher was introduced to various farmers by one of the market managers to increase the confidence of the farm families in the researcher. After introductions and a description of the project, farm families were asked if they would like to participate. Participants were chosen based on their willingness to participate. Once they agreed to participate a convenient time, date, and place for the participant was arranged. Participants were also given an informed consent form to sign, and one to keep for their own records.

As stated above interviews took place at a time, date, and location convenient for participants. This ensured that participants were comfortable and able to answer the interview questions openly and easily. Data collection took place during June and July 2014. All interviews were audio-recorded and later transcribed into a word document at the conclusion of the interviews. This ensured that the interviewer could concentrate on the interviewee, rather than attempting to type while interviewing. Four of the five interviews took place on the farmers' farm. The fifth interview took place at the farmers market per the request of the farmer.

The researcher utilized the structured interview method (Flick, 2006) in which the questions in the interview were standardized. All questions were asked in the same order to all participants, and were phrased the same. Questions utilized in a structured interview were constructed before the interview took place. Additionally, the interviewer did not interject opinions into the interview, but instead acted friendly and casual, while staying neutral (Cohen, & Crabtree, 2006). As noted, interviews were structured as one-to-one between the researcher and the farmer (Flick, 2006). Using the research method of interviewing it was assumed that "the participants' perspectives are meaningful, knowable, and able to be made explicit, and that their perspectives affect the success of the project" (Frechtling, & Frierson, 2002, 50). The researcher utilized a structured interview method using a questionnaire that had been carefully worded on concepts gleaned from the literature review (Flick, 2006; Frechtling, & Frierson, 2002). By using the structured interview method the researcher ensured that interviews were as uniform as possible in order to compare data after all interviews had been completed.

Data Analysis

The constant comparative method (Glaser, 1965) was used to analyze the data obtained in this study. Using this method allowed the researcher to analyze and code at the same time to establish concepts from the data (Kolb, 2012, 83-86). This method consisted of four steps: 1)

comparing incidents applicable to each category, 2) integrating categories 3) delimiting the theory, and 4) writing the theory (Kolb, 2012).

The researcher analyzed the interviews to develop codes and to categorize the responses, and at the same time looked for trends in the codes and answers. The researcher then integrated the categories derived from comparing and coding to further the developing theory and understanding of the data. Next, the researcher delimited the theory and analyzed the data further to write the theory. By delimiting the theory the researcher was able to determine if there were any limits to the theory. The use of the constant comparative method allowed a sound theory to materialize (Kolb, 2012).

Evaluation Criteria

To establish rigor within qualitative studies, Lincoln and Guba (1985) recommend the four components of confirmability, dependability, transferability, and credibility of the findings. Confirmability is the degree to which results can be verified. Dependability is whether or not the data is reliable and accurate. Transferability allows for the interview and data gleaned from it, to be used in other studies. Credibility is whether the data collected is honest and truthful. Both confirmability and dependability were ensured through using the structured interview method. This method ensured that all of the participants were asked the same questions. In addition, dependability and confirmability were further enhanced by using an audit trail via audio-recording and transcription of the recorded data. This allowed the researcher to compare and triangulate the data between all interviews. Data was also triangulated by the researcher and the mentor.

The structured interview also allowed transferability of the study and the findings because the established interview questions could be used for future studies. The structured

interview approach also allowed the researcher to analyze answers from various farm families to triangulate the data and create themes and concepts. In addition, the researcher was able to describe farmers and their farms. This allowed for future researchers to have a basis of understanding of farmers, their farms, and their families.

To establish credibility researchers demonstrate the ability to design the study, and accurately report findings, as well as rigorously interpret and thus represent the collected data (Lincoln & Guba, 1985). Credibility of the study was partly established by transcription of the collected data. This written transcription also allowed for transparency of the data because it allowed others to read the interviews. The transparency, along with the rigor of the structured interview, established that information gained during this study was credible and confirmable. The researcher also had prolonged engagement with the farmers. This was partly established as the researcher purchased food from this local farmers market on a regular basis, and had completed previous work at the farmers market. In addition, the researcher continued the prolonged engagement by conducting the interviews at the farmers' farms whenever possible. Credibility was further enhanced by the use of field notes and researcher observations while at the farms. This information was triangulated with the audio recordings and transcriptions. The researcher was debriefed by the mentor, thus increasing the credibility of the study. Lastly, credibility was established via member checking. Member checking allowed farmers to view the data analysis to confirm that their statements were accurately interpreted.

