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THEME OVERVIEW: INNOVATIONS TO SUPPORT BEGINNING FARMERS AND RANCHERS

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JEL Classifications: Q12, Q16

Keywords: Beginning Farmers, Extension Models, Farmer Demographics

Across the United States, agricultural producers are responding to increased interest in the “Know your Farmer, Know your Food” concept promoted by the USDA, as well as growing market demand for local foods. At the same time, USDA and industry leadership have a growing concern about the aging farmer and rancher population, and wonder who will be the future food producers in this country. Subsequently, an unprecedented transition in farm enterprises and land use is occurring as the U.S. farm population continues to age, and in some regions, there is evidence of a “shift” from the conventional system of passing down operations within the same family or to farms with similar production plans with an emerging generation of beginning farmers who are at least two generations from an agricultural family background.

All these trends led to a small proliferation in programs targeted at beginning farmers and ranchers, a fact that gave rise to this theme set of articles that shares some of the trends, programs and projects that demonstrate how the government, academic and nongovernmental organizations (NGOs) communities are responding to this population. In her article, Ahearn delves deeper into how beginning farmers vary from the broader population, in terms of demographics, financial resources and performance. Some of the differences seem to deviate from conventional wisdom.

More customer-focused marketing channels often require a modified approach to production planning and implementation that begins with changing the farm business structure and modes of production to meet food demand according to the marketing outlets used to reach consumers. While some producers are transitioning to new production and marketing practices, other producers are entering agriculture only to find that there are few technical assistance offerings or, for that matter, limited or non-existent management and decision tools oriented toward production and marketing planning for smaller-scale, diversified operations. In their article, Sureshwaran and Ritchie highlight some of the new resources and programs available to bridge some of the gap between needs and resources for beginning farmers. This overview also helps to frame the commonality between the final two articles, new USDA Beginning Farmer and Rancher Development Program (BFRDP) grants that are funding outreach and technical assistance programs.

In Fiscal Year (FY) 2009, BFRDP funded 29 projects to train, educate, and provide outreach and technical assistance to beginning farmers. Twenty-five of these projects are standard projects that address the needs of beginning farmers and ranchers through new and established local and regional training, education, outreach, and technical assistance initiatives that enhance self-employment in farming, ranching, and forestry opportunities. At the request of stakeholders, these projects are very outcomes oriented and there is already evidence that the initial set of 2009 grantees are increasing the knowledge base of beginning farmers while strengthening networks and communities to improve peer support.

It is also important to note that the outcomes are commonly saving new farmers from negative outcomes, with a notable share of participants reporting that what they learned led them to exit from farming and thereby helping them to avoid investment losses in time and capital. Finally, these programs are helping Extension and community professionals to reach a fairly diverse set of project participants.

The changing attitudes toward food and farming has seemingly affected the types of strategies that beginning farmers are using to gain momentum. The articles by Zimmer and Wilcox, and Meyer and his co-authors, describe three such projects from Missouri, Kentucky and Colorado. These articles focus on the types of tools, educational models and content needed in new Extension programs targeted at bridging the experience gap for agricultural producers who are new to the agricultural sector.

For More Information

Start2Farm.gov. (2011). Available at: <http://Start2Farm.gov>.

USDA Beginning Farmer and Rancher Development Program. (2011). Available at: <http://www.nifa.usda.gov/funding/bfrdp/bfrdp.html>

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2nd Quarter 2011 | 26(2)

POTENTIAL CHALLENGES FOR BEGINNING FARMERS AND RANCHERS

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JEL Classifications: Q12, Q14, Q18, R12

Keywords: Beginning Farmer and Rancher, Farm Finances, Access to Farmland, Government Farm Programs, Off-farm Income, Age of Farm Operator

There are many preconceived notions of beginning farmers. The main reason for the diversity of views is because they are a very diverse population—in many ways more diverse than the established farmer population. So, one's characterization of beginning farmers depends on where the blind man has touched the elephant. There is also diversity in views because data are not frequently and widely available to characterize the population. Moreover, there may be complex relationships at work, not easily verified, about the importance of the beginning farmer population to larger issues, such as national food security. It is worth considering what can be quantified.

Box 1

Reasons for Limited and Inconsistent Data on the Beginning Farmer Population

- Agricultural data collection efforts usually focus on farm production issues, not human capital issues
- U.S. household data collection efforts do not have statistically reliable information for the farm population, let alone any subpopulation, such as beginning farmers
- Differences between the USDA program definition and Census of Agriculture wording, such as, the number of years spent farming the current farm operation (Census) versus years spent operating any farm (USDA program eligibility)
- Differences in USDA program and Farm Credit Administration definitions of eligibility, such as, all farm operators versus just one operator must have 10 years or less of experience farming

What distinguishes a beginning farm from an established farm? The only clear distinction is simply experience operating a farm. Beginning farms, by USDA definition, are those operated by individuals with 10 years or less experience operating farms. About 20% of the 2.1 million U.S. farms are classified as beginning farms, based on the USDA definition. As with any young business, beginning farms are more likely to have a smaller median farm size than established farms, but both beginning and established farms come in a wide distribution of sizes. Similarly, there are beginning farms that specialize in production of the full variety of U.S. agricultural commodities and market those goods, and in some cases services, in a variety of ways. Demographically, beginning farmers are in all age ranges, racial and ethnic groups, and both male and female.

One common view of beginning farmers is that they are young, well-educated individuals, operating smaller farms with a positive value of farm production, perhaps with access to farmland through relatives. However, because most beginning farmers are not young (that is, under 35 years old), do not have a college education, nor have access to farmland through their relatives, and more than one-quarter have zero value of farm production, less than 1% of all beginning principal operators meet the common view as described above.

So, who are the approximately 21% of farms classified as beginning farms? As shown in Table 1, compared to established farmers, principal operators of beginning farms are indeed more likely than established farmers to be young, college-educated, women, and to be ethnically and racially diverse. However, the majority of beginning

Table 1**Characteristics of Family Farms, by Experience Level, 2009**

Item	Experience Level		
	Established farm	Beginning farm	All
Number of family farms	1,699,250	431,757	2,131,007
Percent of family farms	80%	20%	100%
Percent of total value of production	90%	10%	100%
Percent of group with zero value of production	23%	30%	24%
Average farm size (operated acres)	447	153	388
Age distribution of principal operator			
Less than 35 years old	1%	14%	4%
35-54 years old	28%	53%	33%
55-64 years old	35%	22%	32%
65 years old or more	35%	10%	30%
Educational distribution of principal operator			
Less than high school	8%	8%	8%
High school and some college	69%	64%	68%
4-year college degree or more	22%	29%	23%
Percent of principal operators male	90%	83%	88%
Percent of principal operators nonHispanic/White	89%	87%	88%
Percent of principal operators with nonfarm major occupation	37%	66%	43%
Regional distribution			
Northeast	7%	7%	7%
Midwest	38%	31%	37%
South	41%	47%	43%
West	14%	16%	14%
Percent of group receiving any direct payments	41%	24%	37%
Average government payment (payment farms)	\$11,793	\$7,302	\$11,205
Percent of group receiving conservation payments	19%	11%	18%
Average conservation payment (payment farms)	\$2,838	\$2,231	\$2,758
Percent of group receiving commodity payments	30%	16%	27%
Average commodity payment (payment farms)	\$8,956	\$5,070	\$8,447
Farm income, average	\$10,716	-\$8,283	\$6,866
Off-farm income, average	\$66,757	\$84,253	\$70,302
Total income, average	\$77,473	\$75,969	\$77,169
Total income, median	\$50,775	\$60,045	\$52,235
Net worth, mean	\$997,326	\$591,086	\$915,019
Net worth, median	\$599,913	\$366,638	\$541,544

Source: 2009 USDA Agricultural Resource Management Survey.

principal operators (77%) are nonHispanic white males with a median educational level of high school and a median age range of 35-54.

Beginning farms have a somewhat different farm production profile than established farms, too. They are more likely to not have any positive value of production; for example, in a recent year (2009) 30% of beginning farms did not have any positive value of production. It is commonly recognized that most production is concentrated on large farms—50% of product comes from only 1.5% of the largest farms—and that a large share of farms are small, about 60% have sales under \$10,000. Less well understood is that, not only are there a large number with small sales, but approximately one-quarter of all farms and 23% (in 2009) of established farms have no value of production in a given year. This is true for a variety of reasons, including production failures, or newly planted crops, such as fruit and nut trees that have not yet matured. However, the majority of farms without production likely did not intend to have production because they are largely small farms whose operator earns significant off-farm income and/or who is elderly. When they do have a positive value of production, beginning farms are more likely to specialize in livestock specialties and less likely to specialize in cash grains and oilseeds, compared to established farms. The value of production from beginning farms is evenly split between crop and livestock, whereas the value of production of established farms is 58% crops and 42% livestock.

Potential Challenges

Getting started in most businesses requires start-up capital. Like other businesses, farming requires a variety of factors of production, such as management, labor, financial resources, and physical resources. The USDA and Land Grant system provides a wide array of planning resources to assist beginning farmers in establishing and managing their farms and there are also several nonprofit organizations that feature useful tools and links. The resources available highlight two important and related challenges faced by beginning farmers—(1) having the market opportunity to buy or rent suitable land and (2) having capital to acquire land of a large enough scale to be profitable. Given the importance of government –provided support to many farms, lack of qualification for access to the resources of these programs, especially direct payment programs, is a challenge for beginning farms.

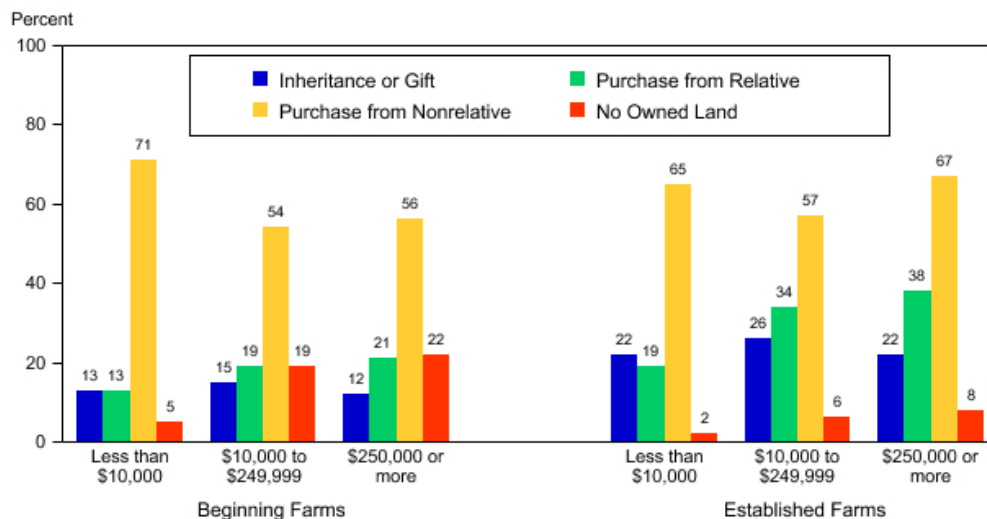
Access to Land

The fact is that most farmers, whether beginning or established and regardless of farm size, are more likely to acquire land by purchasing it from a nonrelative than

by any other means. Therefore, trends in the farmland market are critical to entry opportunities and the cost of farmland helps explain why beginning farmers are more likely to not own any land than established farmers. The latest USDA estimate of the price of farmland in the United States was \$2,140 per acre as of January 1, 2010, but land values vary considerably by location to markets and population concentrations and agricultural productive capacity. For example, farmland in Illinois, in the heart of the productive Midwest, averaged \$4,820 in 2010, compared to \$779 in Montana which has large concentrations of rangeland. And, farmland in a densely populated state like New Jersey with significant development pressures was \$13,300 per acre. California, the number one agricultural producing state in the United States with regions of highly productive soil and significant development pressure, had per-acre agriculture real estate value of \$9,130.

