

A Southwest Virginia Perspective of Beginning Farmers' Needs for Adult
Agricultural Education: A Focus Group Approach

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In

Education

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Chapter 1

Introduction

Problem Statement

Beginning farmers are a very diverse population of people that play an important role in communities across the United States. Today's beginning farmers are perhaps best understood as tomorrow's sustainable producers by way of contributing to much need food production, viable economic development, and community well-being. Without beginning farmers to take the place of those farmers exiting or retiring, communities nationwide could see a decline in agriculture production, farmland preservation, and local economic opportunities.

A beginning farmer striving to become a successful producer is likely to encounter numerous challenges in which they must overcome. Helping these new and beginning agriculturalists is a central focus for several adult agriculture education organizations. In its many forms, adult agriculture education provides information to help local farmers become successful by meeting expressed needs and overcoming the challenges they face. In Floyd County, Virginia, there several of these organizations available to the public such as: Virginia Cooperative Extension, Virginia Young Farmers, Farm Bureau Young Farmers, and the Virginia Association of Biological Farmers. However, if you look at the members of these organizations you will not see many beginning farmers. With the importance of beginning farmers to the future of agriculture and food systems, what are these organizations currently doing to help ensure their success in getting established?

Objectives of the Study

The purpose of this study was to identify the needs and challenges of beginning farmers in an effort to increase the impact of adult agricultural education groups in Floyd County, Virginia. The specific objectives of the study include the following aims

- Identify the needs of Floyd, Virginia, beginning farmers.
- Identify educational barriers faced by these beginning farmers when searching for information, resources, and technical assistance.
- Disseminate findings to the local adult agricultural education organizations for enhanced program development and outreach.

Literature Review

Agriculture has played an important role in every human's life, from hunting and gathering to the cultivation of crops. Early in the history of agriculture the number of people farming was increasing to ensure that their families were fed. "The ability to produce more than needed for home consumption, allowed some people to leave the land – to become neither hunters, gatherers, nor farmers – and to barter with farmers to meet their needs for food and fiber. Those who left the farms became medicine men, warriors, blacksmiths, storekeepers, dentists, schoolteachers, entertainers, etc – they did the things that farm families were least able to do for themselves" (Ikerd, 2000, p.1). This brought about a slow decline in the number of people starting farms. The only other times where the numbers of farmers were increasing was during times of social and economic crisis. Ikerd (2001) stated that these crises range from famine to the Great Depression.

Worldwide, agriculture is one of the most important industries because it impacts every fabric of our lives. As developing countries continue to improve their citizens' standards of living and they become more connected with the rest of the world the need for a safe source of food increases. "Historically, societies survive and nations prosper based, in part, on their ability to feed themselves" (Weller & Richwine, 2001, preface).

The majority of the world's imports and exports are agriculturally related, whether it is food for third-world countries or fiber for the making of different products. One reality that must be faced is that agriculture is an industry that everyone in the world is dependent upon for their very existence. Not only is agriculture understood by many to be 'big business', it's an industry that the world must take seriously in order to sustain community, human, and biophysical health.. This is what gives farmers around the world one of the most important jobs imaginable—producing enough good food and fiber so that the citizens of the world can thrive.

North Americans have specific ties to agriculture and farming. According to Hoag, (1999), "Americans have a rich agricultural history, with deep roots and strong traditions" (p. 1). As it gets harder to make a living as a farmer those traditions slowly fade away as the number of farmers continues to decrease. "Agriculture today in the United States is a booming industry despite apparent problems in the system (Lyson, 2004). In fact it is the nation's largest industry, accounting roughly for 20 percent of the nation's Gross National Product (GNP) (Murphy, 1992, p.3). Agriculture plays a large role in America because the majority of the land in the United States is devoted to the industry. "In 2002, land used for agricultural purposes—cropland; grassland pasture and range; forest land grazed; and land in farmsteads, farm roads, and lanes—totaled nearly 1.2 billion acres, just under 52 percent of the total U.S. land area"(Lubowski, Vesterby, Bucholz, Baez, & Roberts, 2002, p.1). The direct contributions made to the economy

are minimal compared to the indirect contributions. Agriculture impacts the economy in “an indirect way, farm business activity ripples through the rest of the economy, multiplying the direct impact on jobs and income. Firms that do business with farmers, such as input suppliers and marketing firms, also hire more laborers and create new income” (Hoag, 1999, p. 17). In today’s economy providing someone with a steady job and income can be life changing for someone, as well as stimulating to the local economy.

In the United States, as well as the rest of the world, surviving as a farmer is a daily challenge that keeps on changing. This is a significant change socially and economically because most of the residents in the United States do not have any ties to farming (Lyson, 2004). Agriculture has changed from the aspect of can ‘I produce enough to feed my family and my neighbors’ to ‘will I be able to pay for all of my expenses?’. Today farmers have to be knowledgeable business managers, employers, mechanics, marketing specialists, production managers, etc. Besides producing your crops or livestock the farmer must be able to successfully market their product to ensure a profit. As a new or beginning farmer this can be difficult and could produce a problem to their ability to be successful as a farmer and force them out of the industry. The vitality of the agriculture industry depends on the farmer being a successful business manager and much more.