Participants

The Fayetteville Farmers Market consisted of over 120 vendors, and the participants were chosen from this pool based on their willingness to participate. The participants consisted of two Hmong farm families and three Caucasian-American farm families. The translator and market

manager dealt with these farmers on a regular basis; therefore the researcher depended on them to assist in making initial contact with families believed to be most likely to participate. The researcher did not discriminate between produce or protein producers, but instead utilized any farm family in the study who was willing to participate.

Bracketing:

Bracketing occurs when a researcher consciously recognizes the presence of and avoids considering preconceived notions from affecting how the participants are viewed and how this influences their answers (Newman & Tufford, 2014). The researcher in this study attempted to put aside any pre-held conceptions regarding the farm families interviewed. To ensure the findings of this study were examined objectively, the researcher understood that previous experiences might have influenced how answers to the interview questions were perceived. The researcher avoided bias by recognizing the following, and made a conscientious effort to not allow it to influence findings. The researcher came from a rural background in which family members, as well as childhood friends' families were small, rural farmers. This led to the researcher's interest in small family farms, how they continue to make ends meet, and why they farm. The researcher had also completed previous work at the Fayetteville Farmers Market and thus had previous interest in farmers who sell at this level. In addition, the researcher had an interest in local foods and has purchased produce from local farmers, as well as a co-op that sells local produce.

Findings

Data analysis brought to light 12 themes. The first theme revealed that farming was a way of life for these farmers. The farmers continued to farm because it was an identity, part of who they were. Three farmers initially began selling because they produced more food for their

families than they could consume. They farmed in Arkansas for the simple fact that they lived in Arkansas. The farmers' relationships with their customers were key reasons they sold at the local level. To help form this relationship with their customers, they grew and sold quality produce. Along with selling quality produce, they also grew and sold a variety of vegetables and fruits. Challenges included competition at the farmers market and weather conditions. Three of the farmers interviewed had bachelors or master's degrees. For all three Caucasian-American farmers interviewed, a majority of their income was from off-farm sources. Lastly, all but one of the families had at least one person working off-farm. There was no hierarchy to the findings discussed below.

Way of Life

For all of the farmers in this study, farming started at a young age and was a part of the fabric of their families. Farmer One talked about how it was part of their community, "Well in Hmong community there are a lot of people doing farming. Mostly we, we farm background, is farm farmers. In Laos and over here." For Farmer Two, a husband and wife team, the husband's journey in farming started early in life and carried over into his higher education, "I grew up on a farm and was interested in horticulture. Early, early in life and uh when I went to college um my major was in horticulture." Farmer Three, another husband and a wife team, stated, "We've always farmed. And my family owned small farm basically backyard gardening. His family is from Jonesboro, so they were into more commercial type larger farms. We've always farmed; we've always had a garden." Farmer Four's experience with farming was imprinted as a young child, "Um, you know it's it's kind of a simple but a hard question. My um family was into organic farming in California when I was a little kid." "You know when I was a real little kid."

and uh you know that was my kinda of my first memories. And um I guess it kind of imprinted on me."

Farming as a way of life continued into these farmers' adulthoods. Farmer Two moved to Arkansas after achieving a bachelor's and master's degree. Even though they took a job in a field other than horticulture, they continued farming at home, "I work in a different field so want to stay involved with horticulture and farming so we bought this land and ten years later we moved out here and started farming." Farmer Four talked about how they continued farming throughout junior high and high school:

"I was selling vegetables when I was Jr. High and high school. I carried that on ever since but I've been gardening since I was a little kid."

"And uh after we moved to Arkansas when I was four and always kept up some kind of gardening. And uh when I was really little and just carried it on and got a little bit bigger and bigger had uh, farm chickens and about an acre and a half garden when I graduated high school, and um, just ya know agriculture and food always fascinated me."

For Farmer Five (daughter spoke and translated for her mother), farming was a way of life in their home country of Laos, "gardening has been has always been a way of life over there."

Identity

For three of the five farmers in this study, farming was not only a way of life, but also an identity, and part of who they were. Farmer Four summed it up best by stating, "Well I'd say it's more of its more of a habit than anything to be honest. I mean it's, it's something that I love, and it's in it's kinda in your blood." Farmer Two's wife stated that, "it's his passion um I I enjoy the benefits of farming." She went on to say:

"I love its it was something I grew to love um I love being able to um start plants from seed and watch them get to the point of full production and the fact that we can accomplish those things."