The earning capacity of farmland is also tied to whether or not it has an agricultural “base” for farm payment purposes. Due to the historical program eligibility conditions, land used for cash grains, soybean, cotton, and rice are more likely to have an agricultural base than other types of farmland uses, such as vegetables, fruits, nuts, and livestock. Owning farmland with a base encourages established farmers to continue farming. The enhanced earning capacity of farmland with a base likely helps explain why beginning farmers are less likely to specialize in cash grains and oilseeds and compete for access to these acres. In addition, the farmland retirement program, the Conservation Reserve Program (CRP), encourages established farmers—many with a history of cash grain production—with an interest in retiring from farming to place their land in the CRP, rather than exiting farming and selling or renting their land to other producers.

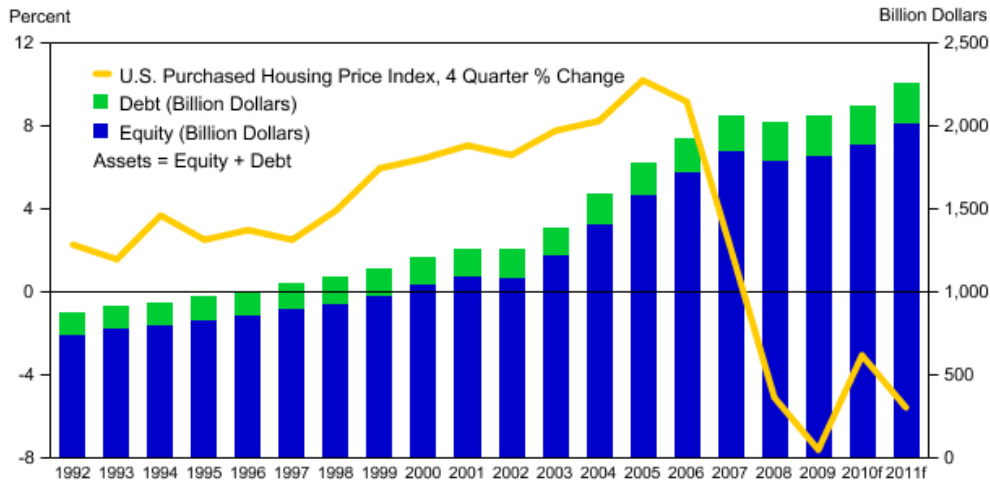
Figure 1: Sources of Land Acquisition for Beginning and Established Farms by Farm Size, 2009



Source: Economic Research Service, USDA.

Aside from the slight decline in 2008, farm assets, comprised mainly of farmland, have been strong during the recent recession which began in December 2007. This is in contrast to other sectors of the economy, for example, like residential housing. The strong asset values are consistent with the high returns the farm sector has experienced during the period, fueled by a variety of factors including the demand for biofuels and growth in U.S. agricultural exports. So, owners of farmland, especially during the last decade, have seen a strong increase in their wealth. While the strong returns and farmland values are good news for established farmers that own land, for beginning farmers the recent economic conditions have meant that not only is farmland relatively expensive, but it is often difficult to find any land on the market, as farmland owners are less willing to sell due to their often less than attractive investment alternatives. If a farm family was expecting to enter farming by selling an urban residence and purchasing a rural farmstead, they are likely to be challenged by a significant decrease in their home equity since 2007.

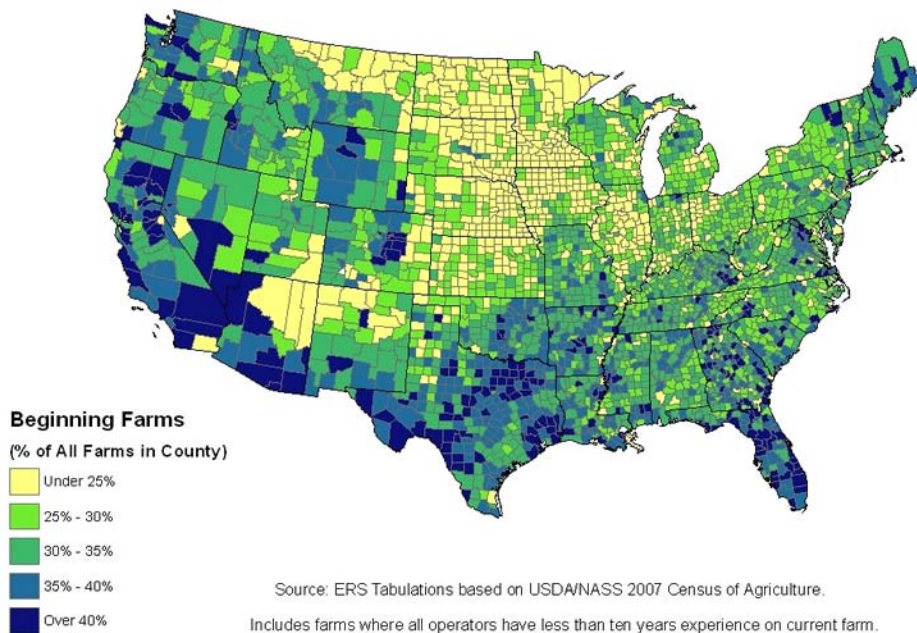
Figure 2: Farm Sector Assets, Debt, and Equity and U.S. Housing Price Index, 1992–2011F



Sources: ERS and Federal Housing Finance Agency.

At the same time that farmland values have increased, economies of size are well-established in farming. Not only should a beginning farmer expect to have low returns in the start-up phase, but even established farms must be of a significant size before they are likely to earn positive returns. For example, in recent years, with size measured by the gross value of production classes, it is not until farms were in the range of \$25,000 to \$30,000 in production did the majority of farms have positive net cash returns, after depreciation. Keep in mind that this measure of returns did not account for the opportunity cost of owned factors of production, like labor, management, land, and equity. And the average farm asset base for farms of \$25,000 to \$30,000 value of production in 2009 was \$840,000, with 84% in land and buildings.

Figure 3: Share of Farms in a County that are Beginning Farms, 2007



Another insight into the financial resources required to be successful in farming, is to consider the characteristics of only beginning farms that earned positive net cash return from farming, after depreciation. In 2009, 22% of beginning farms earned a positive return after depreciation. That successful beginning farmer subpopulation earned on average \$38,775 from farming, had a household off-farm income of \$71,059, and a farm asset base of \$607,000. The off-farm job not only provides the household with resources to cover farm and living expenses, but often times health insurance. The reliance on off-farm income is likely a factor in explaining the relatively small share of beginning farms in some sparsely populated areas of the country, like the Great Plains.

In spite of these daunting financial requirements, the fact is that the number of farms increased between the 2002 and the 2007 Censuses of Agriculture with most of the increase in small farms. Many of the small farms reported entering farming in recent years and had relatively younger ages than most other farm sizes, although some were established farms and elderly. One of the factors explaining the increase in small farms is the increase in demand for farms largely as a place of residence. Small farms may lose money from their farming operation, but those net returns do not account for the in-kind income that comes from having a farm residence.

Generally, small farms, as with all sizes of farms, report their farm residence-associated expenses along with their farm business income. Farm residence expenses reported as part of business expenses are tax deductible in the calculation of taxable farm income. Farm residences are also often afforded other tax advantages, like reduced local property taxes from preferential farm rates and farm income losses that can result in reduced household income taxes than what would otherwise be owed on household off-farm income. The dual role of the farmstead as the farm residence helps explain why more than three-quarters of beginning farmers in 2009 did not earn a positive return from farming.

Access to Government Programs

Several types of USDA and Farm Credit System (FCS) programs foster greater participation of beginning farmers, by requiring program benefits set asides or higher payment rates for beginning farmers. However, beginning farmers are less likely than established farms to benefit from USDA's farm safety net which includes a combination of direct and countercyclical payments, as well as other programs like subsidized crop insurance and conservation programs. For example, according to 2009 survey data, 24% of beginning farms compared to 41% of established farms participated in direct payment programs. Their lower participation relates to the difficulty in acquiring farmland with an agricultural base and the portfolio of production activities in which beginning farmers are engaged. Not only are beginning farmers less likely to participate in direct payment programs, but when they do, they generally receive smaller payments. This is largely a function of the smaller acreage they operate since the benefits of most programs are tied to farm size and/or past production levels. In 2009, the average government payment to a participating established farm was \$11,793, compared to \$7,302 for beginning farms.

The bulk of conservation program funding is directed toward the Conservation Reserve Program which generally attracts established, elderly land owners since it provides a payment to eligible land owners for maintaining land in a conserving use, rather than for commodity production. Other conservation programs include the Wetlands Reserve Program, Environmental Quality Incentive and Conservation Security Programs. In 2009, the conservation program participation rates for beginning and established farms were 11% and 19%, respectively. For those beginning farms that did participate, their average payment of \$2,231 was 20% below the average for established participating farms.

For commodity programs, 17% of beginning farms participated in 2009, compared to 30% of established farms. Commodity payments are generally greater than conservation payments, and the average commodity payment of participating beginning farm was more than 40% below the average payment to an established farm. In contrast, a larger share of beginning farmers receive USDA loans, compared to established farmers. For example, in 2009, 36% of USDA's direct and guaranteed loan funds and 43% of the loans were to beginning farmers. In 2009, 20% of FCS's loan funds were to beginning farmers. However, more beginning and established farmers get government payments than government sponsored loans.

Significance of Beginning Farmer Population

It is reasonable to ask, why do we care about beginning farms? Aren't the markets working? Or, perhaps we should be concerned that the markets are distorted through government programs which favor current farmland owners, such as through direct payment programs and tax policies—such as estate tax policies and IRS Section 1031 land exchanges? Agriculture is still a textbook case of a competitive market on the supply side. What is the downside to the country if there is a decrease in beginning farmers? There are no easy answers to these questions. Based on

policies, programs, and statements, various policy makers have revealed that they believe it matters to the country's national security and rural areas how many beginning farmers there are and how well they are prospering. Concerns are often expressed by referring to the advancing age structure of established farmers. Currently, 30% of principal operators of farms are 65 years old or more. The most recent Farm Bill, 2008, extended programs for beginning farmers that were first introduced with the 1992 legislation. In 1992, the focus was on loans. In 2008, special provisions for beginning farmers were included in 8 titles, including loans, commodity payments, conservation payments, and training programs as policy makers strive to develop the "right" mix of programs to achieve their desired policy goals.

The importance of beginning farmers has been tied to important policy priorities, such as the growth in local foods, in USDA known as the *Know Your Farmer, Know Your Food* initiative. USDA's Agricultural Marketing Service reports that as of mid-2010, there were 6,132 farmers markets operating throughout the United States. This is a 16% increase from 2009. Some have observed that a large share of both the farmers and the shoppers, are more likely to be young compared to their counterparts. USDA's Agricultural and Resource Management Survey, based on a representative sample of farms, does not show a much higher share of beginning farms engaged in local foods or agritourism than established farms. On the other hand, small farms, whether beginning or established, are more likely to be involved in local foods and agritourism than larger farms. Development of these local niches may prove to be an avenue to entry and sustainability for beginning farmers.