In Virginia agriculture plays a huge role in the economy. “The total economic impact of agriculture and forestry-related industries in Virginia was almost \$79 billion in total industry output in 2006” (Rephann, 2008, p.1). The employment of agricultural workers exceeded 10% of the total state employment during the same year. With every new job created within the agricultural industry has a strong impact within the state economy by stimulating more jobs.

The commonwealth of Virginia is built upon the industry of agriculture, and if any part of that industry is lost it will be felt throughout the state.

The reason that agriculture is so deeply rooted in Virginia is because most of the state's land is used for an agriculture related enterprise. "Nearly 21 million acres, or 82 percent, of the commonwealth's total land area is forest, cropland, or pasture and range" (Raphann, 2008, p.3). With so much land steeped in agriculture their influence is felt throughout the commonwealth's economy. The biggest effect that can be seen as Raphann (2008) stated is in the manufacturing industry, which directly affect agriculture, forestry, fishing, and hunting industries. Indirectly, the effects stimulate private and public services through purchases. The effect of agriculture can be seen throughout the commonwealth's economy. This link between many of the different industries within Virginia that agriculture has created adds more value to the economy. Many of the agriculturally linked industries would not exist in the state in their current form without a strong base of agriculture and forest based materials. With such impacts that the industry has upon the commonwealth's economy, it's our responsibility as agriculturalists to see that it continues to do so.

Agriculture in Floyd County, Virginia plays a large role in the economy. As the Census of Agriculture, (2007), states, Floyd has 864 farms in 2007 this is a four percent increase from 2002. Also, Floyd generated over \$43 million dollars in agriculture products sold, ranking 15th in the state of Virginia out of 98 counties, (2007). The census goes on to state that the average age of the principle operator of the farm is 59.1 years of age, which is higher than the state average of 58.2 years of age, (2007). With this increase in the number of farms, and the increased age of the principle operators there is a need for beginning farmers in Floyd County.

One concern that continues to become a larger issue is the lack of young people entering into farming. As in Floyd County, we see a national increase in the ages of established farmers coupled by a decrease in the number of entering farmers. “The average age of principal farm operators in 2007 was 57 years, compared with an average of 50 years in 1978. A decline in the number of young farmers and an increase in the number of aging farmers seem to be pushing this age trend. In fact, more than a quarter of all U.S. farmers in 2007 were 65 years or older” (Ahearn & Newton, 2009, p. 17). According to recent census data, therefore, there needs to be an increasing number of beginning farmers needed to replace those who are exiting farming. As the majority of the nation’s farmers are nearing retirement, beginning farmers will have to take their place to ensure that the current agricultural production continues. Tauer’s (1995) study of age and farmer productivity shows that farmer productivity generally increases and then decreases with age. This study shows that if a majority of the current farmers are replaced with beginning farmers, the overall production level will decrease to the lower level of agricultural knowledge of the beginning farmer. It would be advantageous to the agricultural industry if the transition to the beginning farmers be a gradual, so the effect of lower production will not be an overwhelming problem to the industry. This result shows that there is a need to be able to pass on the agricultural knowledge from generation to generation. Without this passage of knowledge beginning farmers will have a hard time being productive and profitable. So having educational organizations that help with this dilemma of transferring this learned agricultural knowledge will in turn positively impact the entire agriculture industry, and the communities that rely upon them.

There are several organizations that focus on helping agriculturalists. Some organizations focus on grooming young students into becoming better agriculturalists as they

mature into adulthood. The National FFA Organization and 4-H youth development through Cooperative Extension are a couple of such organizations. While clearly important to the discussion, this study focuses on adult agriculture education. There are many different groups that help educate adult agriculturalists. These groups range from Farm Bureau Young Farmers, Young Farmers of Virginia, Virginia Cooperative Extension, and the Virginia Association of Biological Farming.

Adult education groups provide services that can be seen throughout the community's agricultural industry they serve. According to Weller and Richwine, (2001), adult education in agricultural programs provides individual and group instruction designed to assist their local community. Specifically, in topic areas of production, agribusiness, and communicating with the consumers and agricultural community regarding concerns and issues. By having an adult agriculture education organization that beginning farmers can utilize will also lessen the negative impact of lower production by allowing them access to agriculture information needed by them that they might not be able to get access without the organization. By educating the citizens of the community, the adult organizations also meet societal goals by bettering the community and boosting the local economy. The positive impacts that adult agricultural education organizations have on the community can be seen in every part of the community.