Farmer Five stated that their parents "did miss their home and gardening has been has always been a way of life over there. So just starting it here was a great opportunity for them." Farmer Five's family's emotion of missing gardening indicated that gardening, at a scale large enough to sell at a farmers market, was a way of life for them. That without it, part of their identity was missing.

Excess Produce Motivation to Start Selling

Given that farming has been a way of life for these farmers, one might assume that they sold produce because their profession was farming. However, three of the five farmers interviewed started selling because of an excess of produce. Farmer Three stated that they started selling at the farmers market because:

"We had an excess in the first year that you know I said the boys came and we had more than we could eat, so more than we could freeze. So we did, first we started out at smaller markets. This is our only our second year at Fayetteville."

Farmer Four's scenario was akin to Farmer Three's:

"I was growing quite a bit of stuff at the time and really didn't have anywhere to go with

it. And Christopher Nolly in Tontitown was on the board at the time and suggested I apply and start selling there. So I just got in got in there and been there ever since."

Farm Two's excess was due to the fact that their children had a 4-H project called the Pullet Chain. This resulted in: "75 hens laying you know 70 plus eggs a day you have to have an outlet for it. And it was basically the the kick in the pants, big start we needed to get us to make that next step to jumping."

Farm in Arkansas

Three of the five farmers interviewed farmed in Arkansas because they lived in Arkansas. None indicated that they moved or stayed in Arkansas to farm for financial, familial or other reasons. Farmer Three stated, "I've always lived in Arkansas, all my life. We met, we got married, and been here, so we never left." For Farmer Two, the wife had grown up in Arkansas, and after getting married they decided to make their life in Arkansas, "she grew up here and when we got married we stayed here, so I guess that's how we started farming in Arkansas." Farmer One moved to Arkansas from a more metropolitan area. Although they did not initially farm when they moved here, after a time they decided to utilize the land around their home for farming:

"already here, we have some land, like um around my house, it's more convenience. That's why. Um, and other state where we lived, we lived in a large city, so we do not have any large lot that we could do farming."

Relationship With Customers

All farmers interviewed in this study found the relationship they formed with their customers as rewarding. Farmer One stated that:

"And that's the biggest reward to me. I feel like instead of taking money, we also going to different direction now. We know each other and have a better relationship with some of the people and that, that helps out for me." For Farmer Two it was the same, "the relationships we have with our customers. Um and the fact that um that one of the reasons we have that relationships is because were being successful at growing quality products." Farmer Two then expanded upon the theme of building relationships with customers when they stated:

"You know um and it makes it uh it's it's there's there something about knowing your farmer and knowing your customer, each other and seeing that you don't get that in the supermarket. To know who's behind that you fixed, who was successful at getting that and what goes into all of that."

Farmer Five enjoyed the bonding experience with their customers, "the biggest rewards we get are probably um bonding, like we have a bond with our customers."

Additionally, the farmers got to know their customers on a personal basis and know them as more than just customers. This helped build trust and relationships that have lasted for years. In regards to this Farmer Three stated:

"You know you know talking to people, exchanging recipes, and and you know that sort of thing knowing that something we grew is going to someone we maybe not know extremely well, but you know do well and sometimes on a first name basis. We've had customers that we've had for years. We have one customer we've had for 3 years, she buys a quart of honey, now it's up to four quarts of honey every month."

Farmer Four talked about how trust and face-to-face interaction built the relationship local farmers had with their customers:

"You know one of the one of the things that I can see that that uh, about selling local and direct is that you get to interact with the customer. And I think and build relationships with individual customers. And I think that's real important because it uh builds trust

that normally wouldn't be there because you really on a larger scale, you don't know who your customer is."

The relationships that farmers made with their customers also assisted them in business deals, or helping their families with their futures. Farmer One talked about several examples where this was true:

"for example I have customer come in and um ask me to list their properties with me. At the same time we have customer come in and knows us and trusts us and uh they help in in um in, my daughters and sons education that they can be like a counselor, this is what you gotta do if you want to get into this and they kinda help point out that uh direction to my daughters for nursing programs. That's what I like to do. It's the relationships that's always there you know, at the local level. You know you know your customer and its no longer become a customer, it becomes a friend or friends you know."