Some policy makers have expressed the hope that beginning farmers will play a catalytic role in fostering rural development. For example, in his June 30, 2010 testimony before the Senate Committee on Agriculture, Nutrition, and Forestry, USDA Secretary Vilsack asked the Committee to consider an idea to increase the number of farms by 100,000. While that number may not be a hard target, it is intended to be a signal that he views the rather low entry rate of young and beginning farmers into U.S. agriculture as a general concern and, perhaps, an increase in beginning farmers in some areas could foster rural development. For example, can beginning farmers make a contribution to halting the long-term population losses in parts of our rural areas, such as the Great Plains? Most of the nonmetro counties classified by the Economic Research Service as depending on agriculture—based on income or employment from production agriculture—are in the Great Plains. However, only a small share of beginning farms are in farm-dependent counties. In contrast, a disproportionately large share of beginning farmers is in the South in nonfarm-dependent counties. Questions about the importance of beginning farmers to larger issues such as long-term food security, rural development, and the production of local and specialized foods remain to be addressed.

For More Information

Ahearn, M. and D. Newton. (May 2009). *Beginning farmers and ranchers*. Washington, D.C.: U.S. Department of Agriculture, Economic Research Service. Available online at: <http://www.ers.usda.gov/Publications/EIB53/EIB53.pdf>

United States Department of Agriculture Economic Research Service. (2011). Farm household economics and well-being briefing room. Available online at: <http://www.ers.usda.gov/Briefing/WellBeing/>.

United States Department of Agriculture National Agricultural Statistics Service. (Feb. 2009). 2007 Census of Agriculture. United States summary and state data, volume 1, geographic area series, Part 51. Washington, D.C.

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2nd Quarter 2011 | 26(2)

U.S. FARM BILL RESOURCES AND PROGRAMS FOR BEGINNING FARMERS

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JEL Classifications: Q00, Q10

Keywords: Beginning Farmer and Rancher, Farm Bill, Conservation, USDA

Beginning farmer education for adult and young audiences in the United States is nothing new. These programs can be generally traced back to the advent of the 1862 and the 1890 Morrill Land Grant Acts. More comprehensive legislation to address the needs of beginning farmers and ranchers first began with special considerations made in the Agricultural Credit Improvement Act of 1992. However, for various reasons there has been renewed interest and rapid growth in these programs in recent years. These reasons include the rising average age of U.S. farmers (2007 Census of Agriculture); the 8% projected decrease in the number of farmers and ranchers between 2008 and 2018 (U.S. Bureau of Labor Statistics, 2009); and the growing recognition that the current social and education infrastructure does not sufficiently address the needs of beginning farmers and ranchers (Ruhf, 2001). Moreover, there is recognition of new populations considering enterprises in farming and ranching that require a repositioning of classroom and outreach education models. Also, several new state, federal and local partnerships with community-based organizations served as a catalyst to facilitate the development of new programs and services.

The most recent federal legislative activity related to beginning farmers and ranchers (BFRs) was inclusion of provisions in The Food, Conservation and Energy Act (FCEA) of 2008 dealing with credit, research, conservation and other titles of the Farm Bill. The Conservation Title of the 2008 FCEA offers two years of extra payments for CRP owners returning land to production if it is rented or sold to BFR or socially disadvantaged farmers or ranchers (SDFR); and reserves 10% of the total conservation funds to BFR and SDFR for the first four months of the program year. To strengthen services and enhance access to government programs for all farmers, several previous Farm Bill provisions were amended to include BFRs and SDFRs.

Some of the main BFR provisions under the Credit title are: lower interest rates on down payment loan programs; increased percentage of total loan funding reserved for BFRs; and authorization of a new BFR Individual Development Account pilot program in at least 15 states. A big change in the 2008 FCEA is that it provides for any farm experience, no matter when it occurred, to be considered in determining whether an applicant meets the three-year experience requirement for farm operating loans. Previous legislation only allowed beginning farmers with experience in operating a farm or ranch for at least three years to be eligible for a direct farm operating loan.

The Rural Development Title sets aside 10% of the Value-Added Agricultural Product Marketing Development grants for projects benefitting BFRs and SDFRs. The Business and Industry Programs also now gives priority to loans and loan guarantees for locally or regionally produced food projects with components benefitting underserved communities. These changes could benefit BFRs as many beginning farmers focus on marketing their products locally. However, many other provisions under the Rural Development Title, e.g., Communication and Information Programs, focus on improving the quality of life for rural communities and thus may have only indirect impacts on BFRs.

The Research Title included a new beginning farmer and rancher priority mission area within the Initiative for Future Agriculture and Food Systems competitive grants program. The Research Title strengthened and reauthorized the Beginning Farmer and Rancher Development Program (BFRDP) with mandatory funding of \$75 million for FY 2009 – 2012. BFRDP was first authorized in the Farm Security and Rural Investment Act of 2002 but remained inactive until mandatory funding was included in the 2008 FCEA. BFRDP is administered by the newly formed National Institute of Food and Agriculture, which was also established by the 2008 Farm Bill.

Finally, the Miscellaneous Title authorizes the Secretary to establish a new Office of Outreach and Advocacy to improve access to programs and the viability of small, beginning and socially disadvantaged farmers and ranchers. In addition, the 2008 FCEA established within this Office the Socially Disadvantaged Farmers Group; and the Small and Beginning Farmers and Ranchers Group. One of the responsibilities of the Socially Disadvantaged Farmers Group was to conduct the Outreach and Assistance for Socially Disadvantaged Farmers and Ranchers (OASDFR) program. This program provides grants to Land Grant Institutions (1862, 1890, or 1994), Native American Tribal Governments and organizations, Latino-Serving Institutions, State Controlled Institutions of Higher Education, and community-based organizations and nonprofits that work with minority farmers and assist them in owning and operating farms and participating in agricultural and USDA-specific programs. The OASDFR program is different from the Beginning Farmer and Rancher Development Program, as the latter has broader eligibility and purpose. The Small and Beginning Farmers and Ranchers Group of the Office of Advocacy and Outreach will oversee the operations of Office of Small Farms Coordination, consult with the National Institute for Food and Agriculture, and coordinate activities with the Advisory Committee for Beginning Farmers and Ranchers.

U.S. Department of Agriculture (USDA) Programs and Resources

As exemplified by the various titles of the Farm Bill that mandate BFR programs, these programs are spread across many different parts of the USDA. They provide for voluntary participation, offer incentives, and focus on equity in accessing USDA programs and services. An overview of each agency and its role or special program for BFRs has been compiled to create a full picture of the USDA's work.

Natural Resources Conservation Service

Several conservation programs address the unique circumstances and concerns of beginning farmers and ranchers. Benefits include set-asides for a portion of funds in the Environmental Quality Incentives Program (EQIP) and acres in the Conservation Stewardship Program (CSP) for beginning farmers or ranchers; special treatment for land in conservation programs transitioning from retiring farmer to a beginning farmer or rancher, as detailed below; and eligibility for higher cost-share rates.

Special treatment of Conservation Reserve Program (CRP) land transitioning from a retiring farmer or rancher to a beginning farmer or rancher includes a provision for the new farmer to make land improvements or begin the organic certification process starting one year prior to the contract termination date; and enroll in CSP or EQIP when they take possession of the land. The new farmer is also allowed to reenroll certain partial field conservation practices. The retiring farmer may receive up to two additional years of annual payments to facilitate the transfer of land to a beginning farmer or rancher, if the retired or retiring owner or operator is not a family member of the beginning farmer or rancher.

Reserves that equal five% of EQIP funds and five% of CSP available acres are targeted for beginning farmers or ranchers, with another five% of funds or acres reserved for socially disadvantaged farmers. Funds or acres allocated but not used by a certain date—generally the first four months of the program year—can be used for any producers in the programs.

Farm Service Agency

The Farm Service Agency (FSA) uses priority consideration and loan fund set-asides to target credit financing for beginning farmers. The FSA provides direct and guaranteed loans to beginning farmers and ranchers who are unable to obtain financing from commercial credit sources. Each fiscal year, the Agency targets a portion of its direct and guaranteed farm ownership (FO) and operating loan (OL) funds to beginning farmers and ranchers. Other programs to support beginning farmers include guaranteed loans for private-contract land sales from retiring farmers to beginning farmers and ranchers, an Individual Development Accounts (IDA) pilot program which offers beginning farmers and ranchers an opportunity to participate in matching-fund savings accounts, and the designation of beginning farmers and ranchers as a priority group for buying USDA inventory property.

Rural Development

The USDA Rural Development Agency's Value-Added Producer Grants may be used for planning activities and working capital for marketing value-added agricultural products and for farm-based renewable energy. Eligible applicants are independent producers, farmer and rancher cooperatives, agricultural producer groups, and majority-controlled producer-based business ventures. Applications from beginning farmers or ranchers will be considered for

reserved funding, a set-aside of 10% of available grant funds for projects benefitting BFRs and SDFRs specified by the 2008 Farm Bill.

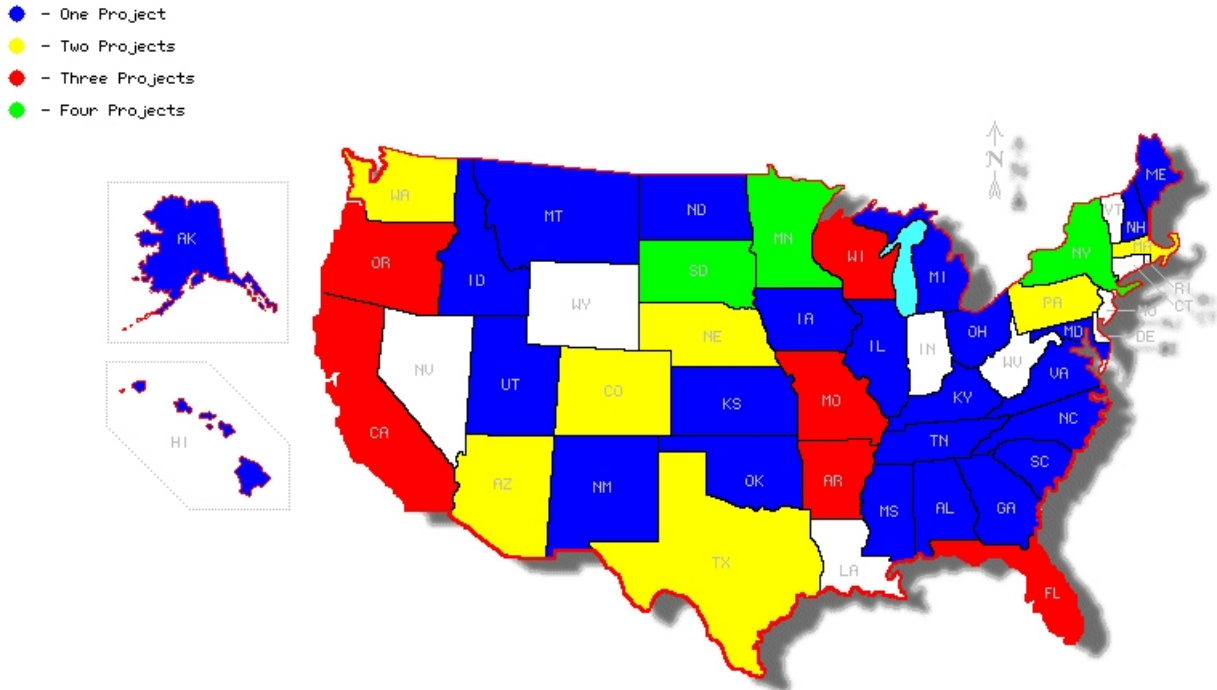
National Institute of Food and Agriculture (NIFA)

National Institute of Food and Agriculture’s (NIFA’s) new Beginning Farmer and Rancher Development Program (BFRDP) made its first-time awards of \$18 million in FY 2009: an important milestone support of local and regional training, education, outreach, and technical assistance to address the critical needs of beginning farmers. Since then, \$19 million was awarded in FY 2010 and the agency is in the process of making the FY 2011 awards. Since its inception, BFRDP has funded 65 Standard Projects to train, educate, and provide outreach and technical assistance to beginning farmers on one or more of 27 topics listed under the following headings:

- Production and management strategies to enhance land stewardship by beginning farmers and ranchers;
- Business management and decision support strategies that enhance the financial viability of beginning farmers and ranchers;
- Marketing strategies that enhance the competitiveness of beginning farmers and ranchers;
- Legal strategies that assist beginning farmers with farm or land acquisition and transfer; and
- Other priority topics to enhance competitiveness and sustainability of beginning farmers and ranchers for the next generation.

