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Farm Incubators - Creating Entrepreneurial Relationships to Support Prosperous Food Networks

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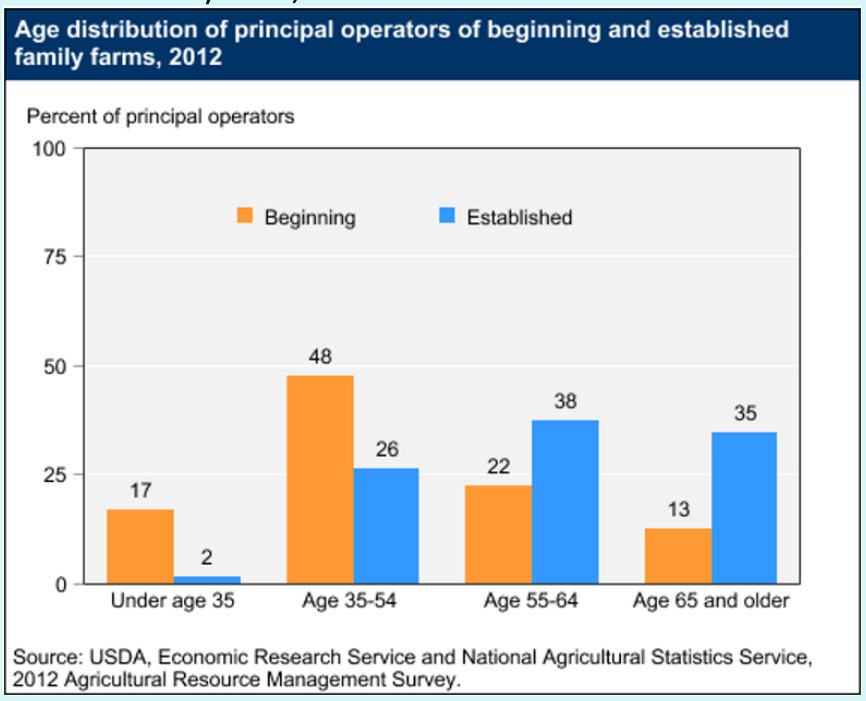
The Breeze Farm in Orange County, North Carolina, represents a growing trend in the United States of those without a farming or ranching background entering a career in farming (North Carolina Cooperative Extension, 2018). Started in 2008, Breeze Farm is an incubator program, supported by North Carolina Cooperative Extension and public–private collaborative funding, Breeze Farm provides a place for farm enthusiasts to test out skills and markets. Land, tools, infrastructure, and services are available as a part of the lease, which significantly reduces the start-up burden for many beginning, small-scale farmers. Participants of the Breeze Farm program complete a business-planning course, then take their knowledge to the field through the incubator lease agreement. Breeze Farm tenants stay 3–4 years on average, then transition out of the program. The majority of the participants use organic and other conservation practices. The program participants also have the option to bring their own tools and equipment such as a small tractor. Beyond receiving technical support, participants have opportunities to introduce new crops to diversify the local food scene or provide for ethnic demand, as well as to exchange information and experiences to support each other. The Breeze Farm incubator is a place where food networking begins!

Figure 1. Age Distribution of Principal Operators of Beginning and Established Family Farms, 2012