Quality Produce

Four of the five farmers said that having fresh, quality produce was an important part of selling at a local level. It was something that their customers wanted, and that the farmers wanted to provide for them. Farmer Four summed it up well when they stated:

"The external qualities, the internal qualities of you know texture, flavor, usability, shelf life and all that, is what brings people back. Uh and if people know that you're selling quality, uh especially the repeat customers, uh, it that really, really reduces the amount of promotion and advertising you have to do."

Farmer Three stated that they provided, "the best possible and freshest produce that we can."

Farmer Four talked mostly about the freshness of the product, and its importance to the customer:

"She says that the food that we pick is more fresh, is it's just is tastes so much better than other produce that's at Wal-Mart or Harps or something or regionally. And it's a lot more fresh, you know. Consumers don't want something that is traveled through trucks or you know by cars or anything."

In the instance of selling local, several farmers indicated telling the truth to their customers helped to bridge any gaps there may have been between the customers and the farmers. Related to trust and quality produce Farmer One stated that, "I think that's the biggest thing we do, we can do to help. Honesty and bring top quality produce to market." While Farmer Four stated:

"Um being able to tell and engaging the customers and telling them the truth. Having superior uh excellent products. Uh you know one of the things I try to do is not only you know, the looks of the product a lot of times sell it."

Variety of Crops

All of the farmers in this study stated that they grew a variety of crops. This was due in part to the fact that they felt they faced competition at the farmers markets where they sold their produce (see section below regarding competition). Some farms grew mostly vegetables, while other grew a variety of vegetables, fruits, and protein products. Yet, even those who grew mostly vegetables grew a variety of them.

Farmer One grew, "everything from um asparagus, okra, zucchini squash, cucumber, um, strawberry, potato, tomatoes, you know everything. Mixed lettuce, everything that we can." Farm Three sold a variety of vegetables, but also included honey products, "tomatoes, broccoli, corn, cabbage, yeah the 23 hives of honeybees, flowers, cauliflower, broccoli, lettuce, kale, arugula, (incoherent) squash, lots of squash, cucumbers." Farm Five grew many of the things that Farms One and Three sold as well:

"we grow a lot we grow tomatoes, cucumbers, uh uh we grow cabbages, cauliflower, broccoli, just a lot of foods. Um and they come at different seasons according to the weather and the months when we planted. Garlic we also grow lets see, Brussels sprouts, cucumbers squash, zucchini."

Whereas Farm Four sold vegetables, they also incorporated fruits into their product line:

"I've got fruit trees, got apple trees, grape vines, and some plum trees. Um really trying to bare on strawberries, work on strawberries, and maybe even expanding that. Um, and other ground that I plan to do tomatoes, peppers, uh watermelons, cantaloupes, that's kinda, and some lettuce, some Brassica crops like broccoli and cauliflower."

Farm Two was also investing more in fruit, while still retaining a wide variety of vegetables and protein products, "beginning of it, we have 65 acres. Um we now have sheep, uh chicken, sheep and pigs and uh a garden. With, with a variety of uh vegetables and we're, we're leaning more towards fruit."

Farm Five spoke about having a different variety of crops than some of the other vendors. As they came from another culture, and thus their diet and vegetable choices available while growing up were different than Americans. Therefore, they offered a wider array of vegetables than other vendors. When speaking about this Farm Five stated:

"we grow like a wide range of vegetables. Um some that some that some that that we eat ourselves, like in our culture and um, which is really weird for you know other consumers who don't know about it. But they end up liking it and it gives them a variety of foods." They expounded upon this further:

"for instance we have um our Asian cucumbers it it has a different taste from the regular pickling cucumbers you know. Um also like the taste that that the taste the texture and stuff, is different. Same thing with spinach. We have a summer spinach and um like I don't know, the regular spinach."

Competition

Three of the five farmers interviewed cited competition with other farmers at the farmers markets. This is one reason they grow and sell a variety of products. As Farmer One stated, "at the farmers market at Fayetteville, there's a lot of competition so you have to have a lot of different varieties of produce to be there." Farmer Three articulated that other farmers had advantages that made competition ever more stringent:

"I think it's the competition. A lot of the uh, especially the Hmong farmers have grants for greenhouses which puts them a little bit earlier. And that seems to be, if you've got something's first you've got the majority of that market on that product."