BFRDP also funded three Educational Enhancement Team Projects and one Clearinghouse grant in FY 2009. The purpose of an Educational Enhancement Team grant is to assemble a team of experts to review beginning farmer and rancher curriculums and programs, identify gaps, and develop and disseminate recommendations and materials to address these gaps.

Figure 1: Distribution of FY 2009 and FY 2010 BFRDP Projects by States, United States



The Educational Enhancement Teams will not train beginning farmers and ranchers but may train the trainers and help enhance funded and non-funded beginning farmer and rancher education programs in the nation. The main thrust of these three projects is very different. The project at Cornell University is focusing on strengthening collaboration and information sharing among BFR training programs in the northeast. At University of Nebraska the

focus is on strengthening environmental management training. The Land Stewardship Project is strengthening the Farm Beginnings program, which is one of the oldest BFR training programs and is now offered in Illinois, Nebraska, North Dakota, South Dakota and in the Hudson Valley of New York, as well as in the Lake Superior region in northeast Minnesota and northwest Wisconsin.

The Clearinghouse grant is now establishing an electronic library of all beginning farmer and rancher education programs and opportunities in the nation. As required by the Farm Bill, BFRDP gives priority to partnerships and collaborations led by or including nongovernmental and community-based organizations with expertise in new agricultural producer training and outreach. Also, at least 25% of the funds will be used to support programs and services that address the needs of limited resource beginning farmers or ranchers; socially disadvantaged beginning farmers or ranchers; and farm workers desiring to become farmers or ranchers.

The 69 awards made since 2009 are located in 40 states, but several projects cover multiple states. Some of the trends in BFRDP awards are the growing number of projects focusing on training to support enterprises that integrate strategies related to local food systems, sustainable agriculture, urban agriculture, and training veterans and youth. BFRDP has the potential to change the demographics of U.S. agriculture and reduce the higher unemployment rates among veterans, minorities and youth if these programs meet the outcomes that were proposed in the competitive granting process.

Office of Advocacy and Outreach

The Office of Advocacy and Outreach, as mandated by the Department of Agriculture Reorganization Act of 1994 and the Food, Conservation, and Energy Act of 2008, was established by the Secretary of Agriculture in late 2009. This Office will gather public input through the Advisory Committee for Beginning Farmers and Ranchers on ways the Department can support beginning producers. The Committee will advise the Secretary on: (1) the development of a program of coordinated financial assistance to qualified beginning farmers and ranchers required by Section 309 (i) of the Consolidated Farm and Rural Development Act—this program consists of Federal and state beginning farmer programs that provide joint financing to beginning farmers and ranchers; (2) methods of maximizing the number of new farming and ranching opportunities created through the program; (3) methods of encouraging states to participate in the program; (4) the administration of the program; and (5) other methods of creating new farming or ranching opportunities. The Committee is comprised of 20 members representing the following groups: (1) USDA, Farm Service Agency (FSA); (2) State beginning farmer programs; (3) commercial lenders; (4) private nonprofit organizations with active beginning farmer programs; (5) USDA, National Institute of Food and Agriculture (NIFA); (6) community colleges or other educational institutions with demonstrated experience in training beginning farmers or ranchers; (7) other entities or persons providing lending or technical assistance for qualified beginning farmers or ranchers; and (8) farmers and ranchers.

Information Sources and Training Models

A wide variety of information and training is available to beginning farmers from non-profit, academic and other supportive institutions. Some of these institutions are supported through Federal funds, primarily through the BFRDP. In order to illustrate the scope of opportunities available to new farmers, select BFRDP-funded beginning farmer training initiatives are highlighted below. These programs were selected to show the varieties of audiences, activities, educational philosophies and other unique characteristics of programs serving BFRs.

Bringing New Farmers to the Table—North Carolina

The Bringing New Farmers to the Table project takes advantage of unique opportunities presented by North Carolina's new statewide 10% local food campaign. This campaign designs support for beginning farmers, and information about their needs, into every aspect of this movement for North Carolina to provide 10% of its own food.

The first step in accomplishing this goal is intensive training for a new network of County Extension, Local and Regional Food Coordinators about issues facing new farmers. These new service providers facilitate connections between farmers and local market outlets and are responsible for providing training and resources for new producers. A series of eight webinars, covering key topics for beginning farmers, supplement the training provided by these coordinators. These educational modules form the basis of a certificate program for new farmers. Additionally, a New Farmer Placement Program works with municipalities, county, and state governments on making idle land available for incubating farms and to facilitate placement of new farmer certificate holders from the webinar series. Educational

resources developed for new farmers are available on the 10% local food campaign and National Sustainable Agriculture Information Service – ATTRA’s websites.

Comprehensive Regional Farmer-to-Farmer Training and Support Project—Illinois

Based on training evaluations and needs assessments from previous work with beginning farmers, collaborating partners from Angelic Organics Learning Center, Michael Fields Agricultural Institute, and Prairie Crossing Farm Business Development Center proposed a project targeted to remove four key barriers to the success of beginning farmers. These include a lack of access to: 1) training, education, and technical assistance; 2) land; 3) capital and credit; and 4) markets. The project addresses all four barriers during successive learning stages for beginning farmers on their path from entering farming to creating a viable farm enterprise. Participation in the network of Collaborative Regional Alliance for Farmer Training (CRAFT) farmer initiatives and the national Farm Beginnings Collaborative links project partners to national farmer training collaboratives/networks to share project outcomes and replicate best practices. By working together, the partners are able to provide a web of support and training—over multiple years and learning stages—that increases the success rates of beginning farmers.

To expand existing new farmer training and technical assistance programs and develop new ones, the collaborators are increasing farmer-to-farmer support services; delivering a year-long Farm Beginnings® program; offering training workshops; providing farmer-training stipends to attend advanced farmer training programs; and creating a farmer technical assistance pool among the CRAFT farmers.

To expand existing partnerships to protect farmland and access to land for beginning farmers and develop new ones, the collaborators are identifying innovative farmland tenure models and farmland for beginning farmers to use via long-term lease or purchase, providing access to land for beginning farmers via agreements with institutional landowners, developing an online bulletin board for beginning farmers with emphasis on land opportunities, and developing workshops and training on land tenure and access.

To provide beginning farmers with access to options for financing/credit for farm start-up, scale-up or transition, the collaborators are identifying existing financing sources for incorporation into curricula, conducting a feasibility study, planning a regional micro-loan program for beginning farmers, and developing a plan to launch an agricultural Individual Development Account (IDA) savings program. Finally, to assist beginning farmers with market development, the collaborators are creating and distributing a menu of group marketing models to 200 beginning farmers via CRAFT and collaborating organizations.

Integrated Poultry, Livestock and Agroforestry Production and Training for New and Beginning Farmers and Ranchers—Arkansas

A team of educational and research institutions, nongovernmental agencies and local farmers are developing training materials, including bilingual offerings (English and Spanish), experiential opportunities at workshops, demonstration farms and internship programs, and custom networking and mentoring systems to support the new generation of farmers and ranchers in the Southern region of the country—especially in Arkansas and Oklahoma. This project targets the minority farmers who are highly relevant to the structure of rural Arkansas: women, African American and Latino farmers, and military veterans. Specific objectives of this project are to: 1) develop a comprehensive modular outreach/training program that provides new and beginning farmers with knowledge and tools to operate efficient and sustainable farms and ranches—focused primarily on integrated poultry, livestock and agroforestry systems and including specialized materials for Spanish speakers and returning veterans; 2) deliver programming through strategies such as a permanently available asynchronous eLearning system, publications, factsheets and worksheets—including specific programs targeted at Spanish speakers and returning veterans; 3) offer unique experiential learning opportunities such as workshops, webinars, conferences and internships for new and beginning farmers on demonstration and production farms located throughout the state of Arkansas at the participating institutions; and 4) offer custom networking and mentoring that will create an effective support system for new and beginning farmers, particularly for the subpopulations targeted in this grant.

Project partners include such diverse groups as Arkansas Women in Agriculture, the Kerr Center for Sustainable Agriculture, the National Center for Appropriate Technology (NCAT), the Dale Bumpers Small Farms Research Center, the USDA-ARS Organic and Specialty or Pasture Poultry Research Unit, and the Farmer Veteran Coalition.

Beginning Entrepreneurs in Agricultural Networks (BEAN) Project—Ohio

The Ohio State University's BEAN Project plays a key role in building capacity to create and sustain economically viable small farm enterprises in the Greater Cleveland area through its unique outreach to socially disadvantaged residents—minorities, immigrants, refugees, and limited resource adults with developmental disabilities—and its ability to educate beginning farmers using methods sensitive to participants' culture, language and learning style. The project includes: 1) curriculum development in plain language and with cultural enhancements; 2) a training program incorporating new, applied models of teaching and learning; 3) an urban farming mentorship model; and 4) other tools such as land lease contracts, business plans, and best practices for growing cultural/specialty crops in an urban area. These materials are delivered through a learning continuum that includes hands-on learning modules, field trips, workshops, educational publications in plain language, mentorship activities, and model land lease agreements. This educational continuum aligns with the BEAN Project's overall goal of contributing to the local food economy and promoting social change by increasing the number of minority and underserved farmers who own and/or operate economically and environmentally sound small farm enterprises.

Curriculum and Training Clearinghouse: Start2Farm—National

The focus of Start2Farm is to develop a national “one-stop” source of online beginning farmer and rancher information. Education, training, mentoring and outreach materials housed in this online library comprises full-text handbooks, manuals, curricula, and other training materials produced from projects funded through the BFRDP. Information from other sources outside the BFRDP have also been identified, collected and housed within this collection to ensure a comprehensive source of information on beginning farmer support. In addition to training materials, information about financing, networking opportunities and sources of technical assistance targeted to beginning farmers are also included. Users may identify organizations offering training, financing, networking and other forms of assistance through geographical designators such as zip codes or other personal characteristics.

The Start2Farm website showcases BFRDP grant projects and provides, through a partnership with the American Farm Bureau Federation, an annual conference for Beginning Farmers and Ranchers. The website also includes stories and reports highlighting the accomplishments of the BFRDP participants, and each month its homepage highlights new projects and materials collected in the online library. Additionally, the latest news and events related to beginning farmers and ranchers is compiled from regional, state and locally created calendars and newsfeeds.