The reasons for starting adult education are varied, as well as the reasons for adults participating in the programs. The purpose for these adult agricultural education programs is to focus on a few general goals. According to Weller and Richwine, (2001), these goals include the needs and goals of individuals, the needs and goals of the organization, and the needs and goals of community. More specifically, "it is the mission of the Young Farmer program to provide the opportunity for agriculturalists to enter the industry, as well as to upgrade the skills needed to be

leaders in their chosen occupation” (Gill & Annan, 1996, p. 14). The reason most people join such organizations is the want to further education themselves. The focus of this study is to explore the challenges that keep adult beginning farmers from utilizing this resource that can positively impact their agriculture enterprise.

Adult agricultural education programs for beginning famers frequently focus on developing the skills of the participants to increase their agriculture production and business management skills (Ahearn & Newton, 2009). Programming also helps local agriculturalists stay current on many different issues and industry standards that they need to know to carry out their agriculture enterprise. There are many ways that this is accomplished; some of the ways include having informal learning groups, organizational meetings, farm tours, workshops, short courses, online resources, and one-on-one consultancy and training, (Niewolny & Lillard, 2010). As agriculture and food systems continue to transform the way farmers grow, market, and distribute food, it is imperative that agriculturalists pursue an avenue of higher education to stay up to date. It’s these reasons that “education for beginning farmers has become critical in recent years” (Trede & Whitaker, 1998, p.1).

Adult education groups also have several benefits, one which is benefiting the local community. By having the community in mind as you plan these programs is to have “participating members becoming leaders in their community, state, and nation” (Gill & Annan, 1996, p. 14). Besides educating the adults, these groups volunteer for several events that introduce elementary school kids to agriculture so that they have some understanding of where their food comes from. They also provide support for local FFA chapters and 4-H clubs in the form of coaches for contests, college scholarships, and etc.

Another way adult education benefits the community is by strengthening the local economy. With localities raising taxes to offset budget shortfalls, they must be able to increase the amount of money the local economy can bring in. Adult education can help make this possible. Research data has “indicated a return to the local economy of \$9.00 for each \$1.00 invested in adult agriculture programs” (Weller & Richwine, 2001, p. 101). These organizations can also help improve the profitability of the beginning farmers. Other such studies have shown that as much as \$3.00 can be returned to the local farmer for every dollar invested in such adult agricultural education programs. With improving the economic efficiency, this will in turn create less expensive agricultural products. These are several reasons that beginning farmers need to have access and utilize adult agriculture education organizations.

This research study was designed to identify the needs and the barriers faced when beginning farmers are searching for information. One reason is that the beginning farmers are not aware of the adult agriculture education organization due to the lack of information of the organization present in the community. Another reason is that they beginning farmers are aware of the organization, and have chosen not to join due to personal constraints. The other plausible reason is that the number of beginning farmers starting in Floyd County is declining leading to a smaller number of younger members. Another reason for this is that the farmers might not feel connected to the organization for social reasons. Then with that information I will put together a plan that could be used to counteract the problems that are present that keep beginning farmers from utilizing this valuable resource.

Methodology

This research study was developed using a qualitative design. This means that data for this study was gained using qualitative methods such as focus group and individual interviews. The reason that a focus group and individual interview were used was to get a deeper discussion of the needs and barriers that each participant faced. The focus group also allowed the participants to see the needs and problems of others and offer different aspects of the same problems they face. The inquiry strategies that were used started with a demographic questionnaire. This was used when contact was made with possible participants over the phone. This questionnaire was used to help find out about their agricultural enterprise and location to setup a location for the focus group.

For this qualitative study a grounded theory approach of inquiry was employed. Grounded theory involves multiple stages of data collection, and means “that the researcher attempts to derive a general, abstract theory of a process, action, or interaction grounded in the views of the participants in a study” (Creswell, 2003, p.14). With this approach a coding system is used when disseminating the data to identify themes and patterns. With the coded data and identified themes, the researcher can start to evaluate the differences between different variables within the study. This allows the researcher to build a theoretical framework from the data collected.

The data that were gathered sequentially starting with a demographic survey, which was broken into the following themes: types of agriculture enterprise, average age, gender, average experience, and agriculture organization experience. This was then followed by a qualitative focus group and individual interviews, where the data were analyzed using the following main themes: financial, farm production, and adult agriculture education organizations. These coded

categories were further broken down into more specific categories. The data analysis and coding process was based on the literature of Johnson & Christensen (2004). The integration of the data took place after each phase of the study, and then the entire analysis was interpreted at the end of the collection phase.

Subject/Participants

The following criterion was used in selecting subjects for this research study. The subjects that I used for this study was between the ages of 18 and 35 years of age. They all were actively engaged in an agricultural enterprise for less than 10 years within Floyd County. The reason for this range is because it is the definition used by the USDA to describe beginning farmers. There are no constraints due to gender, type or size of agricultural enterprise.

The process that I utilized to find participants for this research study was as follows. During the first two weeks of my research I asked the current members of the Floyd County Young Farmers to nominate people that fit the criteria stated above that are not current members of the Floyd County Young Farmers organization. I also contacted two other local organizations, the Farm Bureau Young Farmers and the Virginia Cooperative Extension Agency in search of other individuals that fit the cited criteria that would be willing to participate in this research study. I also contacted the Virginia Association for Biological Farming (VABF) in search for more participants. I continued the search until at least 25 people have been nominated, all names will remain confidential.