Additionally, according to Farmer Four, competition hindered sales, "you know on certain products, again competition at certain times of the year. Like tomatoes, a lot of times, everybody has tomatoes at the same time and it's hard to move tomatoes." "And knowing that none of us are probably going to sell, we're gonna we're only going to sell a percentage of what we have produced and brought." Competition such as this has caused Farmer One to feel discouraged at times:

"Well, we have too much competition. Too much competition and it's too the point that we say well it's too much, I can't do anymore. You know. And then you feel like you want to give up, not want to do it anymore. Uh we have lots vendors, and too much competition and like I said, you may produce a lot of this produce, and bring there."

<u>Weather</u>

Weather was a challenge that three of the five farmers in this study stated they faced. Put succinctly by Farmer Four, when asked what the biggest challenge in farming was they replied, "The weather." Farmer One explained that, "when you have very good plan, but if the weather is not cooperative, then you are lost a lot of, you lose a lot of your crops." Farmer Three expanded upon this further:

"Arkansas has such has such temperamental weather that each year is different. Um there was one year we planted our tomatoes the second week of March, and it's a good thing we did because come April 1st to September the 15th, on a farm there was not a drop of rain. So we got one early batch of tomatoes and that was it. The next year it snowed the 6th of May, so you know it's just you never know."

College Educated

Three of the five farmers in this study obtained college degrees. Some acquired a bachelor's degree, while others a bachelor's and a master's degree. Farmer One and his wife, who also farmed with him, both obtained bachelor's degrees. His wife obtained a master's degree, "my wife she's a graduate in education. She's got a master's degree in education. She's a teacher. I've got a bachelor's degree in social service as well." Farmer Four obtained both a bachelor's and a master's degree as well, "went to College of the Ozarks and majored in Ag econ and animal science minor. And finished there and went to the university and got a masters in poultry uh nutrition and research." Farmer Two also obtained both levels of degrees, "went to

college um my major was in horticulture. Um then when I went to graduate school in Washington State."

Caucasian Americans: Income from Off-farm

All three of the Caucasian-American families interviewed stated that a majority of their income came from off-farm. When asked whether the majority of their income came from farming or from other sources, the male from Farm Two stated, "Other sources." While his spouse replied, "From his job." When asked the same question, Farmer Four replied, "Majority is off-farm, of the profit, I mean." Farmer Three gave the most detailed response to this question by stating, "it it turns a profit on what we put into it, but it's not enough to beat them or, you know (incoherent), we've got car payments and things like that."

<u>Off-farm Work</u>

Three of the five farmers and spouses worked off-farm in fields not related to horticulture. Both Farmer One and the spouse worked off-farm, "My wife she's a teacher at school, Gentry school district. I myself, um I'm a real estate real estate broker." In Farm Family Two, the husband worked off-farm, while the wife was a stay at home mother who home schooled their children and worked on the farm, "we home school so there here on the farm everyday." Farmer Two put it simply when he said, "I work in a different field." Farmer Four was unique in that he worked in horticulture off-farm, "work as a horticulture technician at the University of Arkansas. And um and my wife works as a waitress."

Conclusions

One of the primary questions for this study was why small, local farmers farm and sell at the local level. For all of the farmers in this study, farming was a way of life and something that has been a part of their lives since childhood. This study also explored the motivational factors of

farmers selling at the local farmers market. Motivational factors to begin selling included farmers having excess produce. Motivational factors to continue selling were the relationships the farmers had built with their customers. Additionally, this study focused on farmers' biggest challenges and rewards. Their biggest challenges were competition and the weather. Their biggest rewards were the relationships they built with their customers.

All of the farmers in this study grew up farming, gardening, or had early and prolonged experiences with family that imprinted on them. These experiences formed an affinity for farming, an activity in which these farmers could not only participate in, but enjoy. For three of the farmers indicated it was part of who they were. As Farmer Four stated, "it's kinda in your blood."

The farmers' biggest challenges in farming were weather and competition at the market. Some farmers depended on the rain for irrigation, thus if it did not rain, crops did not get irrigated. Additionally, some lost crops to various weather events. As Farmer One stated, "when you have very good plan, but if the weather is not cooperative, then you are lost a lot of, you lose a lot of your crops." Three of the five farmers cited competition as a challenge they faced. Although all of the farmers grew and sold a variety of produce, much of the produce from booth to booth was exactly the same or very similar.