For More Information

Angelic Organics Learning Center. (2011). *Farmer Training*. Available online: <http://www.learnrowconnect.org/farmer>

National Sustainable Agriculture Information Service—ATTRA. (2011). *Beginning Farmer*. Available online: http://attra.ncat.org/attra-pub/local_food/startup.html

North Carolina State University, Center for Environmental Farm Systems. (2011). *10% Campaign*. Available online: <http://www.ncsu.edu/project/nc10percent/>

Ohio State University Extension. (2011). *Beginning Entrepreneurs in Agriculture Networks (BEAN) Project*. Available online: <http://cuyahoga.osu.edu/topics/agriculture-and-natural-resources/bean-project>

Ruhf, K. (2001). *Northeast New Farmers: Opportunities for Policy Development*. Available online: http://www.smallfarm.org/uploads/uploads/Files/Policy_Background_Paper.pdf

U.S. Bureau of Labor Statistics. (2009). *Occupational Outlook Handbook, 2010-11 Edition: Farmers, Ranchers, and Agricultural Managers*. Available online: <http://www.bls.gov/oco/ocos176.htm>

U.S. Department of Agriculture, Agricultural Research Service. (2011). *Integrated Natural Livestock and Agroforestry Production and Training for Beginning Farms and Ranchers*. Available online: http://www.ars.usda.gov/research/projects/projects.htm?ACCN_NO=421076

U.S. Department of Agriculture, Farm Services Agency. (2011). *Beginning Farmers and Ranchers Loans*. Available online: <http://www.fsa.usda.gov/FSA/webapp?area=home&subject=fmlp&topic=bf>

U.S. Department of Agriculture, National Agricultural Library. (2011). *Start2Farm.gov*. Available online: <http://www.start2farm.gov/>

U.S.Department of Agriculture, National Agricultural Statistics Service. (2011). *2007 Census of Agriculture: Farmers by Age*. Available online: http://www.agcensus.usda.gov/Publications/2007/Online_Highlights/Fact_Sheets/farmer_age.pdf

U.S.Department of Agriculture, National Institute of Food and Agriculture. (2011). *Beginning Farmer and Rancher Development Program*. Available online: <http://www.nifa.usda.gov/fo/beginningfarmerandrancher.cfm>

U.S.Department of Agriculture, Natural Resources Conservation Service. (2011). *Conservation Stewardship Program*. Available online: http://www.nrcs.usda.gov/programs/new_csp/csp.html

U.S.Department of Agriculture, Natural Resources Conservation Service. (2011). *Environmental Quality Incentives Program*. Available online: <http://www.nrcs.usda.gov/programs/eqip/>

U.S.Department of Agriculture, Office of the Secretary. (2009). *Secretary's Memorandum 1064-001: Establishment of the Office of Advocacy and Outreach*. Available online: <http://www.ocio.usda.gov/directives/doc/SM1064-001.htm>

U.S.Department of Agriculture, Rural Development. (2011). *Value-Added Producer Grants*. Available online: <http://www.rurdev.usda.gov/rbs/coops/vadg.htm>

U.S.Government Printing Office. (2008). *Food, Conservation, and Energy Act of 2008. Public Law 110-246*. Available online: <http://www.gpo.gov/fdsys/pkg/PLAW-110publ246/html/PLAW-110publ246.htm>

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2nd Quarter 2011 | 26(2)

A REPRESENTATIVE FARM APPROACH TO OUTREACH WITH BEGINNING FARMERS AND RANCHERS

Peter Zimmel and Lori Wilcox

JEI Classifications: Q12, Q14, D81

Keywords: Beginning Farmers and Ranchers, Representative Farm, Whole Farm Analysis, Risk Management, Online Decision Support, Stochastic, Baseline

Agriculture is a major contributor to the U.S. economy and vital to the continued availability of a safe and inexpensive food supply. In 2007, the value of products sold was \$297 billion (USDA, 2007 Census of Agriculture), a 48% increase over 2002. The total number of farms during this period increased by 4% (75,810 farms) and 291,329 new farms began operation.

While the average age of farm operators continues to increase, the number of beginning farmers and ranchers, defined as those that have not been operating a farm for more than 10 years, increased slightly (0.6%) from 2002 to 2007. The number of operators with the least experience (two years or less) grew by more than 28% over the five year period while those with five to nine years experience decreased by 6.8%. This indicates a marked need for additional outreach and educational efforts designed for beginning farmers and ranchers to continue the increase in beginning farms and ensure these producers are still engaged in farming after 2 years.

There are many factors that impact the success or failure of beginning farmers and ranchers. A lack of capital and experience in farming, smaller operations, and high land values and production expenses (Mishra, et al., 2002) are but a few of the challenges faced by beginning farmers and ranchers.

In an effort to provide beginning farmers and ranchers with a comprehensive, whole farm approach to decisions related to production practices, farm structure and marketing strategies, the Food and Agricultural Policy Research Institute at the University of Missouri (FAPRI-MU) has adapted an existing representative farm framework and focused it on beginning producers in Missouri. This three-year project will culminate in the fall of 2012 with web-based decision support tools for all beginning farmers and ranchers.

Representative Farms

Beginning farm and ranch representative farms were created utilizing a methodology developed by the Agricultural and Food Policy Center (AFPC), at Texas A&M University, in 1981, and first utilized by FAPRI-MU in 1990. In addition, ten year baseline data from the FAPRI-MU modeling system (FAPRI-MU, March 2010) and simulations using the Farm Level Income and Policy Simulation (FLIPSIM) model (Richardson and Nixon, 1986) were incorporated.

The collaborative efforts of AFPC and FAPRI-MU since 1990 have resulted in the development and maintenance of 98 representative farms, in 28 states, with a wide range of commodity coverage. An additional 30 farms have been developed and maintained within the state of Missouri by FAPRI-MU resulting in a database of 128 representative farms consisting of computer-simulated models of established farms and ranches. Each of these computer-simulated "representative" farms is developed with input from a panel of approximately four to eight producers. The data collection is an iterative process of focus group sessions initiated by a local facilitator working closely with AFPC and FAPRI-MU researchers to collect data that would be representative of a farm in the region with detail collected regarding farm structure, existing assets and liabilities, input costs, farm income and machinery needed to operate the farm. New data are collected or updated for each of the 128 representative farms in a three-year, revolving schedule.

Table 1**Characteristics of Missouri representative farms, FAPRI-MU 2010**

Farm Type	Number of Farms	Acres (Min/Max)	Livestock (Min/Max)	Receipts (\$1,000) (Min/Max)	Debt/Asset Ratio
Feedgrain-soy	10	890/4,000	0/0	\$342/\$2,180	20%
Cotton and rice	3	1,600/4,000	0/0	\$765/\$2,582	20%
Crop-beef	9	655/2,955	40 cows/250 cows	\$257/\$1,141	20%
Pork-crop	4	0/1,015	200 sows/1,500 sows	\$426/\$5,152	35%
Beef	5	650/2,125	150 cows/400 cows	\$136/\$293	4%
Dairy	5	245/625	110 cows/500 cows	\$432/\$2,306	30%
Broiler-beef	2	200/225	4 houses/6 houses	\$149/\$206	20%

Table 1 provides an overview of the characteristics of the traditional representative farms in Missouri. With these models of established farms, debt to asset ratios range from 4% to 35% with a median of 20%. The debt to asset ratios are not actual debt levels set by the producers assisting with data collection, but levels that are set based on the category into which the farm fits. Debt levels are initially set based on the major commodities associated with that farm.

A unique capability of the representative farm system is the ability to assess how much risk each modeled farm may encounter. This is accomplished through the use of projected prices, input costs and policy parameters from the FAPRI-MU annual baseline and incorporating historical risk components from AFPC's FLIPSIM whole farm simulation model. FLIPSIM, in conjunction with the FAPRI-MU stochastic baseline which incorporates historic variability, simulates the farm 500 times per year of the analysis. The outcomes of these 500 simulations are tabulated and probabilities are reported. The probability of a cash flow deficit, ending cash being negative, and the farm losing real net worth are just a few of the parameters used to determine how much risk the farms are facing.

Overview of Representative Farm Development

The representative farm approach treats a farm business unit as a unique system characterized by local features and resources and assumes adaptations are made by farm management. Local conditions are internalized in the creation and simulation of each farm. The first phase in the creation of a representative farm begins with a local facilitator coordinating meetings for four to eight producers in a given area that are similar in size, structure and type of farming or ranching operation. In the case of this research, these producers were also required to meet USDA's definition of a beginning farmer or rancher with ten or fewer years associated with operating their own farm enterprise. For this research four representative farms were developed throughout the state of Missouri relying upon seasoned University of Missouri extension specialists that had a proven track record in facilitating a representative farm creation and maintenance process over a multi-year timeframe. Data are collected and validated by participants via a consensus process. Producers establish farm structure, size, production practices, production costs and financial requirements

for the representative farm drawing upon their own individual operations and experience. Table 2 provides an overview of the characteristics of the four beginning farmer and rancher representative farms developed.

Table 2
Characteristics of beginning farmer and rancher representative farms, FAPRI-MU 2010

Farm	Farm Type	Acres	Livestock	Receipts (\$1,000)	Debt/Asset Ratio
Southwest Cow/Calf	Beef	710	180 cows	\$139	36%
Northeast Feedgrain & Cow/calf	Crop-beef	830	60 Cows	\$337	53%
North Central Feedgrain & Cow/calf	Crop-beef	550	15 Cows	\$257	74%
West Central Feedgrain	Feedgrain-soy	400	0	\$237	34%

Business size, structure and management practices are held constant for the simulation period of 2007 through 2014. For simulation, actual yield, price and operating cost data are utilized for the years 2007 through 2009. This historical data set provides some perspective of simulated financial performance with a known set of variables and provides a point of reference for the five-year projection period.

Farm and ranch financial statements are generated using FLIPSIM from AFPC and price, yield and cost data from FAPRI-MU for the 2010 to 2014 simulation. The financial statements include: (a) income statement, (b) cash flow and (c) balance sheet, and are utilized by the participants to ensure the simulated farm is performing in a realistic manner over the historic period. Once these results are validated by the participants, projected financial statements are prepared for the 2010 through 2014 period and referenced as the "baseline farm". Information conveyed to participants also includes a risk assessment associated with how likely the representative farm is to cash flow year in and year out.

At least two, and no more than four, alternatives are developed by participants within each representative farm. Parameters that can be altered include farm size, structure and production practices, and can be single or multi-year adaptations. The same methodology is applied to each alternative, and comparisons of the three financial statements and the risk assessment score are available for comparison to the baseline farm simulation. A short-term and intermediate-term risk assessment score is assigned to the baseline and alternatives, as many farming and ranching decisions can have severe short-term cash flow risks and result in longer-term risk reduction.