Once approximately 25 people have been nominated, I started contacting each nominee. During this initial phone call with the nominees, I discussed the purpose of the study and ask for

their participation in it. The nominees that agree to participate in this research study completed the demographic survey over the phone.

Materials

The demographics questionnaire used in this study was prepared by the researcher, to suit the specific needs of this research study. It was used to assess the participants' current agricultural enterprises and locality. Each survey was coded so that the participants name will not be on the questionnaire.

Demographics & Farm Background.

Participants were asked to indicate their age, gender, and their locality. They were also asked to indicate the following about their farms: the type of agriculture enterprise, how many years of experience they have, and part-time or full-time.

For the second part of the study, during the 3rd week, I conducted a focus group with those participants interested in joining an adult agricultural education organization. There was an incentive for those who wish to participate in the focus group, a meal provided by the researcher. The focus group discussion lasted for approximately one hour. Having a focus group also ensured every one there can voice their opinions on the different questions I asked, and that they were not taken away from their daily routines to long. From the demographic questionnaire a central location was determined to hold the focus group. During the focus group I asked some follow-up questions that come from the gathered data of the questionnaire. The questions revolved around the following areas:

Adult Agricultural Education Groups. The participants were asked if they have participated in any adult agricultural education groups in or out of Floyd County, and what they were. I also inquired if they have ever heard of the Virginia Young Farmers before this study? Then they are asked if they are aware of the local chapter in Floyd County. If they answered yes, they were asked how they came to know about the organization. Then they are asked if they wish to become a member of the organization.

Educational Service Needs. The participants are asked to indicate their primary reason for searching for further agricultural education. Then I inquired about the areas in which they would like the organization to address if they join.

Educational Service Barriers. The participants are asked to indicate their primary reason for not seeking further agricultural education. They are then asked if they had time and the resources would they join. Then at the end I asked if they can be contacted for a follow-up interview if further questions arise.

I also asked for other ideas of why young beginning farmers are not taking advantage of the organization. The participants were also asked for ideas for attracting the next generation of beginning farmers that start in Floyd County into joining the Young Farmers organization so that they will have a support group for when trouble arises. They were instructed to contact me if they wish to discuss any of the matters further or come up with new information they felt would be pertinent to this research study.

The third part of this research study, during week 4, is when I conducted individual interviews. These interviews mostly consisted of those participants who wished not to join the Floyd County Young Farmers organization. Several interviews were with those participants that

wished to join the organization, but could not participate in the focus group discussion, or those who contacted me to further discuss the topics from the focus group.

Limitations

There were several limitations that I faced with this study. One of the limitations faced was in contacting participants for this study. This ranged from not being able to get their correct contact information to messages not being returned. The other limitation was with the number of participants that showed up for the focus group. The goal was for 15 to 20 participants for the focus group. I confirmed 16 participants, but only had 9 actually show up for the focus group further limiting the amount of data that could be collected.

To combat these limitations in the future I would like to get a variety of different contacts for each individual such as: home phone, cell phone, and email address. This will increase the likelihood of getting in contact with possible participants. Also, being able to offer a bigger incentive for participation in the focus group might lead to further participation.

Chapter 2

Article Manuscript for Journal of Extension

A Southwest Virginia Perspective of Beginning Farmers' Needs for Adult Agricultural Education: A Focus Group Approach

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Introduction

Farming as a career can be lucrative as well as satisfying once your farm is established, but getting to that point can be a struggle. This is the reason that the need for adult agriculture organizations is important for beginning farmers. Organizations like the Virginia Cooperative Extension and other local organizations such as the Virginia Young Farmers, Farm Bureau Young Farmers, and the Virginia Association of Biological Farming all can play a role in the educating of beginning farmers.

Beginning farmers can face many obstacles when starting or transitioning into farming. Better understanding the challenges and barriers faced by beginning farmers when they are searching for adult agriculture education is essential for the design of appropriate programs by these adult agricultural organizations. If these organizations can help beginning farmers overcome these barriers and gain access to the information needed they will have a large impact in the farmer's success.

Gamon (1992) describes the use of focus groups in helping in identifying needs and constraints that can be missed by other forms of assessment. For the adult agriculture education groups the population of beginning farmer would be considered potential clientele. The best way to help the beginning farmers in a locale is to ask them, and thus the reason the focus group method was used within this study. With the use of focus groups the adult agriculture education groups can re-direct their programs to better benefit beginning farmers.