A farmer's motivation for three of the five farmers for initially selling at the farmers market was an excess of produce. They had either eaten or preserved all that was possible, and needed another outlet for the produce. Motivational factors to continue to sell at the farmers market, included relationships they had built with their customers.

The farmers' relationship with customers was one of the farmers' rewards for selling at local farmers market. Getting to know their customers as more than customers, even as friends,

was something that was rewarding. Beyond the monetary transactions that took place between farmers and customers, there was a bond, a type of friendship that formed. These relationships built into opportunities; for example, when a customer offered to counsel one of the farmer's children in regards to college. The same farmer was also a real estate broker, and has assisted customers from the farmers market with real estate contracts.

In specific regards to the Theory of Planned Behavior (see Figure 3), the farmers' attitude as to whether the behavior being performed was favorable or unfavorable was explored. Farmers perceived selling at the farmers market as both favorable and unfavorable. They perceived that the relationship with customers was favorable, and a motivation to sell at the farmers market. However, three perceived competition as unfavorable, and a hindrance to overall sales at the farmers market.

The behavioral intentions explored were the perceived outcomes (motivational factors) of selling at a farmers market. Three farmers stated that their initial motivation for selling at the farmers market was an excess of food they had grown for their families. Additionally, all farmers were motivated to continue to sell at the farmers market because of the relationship they had with their customers.

The social norms explored in this study were the expectations of the farmers' loved ones, mentors, and culture in relation to selling at the farmers market. The researcher did not find any social norms or expectations that influenced farmers to sell at the farmers market. However, it was found that the social norm of blemish free, high quality produce influenced four farmers to ensure they were able to provide this to customers. Additionally, it was found that the culture of the Hmong community encouraged them to farm.

Perceived power, circumstances that could aid or deter a behavior occurring, was explored in this study. It was found that three farmers perceived providing quality produce as aiding in their ability to sell at the farmers market. The circumstances that could potentially deter farmers from selling at the farmers market were competition.

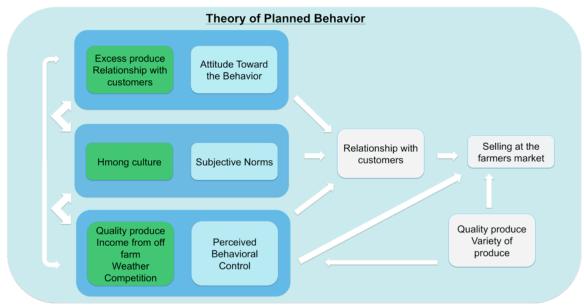


Figure 3. Theory of Planned Behavior, applied to findings.

Recommendations

The researcher suggests that farmers find technologies to assist in mitigating damage that can be inflicted on produce from adverse weather events. Additionally, farmers should find ways to mitigate competition. The researcher also recommends further studies be done at the local, regional, and national level. Information gleaned from these studies should then be utilized in public awareness campaigns or marketing campaigns to increase the sale of local produce.

Although the weather cannot be controlled, there are steps that farmers can take to mitigate damage to their produce from both short and long-term weather events. Hoop houses and high tunnels can be utilized to protect crops from extreme temperatures, reduce disease pressure by preventing splash from rain on soil, extend farming season in both the spring and

fall, and even reduce hail damage. Farmers can utilize close spacing of plants, living mulch (such as straw), and drip irrigation to keep moisture in the soil, even in times of drought. When a well is not present on the farm, farmers should do a cost benefit analysis of installing one. This could allow farmers to irrigate during periods of drought, without a high water bill.

Competition was identified by three farmers as being a challenge while selling at the farmers market. Therefore the researcher suggests that farmers research ways to mitigate competition. Independent research, formal education, and communication with extension agents can provide farmers with appropriate strategies to address this factor.

The researcher suggests that additional studies be completed, not only locally, but in other areas of the United States as well. A larger scale implementation may determine if the themes hold true throughout the small farmer population. The interview could potentially be an Internet questionnaire in which farmers could input the information. The information received from farmers could then be compiled and used in public awareness and marketing campaigns to increase sales of local produce. This could be accomplished via a public marketing campaign to encourage consumers to get to know their farmers on a more personal basis by reading their stories.

If future interviews are completed in person, the researcher suggests touring the farm first, and conducting the interview second. This would allow the interviewee to become more comfortable with the interviewer and the process. It may also remind farmers about practices they use, what they grow, and the farm in general. The researcher believes that had this process been followed for the interviews in this study that answers given would have been more robust.

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