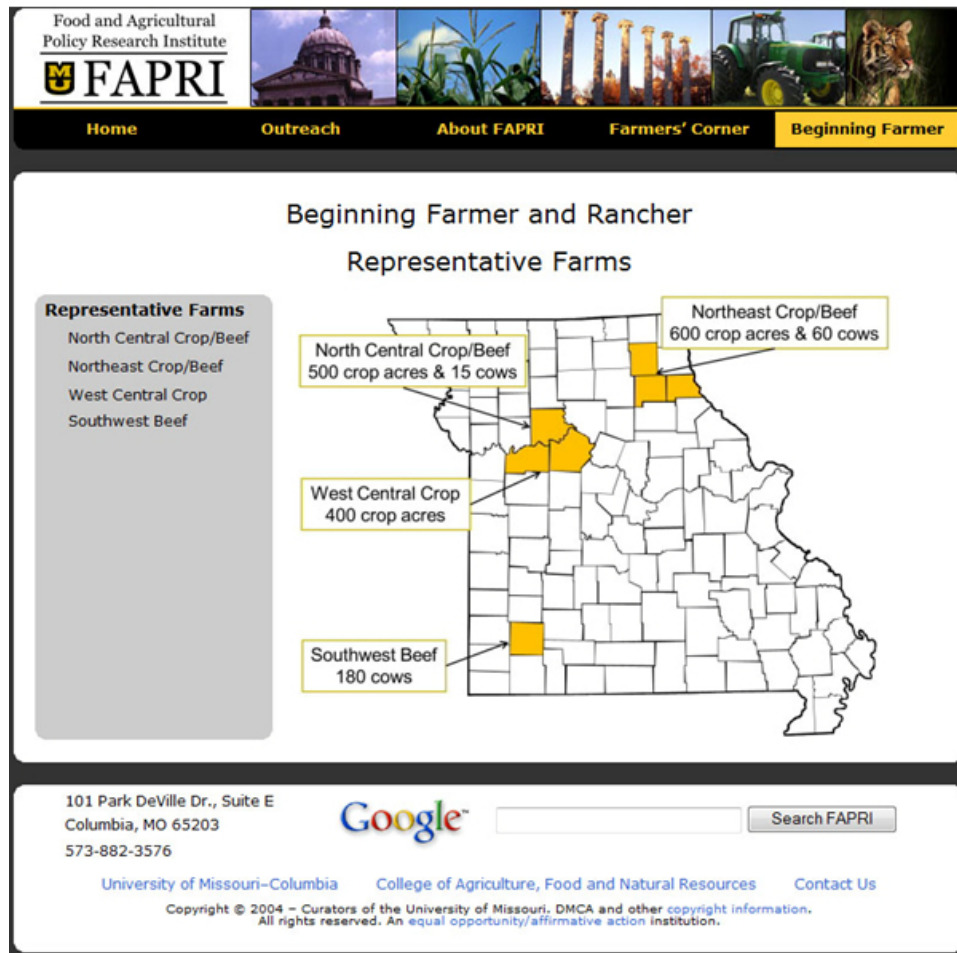
Adaptations and Enhancements for Beginning Farmers and Ranchers

Updates for each beginning representative farm or ranch were necessary every year, not every three years as had been the case with the traditional representative farms. This adaptation in scheduling representative farm updates provides the ability to work closely with beginning producers as they are contemplating annual changes and allows more timely feedback. While critical changes in farm structure or financial liquidity may happen for any existing farm, the likelihood of this occurring for beginning farmers and ranchers is much higher, and the need to collect data more frequently is therefore more critical. According to data from the U.S. Census Bureau the percent of farm operators in Missouri actively engaged in farming for less than ten years increased by only 0.3% from 2002 to 2007. However the number of producers that had been engaged in farming for two years or less increased by 25.3%. These figures

indicate that years five through nine may be the most critical period for significant changes in many beginning farming and ranching operations.

In the traditional representative farm framework, scenarios are often analyzed using the baseline as a benchmark. The scenarios that are developed result primarily from policy debates and Congressional requests while focusing on farm-level impacts of changes in existing agricultural policy or substantial changes in the macro-economy. With respect to the beginning representative farms and ranches, scenarios analyzed were: (a) determined by the representative farm participants and (b) related to changes in farm structure or production and not policy. An adjustment to FLIPSIM was provided by AFPC to allow for the establishment of new debt in any year for major capital changes.

Figure 1: FAPRI-MU Beginning Farmer and Rancher Web Page



Traditionally, the results of representative farm analysis are included in reports and presented to policy makers, farm commodity groups, and at extension or professional meetings. The establishment of a beginning farmer and rancher section of the FAPRI-MU website will be used to enhance the traditional delivery methods. Reports and presentations are being developed and disseminated to the producers as well as being made available to the public via the web site. Also, a section of the web site will contain details not traditionally available for the existing representative farms (Figure 1). Users will be able to browse the four representative farms, look at how the farms are structured, look at key input characteristics, and view output tables and graphics for the baseline, as well as the producer defined alternatives. Furthermore, the alternatives will be summarized, as well as broken down into the components, to show the economic impact of the alternative as a whole and in parts.

The creation of an advisory council comprised of extension specialists, agricultural lenders, agricultural producers, and agency staff experienced in beginning farmer and rancher programs has added depth to the planning and implementation of this beginning representative farm and ranch process. The combined effort of the individuals on the

advisory council has increased participation and trust in the research as well as provided a validation component to the output. The national network of agricultural educators, advocates and beginning farmer support structure that the advisory council provides will prove invaluable in the dissemination and evolution of the online, risk management tools.

An additional focus during year two of this research is also an enhancement to the existing representative farm approach. Each representative farm participant has been given the opportunity to work in a one-on-one, confidential setting with a FAPRI-MU researcher to develop individual financial and risk assessments for their own farming operations through modifications to the newly created beginning representative farms. This customization has not been available to past representative farm participants and provides an opportunity for beginning producers to analyze potential impacts on their own enterprises of alternative scenarios. Participation in this portion of the research was voluntary for the participants, and will not be reported in any form during or after the research project.

Web Tools for Producer Outreach

A significant enhancement to the FAPRI-MU beginning farmer and rancher website will be the inclusion of online and downloadable tools. These tools, with input from beginning farmers and ranchers and stakeholders groups is currently in the initial design and development stage. Once completed, users will be able to utilize an online tool to construct a farm, consisting of commodities currently included in the FAPRI-MU baseline, and analyze the profitability of that operation over a 5-10 year future planning horizon. The user will have limited data entry requirements since the tool will have the entire FAPRI-MU baseline data at its core. Additionally, users will be able to change key inputs and see how those changes impact the profitability of the constructed farm.

Data collection via a survey is an additional component which was not part of the original research design, but is being conducted based on the team's assessment that a broader sample of information was needed. A significant resource commitment is required for the creation and maintenance of the online risk management system. For this reason, stakeholder input is vital to ensuring an online system is developed that is applicable, easily accessible, user friendly and in a format that has a higher probability of being utilized. The survey provides the opportunity to collect data related to preferences and computer capabilities from a small sampling of beginning farmers and ranchers to increase the likelihood of adoption and use of the online risk management tools.

The survey tool contains 29 data collection variables and is available in a hard-copy or online version. The first half of the survey contains basic questions related to demographic information for the producer or potential producer, farm size and structure, and state where farming or ranching occurs. The second half of the survey contains questions related to computer and technology access, preferences for online format and usage.

The survey was first disseminated in conjunction with the Start2Farm conference hosted by the American Farm Bureau Federation Young Farmers and Ranchers (YF&R) conference and USDA's National Agricultural Library. This venue offered an opportunity to collect data from agricultural producers from multiple states engaged in diverse agricultural production. Subsequent surveys have been disseminated at conferences in Missouri to gain additional insight.

Information regarding the online survey is being shared with multiple agencies and organizations as well as other recipients of Beginning Farmer and Rancher Development Project grants through USDA. The online survey may be found at: http://www.fapri.missouri.edu/beginning_farmers/survey/index.asp

The initial design for the online risk management system is in the planning stage and will utilize information gleaned from surveys, panel participants and the advisory council. An iterative process involving beta versions of the online tools and testing by panel participants and advisory council members will be utilized. The finalized online tools will be available in 2012, and will be available on the FAPRI-MU website. These tools will initially be focused on farms with characteristics similar to the four beginning representative farms. Additional funding and further research will allow more diversification in the number and type of representative farms and risk management tools available.

Research Findings

A comparison of Table 1 and Table 2 provides insight into initial research findings related to similarities and differences of the beginning representative farms and the traditional representative farms. Quantitative analysis indicates higher debt-to-asset ratios for the beginning representative farms. The debt-to-asset ratio for the beginning representative farms was derived differently than the traditional representative farms. For the beginning representative farms, it was determined when the farm actually came into existence and purchased the land and

buildings. It was then determined how much long term debt would be left at the beginning of the simulation period (2007). Knowing the value of the long term debt in 2007 and how much was still owed on it, the beginning debt-to-asset ratio was calculated.

The Southwest Cow/Calf farm has a debt to asset ratio of 36% compared to an average of 4% for the five existing Missouri beef representative farms. The Northeast and North Central feedgrain and cow/calf farms have an average debt to asset ratio of 64% compared to an average of 20% for the nine existing Missouri feedgrain and cow/calf farms. The West Central feedgrain farm has a debt to asset ratio of 34% compared to an average of 20% for the ten existing Missouri feedgrain/soy farms. These beginning farms and ranches are typically more leveraged than existing farms and ranches, and thus, face more financial risks resulting in a higher probability of a cash flow deficit in both the short and intermediate terms. Access to government supported financing options through agencies in Missouri such as the Missouri Agricultural and Small Business Development Authority (MASBDA) and USDA's Farm Service Agency (FSA) in collaboration with Missouri's Farm Credit Service, FCS Financial, and commercial lenders provides a critical risk reducing component – lower interest rates and an increased loan repayment timeframe.

The results of the initial baseline and alternatives simulation were presented to the representative farm participants, discussed, and used to help educate the participants about the inherent risk associated with farming and ranching. From the perspective of an established agricultural producer many of the alternatives analyzed were not unique. However, the ability to assess risk in a computer-simulated environment from a whole farm perspective is an added benefit for these beginning farmers and ranchers. In multiple instances, this research exercise prompted discussions among participants and the local facilitator creating an educational opportunity to explore real-world applications and economic impacts of diversified practices.

Figure 2: Southwest Cow/Calf Farm, Risk Rating Score

	2010-11	2012-14
Baseline	Moderate	Moderate
Alternative 1	Severe	Low
Alternative 2	Severe	Low

The cow/calf producers were the most conservative of the four groups. The two alternatives they chose to analyze, purchasing calves to background, and increase their cow herd with purchased cows and management intensive grazing, resulted in increased cash flow pressure initially but ultimately resulted in lowering that same risk longer term. Figure 2 shows how the cash risk rating changes over time for the baseline and two alternatives. The cash risk rating is how likely a farm is to have a cash flow deficit in a particular time period. A low rating means the farm has less than a 25% chance of cash flow deficit, moderate is between 25% and 50%, high is between 50% and 75%, and severe is more than 75%. The baseline farm was in that moderate category over the five year projection period (2010-2014). However, the two alternatives both increased the likelihood of having a cash flow deficit in the early projection period (2010-11), but a lower likelihood (less than 25%) in the later years (2012-14).

In contrast to the cow/calf representative farm, the three representative farms that received the majority of their income from their crop enterprises were more aggressive in the alternatives they wanted to analyze. These three groups chose to look at adding acres to their operation through leasing more cash rented land, in many cases at a higher per acre rental rate, purchasing additional acres, adding grain bins, purchasing more equipment, or adding more cattle to their small cattle enterprises. In many cases, these groups chose to look at several of these options together. This aggressiveness resulted in most cases with increasing the likelihood of the farm have cash flow deficits. Many of these producers have experienced higher than average yields and higher prices over the last several years. This higher income level in recent years may have influenced the producers in setting what alternatives they wished to analyze.

From a qualitative perspective, comparative observations of beginning representative farm and ranch participants to existing national and Missouri representative farm participants indicates an increased willingness to utilize technology and discuss their individual operations with a group of their peers. A higher percentage of these beginning farm and ranch participants have received postsecondary education, and many are involved with a larger family operation in addition to their own enterprise.

Preliminary results for 270 surveys completed indicate 54% of respondents consider themselves full-time farmers/ranchers with 39% indicating part-time, 3% planning to start within 24 months and 5% currently not actively engaged in farming/ranching or planning to start within 24 months. In addition, 90% of respondents were 34 years of age or younger and 65% were male.

Surveys were completed by respondents from 42 states in the United States with grains, oilseeds, cattle and hay listed by over 50% of the respondents as a primary enterprise. 87% of the respondents indicated they farmed in conjunction with someone else—either a spouse, other family member or partner.