This study was based in Floyd County, Virginia, in hopes of improving the ability of these organizations to help beginning farmers in the county. Floyd County is a rural community with a diverse agriculture background. The county consists of rolling hills, open pastures, mixed forests and a few breathtaking drop-offs along mountain back roads. The main roads and secondary roads in Floyd are primarily paved hardtop but most all connecting roads throughout the county are dirt/gravel. Floyd is a county of time and weather worn mountains connected by acres of forests, grazing lands and crop fields. A drive down most roadways will reveal many agriculture operations ranging from raising Christmas trees, raising livestock, and growing crops. "With its split rail fences, deep valleys, accessible ridges and small streams, Floyd County contains all that comprise the image of the Blue Ridge Mountains" (Ratner 2011).

Objectives of Study

The purpose of this study was to identify the needs and challenges of beginning farmers in an effort to increase the impact of adult agricultural education groups in Floyd County, Virginia.

The specific objectives of the study include the following aims

- Identify the needs of Floyd, Virginia, beginning farmers.
- Identify educational barriers faced by these beginning farmers when searching for information, resources, and technical assistance.
- Disseminate findings to the local adult agricultural education organizations for enhanced program development and outreach.

Literature Review

Worldwide, agriculture is one of the most important industries because it impacts every fabric of our lives. As developing countries continue to improve their citizens' standards of living and they become more connected with the rest of the world, the need for a safe source of food increases. Weller and Richwine (2001) state that, historically, societies survive and nations prosper based, in part, on their ability to feed themselves.

In the United States, as well as the rest of the world, surviving as a farmer is a daily challenge that keeps on changing. North Americans have specific ties to agriculture and farming.

According to Hoag, (1999), "Americans have a rich agricultural history, with deep roots and strong traditions." (p. 1) As it gets harder to make a living as a farmer those agricultural traditions of the past slowly fade away as the number of farmers continues to decrease. This is

the main reason it is hard for farmers to make a living because the amount of people producing crops is decreasing while the number of people to feed keeps increasing. Agriculture has changed from the aspect of can 'I produce enough to feed my family and my neighbors' to 'will I be able to pay for all of my expenses?'. Today farmers have to be knowledgeable business managers, employers, mechanics, marketing specialists, production managers, etc. Besides producing your crops or livestock the farmer must be able to successfully market their product to ensure a profit. As a new or beginning farmer this can be difficult and could produce a problem to their ability to be successful as a farmer and force them out of the industry. The vitality of the agriculture industry depends on the farmer being a successful business manager and much more.

In Virginia, agriculture plays a huge role in the economy. Rephann (2008) reported that the total economic impact of agriculture and forestry-related industries in Virginia was almost \$79 billion in total industry output in 2006. The employment of agricultural workers exceeded 10% of the total state employment during the same year. With every new job created within the agricultural industry has a strong impact within the state economy by stimulating more jobs. The commonwealth of Virginia is built upon the industry of agriculture, and if any part of that industry is lost it will be felt throughout the state.

The reason that agriculture is so deeply rooted in Virginia is because most of the state's land is used for an agriculture related enterprise. Rephann (2008) reported that nearly 21 million acres, or 82 percent, of the commonwealth's total land area is forest, cropland, or pasture and range. With so much land steeped in agriculture their influence is felt throughout the commonwealth's economy.

Agriculture in Floyd County, Virginia plays a large role in the economy. As the Census of Agriculture (2007) states, Floyd has 864 farms in 2007 this is a four percent increase from 2002. Also, Floyd generated over \$43 million dollars in agriculture products sold, ranking 15th in the state of Virginia out of 98 counties (2007). The census goes on to state that the average age of the principle operator of the farm is 59.1 years of age, which is higher than the state average of 58.2 years of age (2007). With this increase in the number of farms, and the increased age of the principle operators there is a need for beginning farmers in Floyd County.

One concern that continues to become a larger issue is the lack of young people entering the farming industry. As in Floyd County, we see a national increase in the ages of established farmers coupled by a decrease in the number of entering farmers. Ahearn and Newton (2009) reported that the average age of principal farm operators in 2007 was 57 years, compared with an average of 50 years in 1978. According to recent census data, therefore, there needs to be an increasing number of beginning farmers needed to replace those who are exiting farming. As the majority of the nation's farmers are nearing retirement, beginning farmers will have to take their place to ensure that the current agricultural production continues. Tauer's, (1995), study of age and farmer productivity shows that farmer productivity generally increases and then decreases with age. This study shows that if a majority of the current farmers are replaced with beginning farmers, the overall production level will decrease to the lower level of agricultural knowledge of the beginning farmer. It would be advantageous to the agricultural industry if the transition to the beginning farmers was gradual, so the effect of lower production will not be an overwhelming problem to the industry. This result shows that there is a need to be able to pass on the agricultural knowledge from generation to generation. Without this passage of knowledge beginning farmers will have a hard time being productive and profitable. So having educational

organizations that help with this dilemma of transferring this learned agricultural knowledge will in turn positively impact the entire agriculture industry and the communities that rely upon them.

Having adult agriculture education organizations that beginning farmers can utilize will also lessen the negative impact of lower production, by allowing beginning farmers access to agriculture information needed by them that they might not be able to get access without the organization. By educating the citizens of the community, the adult organizations also meet societal goals by bettering the community and boosting the local economy. The positive impacts that adult agricultural education organizations have on the community can be seen in every part of the community.

The reasons for starting adult agriculture education organizations are varied, as well as the reasons for adults participating in the programs. The purpose for these adult agricultural education programs is to focus on a few general goals. These goals include the needs and goals of individuals, the needs and goals of the organization, and the needs and goals of community. Adult agricultural education programs most frequently focus on developing the skills of the participants to increase their agriculture production efficiency. These adult programs help local agriculturalists stay current on many different issues and industry standards that they need to know to carry out their agriculture enterprise. As more technological advances are made it is imperative that agriculturalists pursue an avenue of higher education to stay up to date. Trede and Whitaker (1998) said it's these reasons that education for beginning farmers has become critical in recent years. Niewolny and Lillard (2010) state that specific programs for beginning farmers are needed to maintain the viability of new farms, and the economic, social, and environmental fabric of which they are a part of.

Methods

This study was designed to identify the needs of beginning farmers and the barriers that they face when looking for adult agriculture education. Data were collected through a focus group of beginning farmers. The participants of this study were nominated by members of the Floyd County chapter of the Virginia Young Farmers, local Farm Bureau Young Farmers, and local extension agents. The following criterion was used in selecting subjects for this research study. The subjects were between the ages of 18 and 35 years of age. They also have had to be actively engaged in an agricultural enterprise for less than 10 years within Floyd County. The reason for this range is because it is the definition used by the USDA to describe beginning farmers. There were no limitations based on gender or type or size of agriculture enterprise.

The people nominated were then contacted and completed a demographic survey. The survey included questions about age, gender, hometown, type of agriculture enterprises they have, and their use of adult agriculture education organizations. They were also asked to participate in a focus group to help identify their needs and the challenges they faced when seeking information.

The focus group discussion questions utilized were aimed to identify several aspects of a beginning farmer's struggles to gain further adult agriculture education. The first section of questions asked were utilized to identify their reasons and needs for searching for further adult agriculture education. The second section of questions identified the challenges and barriers they faced with trying to locate the information they desired. The final section of questions asked were used to see what adult agriculture education groups they had utilized or would like to learn more about, and specifically asked if they had used the local chapter of the Virginia Young Farmers Organization. The purpose of asking about this specific organization is because it is the

largest adult agriculture education organization in the county besides the local extension organization. The aim was to see which one is being utilized more.

The method utilized to analyze the data gathered is data entry and storage. This is shown by recording the focus group discussion and individual interviews then transcribing the data into a word processing document. Inductive coding was used when analyzing the data, which means I came up with the categories while analyzing the data. The following were the categories that the data were broken into: (Table 1)

Table 1

Coding Categories used for Data Organization and Analysis

<u>Coding Category</u>	<u>Topics with category</u>
Agriculture Business	<ul style="list-style-type: none"> • Getting financial help • Land purchasing • Available markets • Business expenses
Farm Production Concerns	<ul style="list-style-type: none"> • Livestock issues • Land issues • Facilities and Equipment issues
Adult Agriculture Education Organizations and Outreach	<ul style="list-style-type: none"> • Reasons for searching • Barriers faced • Ideas for improvement

Findings

Demographic Survey Findings

With the demographic survey the following data was found about the beginning farmers of Floyd County, Virginia. Out of the 22 people who completed the survey 9 were livestock producers, 6 were produced food and fiber, 4 primarily raised grains and forages, and 3 raised nursery stock. The range of the experience of the beginning farmers was two to eight years, with an average of five years of experience. The gender of beginning farmers had the following breakdown 16 were male and 6 were female. The following is how the beginning farmers own perception of how they see themselves as an agricultural producer, 14 thought themselves as a full-time and 8 as part-time producers. Eight participants said they had taken part in at least one activity of an adult agriculture education organization. Out of those eight that participated with an adult agriculture education organization said that they would continue to use them when it was beneficial.

Focus Group Findings

There were 49 people nominated for this study out of those 11 people had moved out of county, 22 people refused to participate in the focus group, and 16 people confirmed that they would participate in the focus group. The desired number of participants for the focus group was 15-20 people, but only had 9 present at the focus group. The number was less than desired, but with the diverse background of the 9 participants still provided great insight into the needs and challenges of beginning farmers.

The participants of the focus group ranged from owner/operator, farm workers wanting to start their own farm, and, transitioning farmers. The average age of the participants was 23 years old. The focus group had 5 male and 4 female participants. The farming backgrounds ranged from

dairy production, beef production, equine production, field crops, vegetable crops, and small animal production. Only 5 out of the 9 present considered themselves a full-time farmer.

The first question was used to identify their primary reason for searching for further adult agricultural education. Most of the reasons stated by the participants had a common theme of being able to stay up to date and informed to be able to keep a productive farm that would continue to make money. The following answers help form the themes seen in this study.