With respect to computer usage, 259 out of 270 respondents chose to answer this question. Of those 259, 100% of the respondents indicated they used a computer, 97% owned the computer they used, and 93% used a PC with 7% indicating use of a Mac. Over 80% of the 270 respondents indicated they use the internet, email, and have Microsoft Excel. A little over 50% of the respondents indicated utilization of a specific computer software package for farm or ranch budgeting/reporting. 6% of the respondents indicate dial-up internet access with the remainder indicating access to high-speed internet. Surveys will continue to be collected throughout Summer 2011 with final results analyzed in early September. These results will support the final web-based format and delivery mechanism incorporated into the FAPRI-MU Beginning Farmer and Rancher website.

Concluding Comments

Input from representative farm participants and advisory council members has been extremely positive regarding the real-world application of a representative farm approach to risk management for beginning farmers and ranchers. The combined utility of existing historical data for a farm or ranch enterprise, the FAPRI-MU ten year baseline to provide potential price, yield and input costs from 500 possible outcomes, and applicable financial statements and risk assessment scoring provide a tool for beginning producers. This tool allows single and multi-year decisions to be analyzed and discussed with farming partners, lenders and peers prior to actual changes in farm structure or production practices occurring.

Through the adaptation and enhancement of existing research methodology and decision support and risk management tools, beginning and potential farmers and ranchers throughout the U.S. are provided with timely and applicable information to further their enterprise while reducing or managing risk.

For More Information

Food and Agricultural Policy Research Institute. (2010). FAPRI U.S. Baseline Briefing Book (#01-10). Columbia, MO.

Mishra, A.K., Morehart, M.J., El-Osta, H.S., Johnson, J.D., and Hopkins, J.W. (2002, September). *Income, Wealth, and Well-Being of Farm Operator Households*. Agricultural Economics Report 812. Washington, DC: U.S. Department of Agriculture, Economic Research Service.

Richardson, J.W., and Nixon, C.J. (1986). *Description of FLIPSIM V: A General Firm Level Policy Simulation Model*. Texas Agricultural Experiment Station, Bulletin B-1528. College Station, TX: Texas A&M University.

United States Department of Agriculture Census. (2002). *2002 Census of Agriculture*. Available online <http://www.agcensus.usda.gov/publications/2002/index.html>.

United States Department of Agriculture Census. (2007). *2007 Census of Agriculture*. Available online <http://www.agcensus.usda.gov/publications/2007/index.html>.

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This research was supported by the United States Department of Agriculture/National Institute for Food and Agriculture under Project #2009-03859. Senior authorship is shared.

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APPROACHING BEGINNING FARMERS AS A NEW STAKEHOLDER FOR EXTENSION

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JEL Classifications: Q13, Q15, Q16

Keywords: New Farmer, Farm Transitions, Business Planning, Direct Marketing, Extension Service, Capacity Building, Mentoring

Across the United States, agricultural producers are responding more and more to growing market demand for local, fresh foods. While this phenomenon has created new market dynamics and momentum, it has also highlighted an information and experience gap for agricultural producers who are new to the industry or producing for a different type of market—where they are essentially beginning new businesses. These newer marketing channels require entirely new production planning and implementation that begins with changing business structure and modes of production to meet consumer demand according to the various marketing outlets that will be used.

Demographic and economic changes have signaled a need for beginning farmer programs in several states. In this article we highlight the dynamics that led to forming and designing University Extension-based programs in Kentucky and Colorado. Beyond the concerns surrounding an aging farm population, current economic conditions and a keen public interest in food system dynamics have spurred a new cohort of young, and not so young, potential farmers and ranchers who require new models of outreach and represent a growing new cohort of stakeholders for Extension professionals. This new potential clientele group could become an emerging priority for Extension systems seeking to show relevance in an ever-evolving environment.

Both United States Department of Agriculture (USDA) Census of Agriculture and Agricultural Resource Management Survey (ARMS) data confirm an aging farm population—a growing concern for a wide range of agricultural organizations, institutions and those who advocate for the U.S. farm sector. For example, 30% of farm operators were over age 65 as of the 2007 USDA Census of Agriculture, and, there were more than five times as many farmers over age 75 as under age 25. At the younger end of the spectrum, 23% were under the age of 45 in 2002 compared to 18% in 2007, so it isn't clear whether there is a large enough cohort in place to be bequeathed, leased or sold agricultural lands and enterprises. Even so, about 20% of U.S. farmers are considered to be beginning farmers according to ARMS statistics.

Programming within the Kentucky Extension system is driven by a county issues identification process, whereby feedback from clientele is shared with local county extension agents as county plans of work are developed. During this process, concerns about the aging population of agricultural operators drove the issue of farm transitions to a high priority initiative for Kentucky extension programs. The “farm transitions” concept encompasses farmer retirement, next generation ownership/management transition, and new entry into farming. But what does that mean? Observers, from community and farm organization leaders to policy makers, want to address the perceived problem. Additionally, farmers and their families have asked extension agents for help in dealing with their own personal situations. With support at all levels, Kentucky developed a targeted farm transition program which specifically highlighted barriers to entry and exit of a farming operation. Experience from this program laid the groundwork for developing a more extensive program for beginning farmers.

Similarly, Colorado Extension personnel noted a significant shift in the types of backgrounds and interests among those bringing agricultural production and business planning questions to their county offices. Their backgrounds were less likely to be tied to a farm or ranch heritage and, although often highly-educated, their knowledge of agricultural production and business practices was limited. Initially, these new clientele were grouped into programs targeted at the small acreage population that is seeking high amenity lifestyles and has historically settled in Colorado. However, it became increasingly clear that these entry-level producers had far greater aspirations about

growing for direct markets, and quickly gaining the skills to run commercially viable farm enterprises. In short, some farm operators who would have been classified as lifestyle farmers in the past are now recognized as trying to gain the skills and capacity to quickly ramp up to operating small and medium farms with little or no dependency on off-farm jobs. This posed some new challenges and opportunities for Colorado State University Extension.

Cultivating Beginning Farmer Programs

As background, Kentucky has a very county-focused cooperative extension system. It has 120 counties, with at least one agriculture and natural resources extension agent in each county, and the support of more than 70 extension specialists—tenure-track faculty with a majority of their distribution of effort in extension—for the state's 83,000 farms. The existence of a local property-value based extension tax and local extension boards provides strong incentives for agents to respond to locally identified needs. Therefore, agents from this system who directly perceived the need, strongly supported state-wide efforts to address the broad farm transitions issue.

In Kentucky, the first programs related to farm transitions were targeted toward the transfer of farms from one generation to the next. With funding from USDA Sustainable Agriculture Research and Education (SARE) and the Southern Risk Management Education Center, both agent training and clientele-focused programs were implemented. These programs included financial planning, estate and legal dimensions of transitions, and intra-family communications. Based on both participant survey responses and program popularity, this topic is of great interest in the farming community. Programs focused on taking care of the retiring generation actually help create an emerging farmer gap, and new farmers are needed to fill this void. These replacements may come from the younger members of the retiring farmers' families or from new entrants to farming.

The Colorado State University (CSU) Building Farmers program (<http://www.extension.colostate.edu/boulder/ag/smallfarms.shtml>), launched in Boulder County in 2007, is the only program in Colorado that provides a proven route for succeeding in market farm production, management and sales. For example, evaluations show that three years after completing the Building Farmers course, 83% of participants reported that they had increased the range of products they grew and had made investments in infrastructure and equipment, with 73% reporting an increased customer base, and 67% reporting that they had a greater number of farm enterprises. In each of the four regions where this program has been offered, experienced CSU Extension field agents identified segments of the agricultural producer population where more focused and intensive education was needed to meet growing local demand for high-value, direct-marketed products.

The Beginning Farmer programs in Kentucky and Colorado were not created simply because new federal programming resources were available. Instead, it is the increasing demand and engagement of the new and transitioning farm clientele with county, regional and state Extension personnel that led to more targeted programming for this target audience. In Colorado, there was some lack of clarity on how this programming would connect with or be unique from longstanding small acreage programs, and it is an ongoing challenge to determine at what point landowners are transitioning to more commercial and profit-oriented enterprises.

What We Have Learned

The USDA Beginning Farmer and Rancher program was a catalyst and opportunity to respond to this clearly identified need. Kentucky had a very recent history of providing farm transitions programs—because of technical assistance provided to tobacco farmers—and an extension program model that could be adapted to the beginning farmer program needs. Although Colorado had fewer past experiences to emulate, there were national programs—such as California's Agriculture and Land Based Training Association (ALBA)—that offered clear examples of how to provide long-term education and support to new farmers.

Balancing the Roles of County Educators, State Specialists and Producer Educators

The most visible models from which to draw lessons about past successes in Kentucky were the "Master Cattleman" program and "Annie's Project", a management program for farm women. Both of these programs have similar characteristics. They use a multi-session curriculum, 10 and six sessions respectively; are organized by groups of county agents and taught primarily by state specialists, but with agents also actively participating in the instruction; charge a modest fee which is kept at the local/county level to provide support for educational materials, meals, and other materials; and are supported by state level, grant-funded extension associates under the direction of the project director who is a state extension specialist.

Kentucky's BFRDP—originally called “A Common Field” but now known as KyFarmStart—was developed with the direct involvement of extension agents. This was possible because of their familiarity with the model used, their own clientele-driven interest in the program area and their enthusiasm for implementing the program. KyFarmStart was created using weekly conference calls during the program development phase, and initiated with a face-to-face agent “training” which required a program redesign session and launch. The “redesign” was actually a means to ensure that the program, as implemented, fit the expectations of the agents who would be managing it at the county level.

KyFarmStart is inherently multidisciplinary due to the beginning farmers' diverse needs and the multi-county (local), agent-managed model. Sessions are needs-focused, rather than disciplinary in nature. Each group has a 12-session curriculum, beginning with whole farm planning and enterprise selection sessions, a session on soils and nutrient management, and another on marketing. The remaining six to eight sessions address production topics, and are a combination of classroom and field day experiences. Local stakeholders are extensively involved in these field days, which often serve multiple functions in the local extension programming.

Marketing, for example, is considered as a needed skill, not a discipline, where producers learn how to develop a marketing plan and a network of market resources. Establishing farm mission and goals is often taught by a dairy specialist. Production focused field days are designed to incorporate lessons learned in the soils session with the pragmatic skills of managing a pasture-based cow-calf enterprise. Agents and skilled, experienced farmers are often the most effective teachers, because they have the knowledge base and have integrated the skills, often unknowingly, needed for success in their chosen enterprises. About two-thirds of the KyFarmStart participants indicated an increase in their knowledge of specific skills as a result of participating in the beginning farmer program—similar to the program-wide results discussed in the introduction to this theme. As one participant said, “The (KyFarmStart) program showed me great resources and allowed me to network with other farmers with similar interest.”

Networking Producers and Engaging Experienced Farmers as Educators

Two key elements ensure that the CSU Building Farmers program provides a foundation on which new farm enterprises can thrive in each of the regional programs: networking among course participants and mentoring of beginning farmers provided by more experienced farmers.

To facilitate deeper interactions, Colorado's short course emphasizes community-building through shared meals, peer review of business plans and project reports and, where possible, tours of participants' operations. During the Colorado programs, these community building activities were noted as similarly impactful compared to the “capacity building” the participants' reported from the coursework in terms of knowledge gained and progress made toward operational goals. Thus, in each area where the program is implemented—local areas vary greatly in geographic size, but generally draw participants from about a 50 mile radius—it builds a strong community network of producers involved in direct marketing; local input suppliers of land, water, labor, capital, and equipment; and other resources that ultimately help the community better support small agricultural operations and strengthen the local food system. As a result, this model is being adopted throughout a new Western BFRDP, multi-state project including Washington, Oregon, Idaho, Utah, Nevada and New Mexico (see <http://buildingfarmersinthewest.org/> for more information).