“I want to be an agriculture educator, so I want to be well informed so that I can educate the public and advocate for the industry.”

“To better my farm knowledge so that I can have the best working farm so that I can make more money.”

“To become a better farmer so that my farm becomes more efficient.”

“To be able to overcome the problems that I face while farming.”

Perceived Needs

The needs of beginning farmers in Floyd County, Virginia, are mostly in the business side of the farming operation. This can also be seen in the study conducted by Trede and Whitaker (1998) *Beginning Farmer Education in Iowa: Implications to Extension*. The following were the educational needs mentioned at the focus group in Virginia:

- Agriculture business
 - Starting farms and transitioning farms
 - Purchasing land: how to know it's suitable for farming
 - Farm grants and conservation easements

- Agriculture tourism: how to make the farm people friendly
- What markets are available in the area
- Feed futures and stock market
- Hiring employees
- Farm Production Concerns
 - Where to buy supplies/equipment
 - Fertilizers
 - Pesticides
 - Doctoring livestock
- Adult Agriculture Education Organization and Outreach
 - Understanding farm technology
 - Online access to information
 - What organizations are available

Many participants were concerned about where their money was being spent and if it were actually being beneficial to their agricultural enterprises. The other themes that became evident were how to diversify their farm and be more environmentally friendly. Many of the participants were concerned about how the public would perceive their farm and wanted to help advocate for the industry by having a well run farm.

Perceived Barriers

Although beginning farmers have many needs, they also face many barriers when trying to address these needs through adult agriculture education organizations. The barriers that were mentioned during the focus group ranged from economical to personal. The largest barrier faced

was trying to find an organization to utilize to address their needs and getting in contact with them. Upon further investigation the only adult agricultural education organization that has contact information available in the local phone book is the local extension office. This is the main reason that the majority of the resource people utilized by the participants were family members with prior experience. This is also seen in a study by Nelson & Trede (2004) where the top two resources used by beginning farmers were local extension personnel, parents, sibling, and relatives.

The next barrier stated by the participants was not having enough time to be part of the adult agriculture education organizations. Several of the participants have families to support, which takes up most of their time after working with their agricultural enterprises. One participant stated that “after taking their children to t-ball, violin lessons, gymnastics, and church doesn’t leave much time to do anything else.” Other participants are currently enrolled in college pursuing agricultural degrees or have a second job.

This leads to the next problem that many faced when finding or utilizing the organization, money. This can be seen through a study conducted by Ahearn (2011) that stated that beginning farmers are more likely to not have any positive value of production. Several participants stated that “after their family expenses they could not afford to get help or could not afford to fix it once they figured out the problem.” One participant went on to say “if we can’t afford that how are we going to be able to pay dues to become part of these organizations that want to help us.”

The last barrier stated by the participants was that when they were able to find the information that they needed for their agricultural enterprises was it used technical jargon and was too complicated that they could not understand. Others stated when they got help from other farmers

they could not understand the farmer's lingo, which still left them searching for information. One suggestion made by several participants was to have the organizations "organize materials online for easy access." Most participants have access to the internet, and said this would benefit them when they couldn't participate in programs or meetings.

Conclusions

From the use of a focus group comprised of beginning farmers in Floyd County, Virginia, has shown a light on the needs and challenges they face as they struggle to develop and improve their agricultural enterprises. As a result several different conclusions can be made from this study that can have a positive impact on the education of beginning farmers within Floyd County, Virginia.

Through this study, it was seen that the beginning farmers of Floyd County have a high need for further education, with an emphasis on gaining access to knowledge about business and financial management. With such a high demand for this information the adult agriculture education organizations must address these topics by providing educational programs, electronic resources, etc.

The beginning farmers also face many different barriers when searching for an adult agricultural education organization to utilize, which makes the farmers find a balance between quality of life and farm ownership. The adult agricultural education organizations need to include various ways to overcome these barriers within their community outreach program to ensure they can reach as many beginning farmers as they can.

Another conclusion that can be made is that beginning farmers would like more resources online. This would be beneficial to those beginning farmers that don't have enough time to participate in educational programs and meetings.

Implications for Practice

From this study, several implications can be made for adult agriculture education organizations regarding the delivery of beginning farmer education in Floyd County, Virginia.

1. The adult agricultural education organizations need to reevaluate their community outreach program so that they can introduce more beginning farmers to their organizations.
2. The adult agriculture education organizations need to collaborate with each other to ensure the largest impact possible for beginning farmers. This will also help with creating an online resource for beginning farmers by providing information from all adult agricultural education organizations within a locale.
3. Resources need to be in a variety of forms (brochure, video, email) that can be accessed from the World Wide Web.
4. The resources from these organizations need to be organized, yet simple to access and understand.
5. Participants stated they would like more hands-on problem-solving learning opportunities for practical experience. This is similar to conclusions of Jones (1992) regarding program planning and delivery.

6. Participants stressed topics in the business area of farming such as: purchasing land, hiring employees, and farm grants. These topics need to be addressed by the adult agriculture education organizations.
7. These organizations need to find ways to help pay the organizational dues for beginning farmers to help get them the help they need to be successful. One suggestion is that if the organizations have any investments, put a percentage of its return towards helping pay membership dues.

Further Research Needs

1. Further research is needed in this area to ascertain further challenges that beginning farmers face in rural communities.
2. Research is needed to see what technology can be useful to adult agricultural education programs in providing resources to beginning farmers.

This research displays a large demand for adult agriculture education organizations to help education beginning farmers in Floyd County, Virginia. Working with beginning farmers presents a challenge to these organizations in terms of helping the beginning farmers overcome the various barriers they face when searching for agriculture related information.

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Abstract

New and beginning farmers have many needs and face several barriers when searching for information from adult agriculture education organizations. Better understanding the needs and barriers faced by beginning farmers when they are searching for adult agriculture education is essential for the design of appropriate programs by these adult agricultural organizations. A focus group of rural beginning farmers was used to better understand these needs and challenges. These farmers preferred hands-on learning opportunities, and topics related to the business side of farming.

Keywords

beginning farmer needs, rural, beginning farmer education, adult agriculture education, focus group

Chapter 3

Conclusions

From the use of a focus group comprised of beginning farmers in Floyd County, Virginia, has shown a light on the needs and challenges they face as they struggle to develop and improve their agricultural enterprises. As a result several different conclusions can be made from this study that can have a positive impact on the education of beginning farmers within Floyd County, Virginia.

Through this study, it was seen that the beginning farmers of Floyd County have a high need for further education, with an emphasis on gaining access to knowledge about business and financial management. With such a high demand for this information the adult agriculture education organizations must address these topics by providing educational programs, electronic resources, etc. This will help the organizations impact with beginning farmers' success rates, and increase their membership numbers.

The beginning farmers also face many different barriers when searching for an adult agricultural education organization to utilize, which makes the farmers find a balance between quality of life and farm ownership. The adult agricultural education organizations need to include various ways to overcome these barriers within their community outreach program to ensure they can reach as many beginning farmers as they can.

The different adult agricultural education organizations have a great opportunity to impact the success of the beginning farmers present in Floyd County. With an increase in the home gardener and production agriculturalists presents a great need and opportunity for these

adult agriculture education organizations to have a positive impact on beginning farmers as well as their local economy. This is evident by the majority of this study's participants not having utilized any of the organizations mentioned in the demographics survey. This left them wondering more about these organizations and how they could benefit from them. As one of the participants stated "I would join the organization if I could see that it would benefit me!"

Through this focus group it was seen that many beginning farmers do not know about the adult agricultural education groups because of the lack of organizational information present in the community. This was seen when most participants within the study stated "they had no prior knowledge of these organization before this study." This leads to the next conclusion made in this study, which is that the organizations need to reevaluate their community outreach program. These organizations need to find an avenue that's affective for Floyd County to be able to advertise the various programs and their benefits to all farmers of the county especially the beginning farmers. This lack of preparation on the behalf of the organizations hasn't benefited anyone. All of the participants of this study stated they only knew of any the fore mentioned organizations by word of mouth. One participant said they "vaguely remember their high school agriculture teacher talking about them in class." Only a couple stated they learned of the Floyd County Young Farmers through an advertisement for their farm show. Without having a system setup to get information about adult agriculture education opportunities only increases the struggle of these organizations have on trying to create a positive impact on beginning farmers.

In an effort to combat the issue of having the adult agriculture education organizations advertise their programs might shed light on a greater problem, organization. Without having a well organized and run program success can be limited, as can be seen through this focus group participants not knowing or participating in the organizations present in the county. This brought

up a concern the participants had about how the organizations were run, specifically the local Young Farmers chapter. They liked the idea that the organization was run by the local farmers, but if beginning farmers don't have enough time to participate in the organization do the other local farmers have adequate time to properly run the organization. The participants understood the need for credible sources to learn from, but proposed putting some in charge that undertook the responsibility of organizing and coordinating the activities so that it could be more successful in impacting the future of beginning farmers.

The adult agriculture education organizations also need to put their resources into different forms so that they can be access anytime. As time was a factor in the participation of beginning farmers in not getting to all the programs provided. The adult agricultural education organizations need to be able to get this information to the beginning farmers. One suggestion was to "put the resources on the internet so everyone could access and utilize the information that was presented in the various programs." Most of the participants looked at the internet as a valuable resource for the newer generation as a means of transmission of this information. The participants said "since students must take computer courses in high school, most beginning farmers will be more apt to look to the internet first for their answers." This would be beneficial to those beginning farmers that don't have enough time to participate in educational programs and meetings.

For the success of beginning farmers there are many needs and challenges that have to be met by both farmer and adult agricultural education organization alike. If these organizations can address these needs and help lessen the burden of the challenges the beginning farmers face, the impact they can have on beginning farmers' success can be great.

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