New Models for Mentoring

Beginning farmers greatly benefit from active engagement of an experienced farmer mentor. In the case of market farms—direct sales of food crops and animal products both on and off farm through farmers markets, CSAs, restaurants, produce stands, and u-picks—the complexity of operations is a challenge for Extension staff to fully understand and convey to those learning these production and marketing systems. As mentioned earlier, using paid mentorships, the Colorado program began by linking program participants with a producer-mentor experienced in direct market production, management and sales to provide more market-tested advice than academic class materials.

More recently, as a next step in the classroom component of the Building Farmers Program, graduates who present a well-crafted business plan are eligible to apply for an internship—for those without a substantial production enterprise or experience—or mentorship. Mentorships are designed to provide on-call technical advice to a mentee starting a market farm, while internships provide an unpaid opportunity for new farmers to work on an experienced producer's farm. The mentors and the local extension agent meet and review applications to determine the matches for the season's internships and mentorships. The mentor then acts as a consultant throughout one planning and growing season to help the mentee successfully implement his/her business plan developed during the previous fall

classroom sessions. Mentors working with interns are paid \$1875 for the season and mentors working with mentees are paid \$625 for the season.

To amplify the learning of all mentees, they may access all of the mentors in service with mentees that season, not just their primary mentor. This allows them to tap the vast knowledge and diverse experience and production systems from the pool of mentors. The service period for mentorship is usually February through October and for internships, April through September. Both interns and mentees are required to write a professional development plan that helps to focus their learning and wisely use the time of the mentors and internship supervisors. Interns and mentees are asked to develop these, when possible, with their mentor. These plans are then shared with mentors so that there is a common understanding of the participants' educational and business development goals at the onset of the season.

Initial Outcomes

At the end of the season, all participants complete a written evaluation to determine outcomes and impacts from the mentors, interns and mentees. Evaluations from the 2010 mentorship program show that mentees felt that they gained more information about planning than they had the previous year, as well as knowledge of soil fertility, postharvest handling and merchandising for direct sales. This demonstrates that the mentorships are flexible in terms of the mentees' potential learning outcomes. Mentees indicated that the skills they gained during the mentorship period would help them develop or update their business plans and explore new markets—key goals of the beginning farmer program. From the mentor perspective, mentors felt that they gained a new perspective on their own farming operations and enjoyed sharing their knowledge of farming with their mentees. Mentors felt that the compensation for their time was appropriate and that their time was well-used by their mentees—all indications that the Colorado program management is responsive to the needs of all participants.

Kentucky also recognized mentoring as a critical component to the success of beginning farmers. However, the Kentucky program has developed a less formalized mentoring structure compared to Colorado. Traditionally mentoring in Kentucky has taken place in the context of family or community, but today many beginning farmers do not have the family or community connection as a resource when they begin farming. The Kentucky program has worked with beginning farmers to connect them with experienced farmers with a similar enterprise interest, so that they will have a mentor that understands the challenges, both production and financial, that the operation will face. This will assist producers in translating the knowledge gained in the classroom to on-farm practical experiences.

In Kentucky, the monetary incentive for the mentor-farmer to participate is marginal, based on the assumption that mentor-farmers would participate out of altruistic motives to support the future of the Kentucky agriculture industry. The Kentucky program initially outlined a simple mentoring program, but subsequently the mentoring model was expanded to encompass several different models, based on county agent and participant feedback. Instead of offering only one-on-one mentoring, the expanded options include family mentoring, group mentoring based on specific enterprises and, in some cases, institutional mentorship. Furthermore, working with Kentucky State University professional and paraprofessional staff, the group has been able to offer targeted mentor support to beginning farmers who are African-American, Mennonite, limited-resource, small in terms of gross farm sales, and female. Their outreach activities have included one-on-one education on the farmer's operations, educational outreach meetings for beginning farmers, educational workshops including monthly "Third Thursday" educational workshops on farm management, marketing, and farm enterprises, and mentorship programs coupling existing farmers with beginning farmers in the targeted counties.

To supplement the University of Kentucky and Kentucky State University's formal mentoring and one-on-one training programs, the KyFarmStart program has partnered with two nongovernmental organizations, the Kentucky Beef Network and Kentucky Women in Agriculture to identify mentors and host mentoring events.

Beginning Farmers Bring Diversity

One unforeseen benefit from beginning farmer programs is that they draw in a diverse, and often new, audience whose composition varies by region. This represents new opportunities for Extension Agents and Specialists to develop outreach strategies that help them to more directly target the needs of this emerging client group and be more successful. For example, each year the Colorado programs accept participants who are launching a second career in agriculture, either from a completely different background or from a different type of agricultural production system. These participants may come from corporate backgrounds such as marketing or technology, but want to transition into a new, more rural lifestyle that creates value-based linkages in their community, or they may want to transition into a new business model such as direct marketing food and food products to consumers.

Kentucky reports similar experiences, where its beginning farmer program not only attracts new clientele groups, such as second-career farmers, but also generates interest among younger clientele who will hopefully be the future extension leadership. Initially, anecdotal data suggested that a majority of program clientele would not be the stereotypical young farmers, under age 30, and that has proven true. Initial KyFarmStart participant analysis shows that 9% were under 30 years old, 18% were in the 30 to 45 age group, 40% were 46 to 60 years old, and 33% were age 60 or older. The backgrounds of the participants were equally diverse, with beef cattle, vegetables, sheep/goat production and forage production representing the most common industries. Twelve percent of the participants were limited resource farmers with gross farm sales not exceeding \$150,000 and a household income of less than \$25,000. This diversity obviously created a challenge in curriculum design.

The Colorado Building Farmers Program serves as a springboard for younger individuals involved in 4-H and FFA (formerly Future Farmers of America) to advance their connections to agriculture in ways that were unavailable five years ago. With experience and an interest in agriculture, these youth-based programs are a natural new client base for beginning farmer programs, primarily as participants who want to start their own specialty production agriculture businesses and explore new market opportunities. These young farmers and ranchers bring innovative marketing ideas and energy, as well as a link to the generation that still retains most of agriculture's productive land and water resources. By demonstrating the viability of managing smaller-scale, direct market operations, these younger individuals may also help to retain land and water in agriculture, for future generations.

Expanding the Resource Base for Agriculture

The beginning farmer classroom component gives these new farmers a chance to test their interest in and commitment to agriculture as a profitable, commercial business rather than a recreational or hobby pursuit. The process of developing the foundation for a complete business plan allows participants to identify their goals and capabilities for a production agriculture business. As they advance through the course, they also have the opportunity to interact with experienced producers who can identify key production and business management practices for direct market enterprises, such as keeping accurate records that trace the product from preseason planning to marketing, or useful equipment for different scales of specialty crop production.

For those participants who are transitioning from a different agricultural production and/or marketing system such as larger scale crop or livestock enterprises, the beginning farmer program provides community resources not always applicable to commodity production and marketing systems, and links them to the market farm community of producers and potential market outlets. Without these connections and resources—such as information on locating land, labor, seeds, transplants and other inputs—it would be more difficult to help commodity producers transition into specialized crop or livestock production.

Closing Comments

The information and experience gap for young, beginning and transitioning agricultural producers includes production and business skills. While some producers are transitioning to new production and marketing practices, other producers are entering agriculture for the first time and want to respond to emerging markets. But previously, there were few technical assistance offerings for smaller-scale, direct-market oriented operations. So, new planning for agricultural Extension programs may include activities that could help new operators grow sales, plan for better efficiency, target appropriate customers and marketing channels, and ultimately, improve the likelihood of profitability in the long run.

The key indicator of program success is the long term financial viability of the beginning farmer clientele, and there is limited evidence that these programs are helping to move participants in the right direction. Indeed, a three-year assessment of Boulder County, Colo. program participants showed that, by the third year, farmers had significantly increased their average sales as a medium term outcome toward commercial sustainability, while making modest capital investments. Based on outcomes from Colorado pilot programs, and the steep learning curves perceived, project coordinators expect to keep seeing improved knowledge among all participants, and documented business plans developed by at least half of the project's beginning farmers.

In Kentucky, the level of involvement in the farm business increased dramatically for participants. The program met expectations for 97% of the participants, and over half intend to participate in a subsequent mentoring program. As a result of participation in the KyFarmStart Program, 65% of participants indicated an increase in knowledge by at least one category on a Likert scale—where participants specified a level of agreement with a statement about their own

learning. A majority of Kentucky participants also agreed that they were in a better position to network and use government resources after completing the program, but only about one-quarter had developed a farm business plan.

Stronger networks and awareness of resources was an intended outcome, and feedback from community resource partners in Colorado suggests these outcomes are being realized. Colorado participants note that at least 10% of program “graduates” will have made such significant progress on their business plans that they will be able to acquire additional capital, land, or financing; establish new markets such as farmers markets, CSAs, or chef accounts; or complete the requirements to participate in government programs such as NRCS, FSA, or value-added loans within 18 months of completing the course.

Community linkages are also important in recruiting some participants. As a unique aspect of the Kentucky program, project leaders partnered with two community social services organizations, Catholic Charities and Americana Community Services, to serve the refugee community. This is an urban/community garden-focused group, comprising 50-60 participants from nine ethnic communities. Most of the participants have some farming experience and are learning how to adapt their skills to an Upper South, urban ecology. Although, the initial program may not have targeted this specific audience, it clearly demonstrates the need for flexible programming and responding to the needs of clientele.

An interesting question emerged during the delivery of the KyFarmStart program: how do we account for and understand the reasons for participant attrition? In general, the Kentucky program was designed to help beginning farmers develop a farm business plan and evaluate the actual viability of their specific plan. Therefore, if producers “drop” from the program because they realize that embarking on a new agricultural venture is not as easy or financially possible as they initially perceived, then this should be viewed as a success of the program, potentially preventing a future farm failure. Kentucky’s hope is to address this specific question in the post-program evaluation: why do participants drop out of KyFarmStart? The goal of program leadership is to know how much attrition occurs because clientele learn enough about farming to decide that it is not the life for them and/or perhaps that farming does not justify the investment they would have to make, financially or otherwise.

This became a question of interest because the attrition rate was higher in one specific group, which had the largest numbers of “explorers” or those individuals currently considering a possible career in farming. Colorado has seen less attrition—typically less than 15% according to follow-up surveys—which may be due to an application process which compels participants to explain their goals and why program participation is important for their business development and sustainability.

On the other hand, Colorado Extension agents are more concerned with developing Building Farmer programs in regions of the state that are less connected to high value, consumer markets in urban areas. This entails cultivating demand through consumer market development and/or increasing supply by developing concentrations of market farm producers in more rural areas—an evolution which is slowly occurring as farmers’ markets emerge in rural counties and larger scale buyers have to seek more distant suppliers.

Comments similar to these by Colorado Building Farmers program graduates provide positive feedback: “This is a fabulous course with lots of great experienced farmers supporting the system... I found it extremely valuable and felt that I made connections within my community that are irreplaceable!” By carefully adapting the Colorado Building Farmers and KyFarmStart programs to each locale, the programs create a foundation for success that lies not only in the business management skills that participants gain, but also in the farm community networks that will support those new businesses in the future.

For More Information

Colorado Building Farmers website: <http://extension.colostate.edu/boulder/ag/smallfarms.shtml#cbf>.

Kentucky FarmStart website: <http://www.ca.uky.edu/kyfarmstart/>.

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