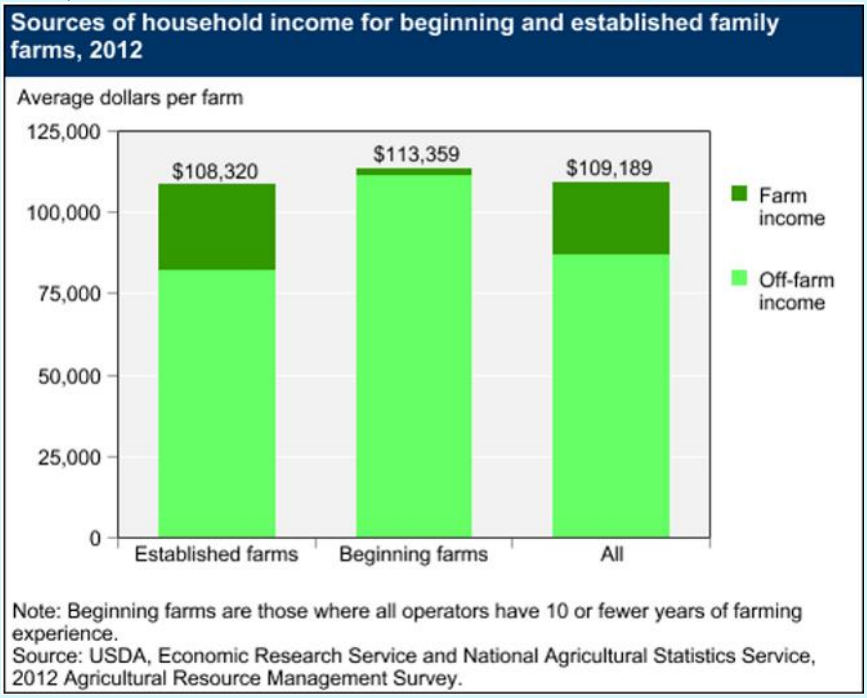
Source: Source: USDA Economic Research Service, 2017.

Beginning Farms and Farm Incubators in the United States

The U.S. Department of Agriculture (USDA) defines a beginning farmer as a farmer or rancher with less than 10 years of experience operating a farm or ranch (USDA, 2017). In the 2012 Census of Agriculture, approximately 17.2% of family farms were categorized as beginning farms, and these beginning farms were more likely to operate at a small scale than

established farms. The majority of beginning farm operators were younger and had acquired more education than established farm operators, and they relied more on off-farm income than established farm families (USDA, 2012; USDA, 2017). Beginning farmers could be found across all categories of age, gender, race, and ethnicity (see Figure 1). Research had also shown that beginning farmers were more likely to adopt best management practices or innovative technologies while considering environmental impacts (Inwood, Clark, and Bean, 2013; Caswell et al. 2001; Nickerson and Hand, 2009). With strong encouragement from the USDA Beginning Farmer and Rancher Development Program and the local food movement, it is likely that more retirees, veterans, and other citizens will seek farming opportunities. Some common challenges for beginning farmers and ranchers include lack of support in career transition and lack of access to resources such as land, labor, capital, government programs, and networks (see Figure 2) (Ahearn, 2011; Ruhf, 2001).

Figure 2. Sources of Household Income for Beginning and Established Family Farms, 2012



Source: Source: USDA Economic Research Service, 2017.

Many community organizations have established farm incubator programs to respond to the growing interest among beginning farmers. Similar to a business incubator, a farm incubator offers exclusive use of affordable shared space, well-organized and intensive training, and shared infrastructure such as tools and equipment. Program participants pay a fee to lease land, access technical assistance, and acquire tools/equipment. Some farm incubator programs charge additional fees to cover custom work, pesticide application, or greenhouse rental, depending on the complexity of the program participant's goals. Most of the incubator farm programs require participants to complete a series of business-planning workshops prior to enrolling in farming activities.

Only a few farm incubator programs in the United States have operated for more than 10 years (Overton, 2014). The National Incubator Farm Training Initiative (NIFTI) was established in 2012 through a collaboration between New Entry, the Intervale Center, the Minnesota Food Association, the Agriculture and Land-Based Training Association, Cultivating Community, and the International Rescue Committee (NIFTI, 2016). NIFTI offers toolkits to support farm incubators and conducts annual surveys to gathers information across the country to establish and maintain a database for all farm incubators. NIFTI also operates a farm incubator training program to include farm business-planning courses, access to farmland and infrastructure, one-on-one technical assistance, on-farm field trainings and workshops, and other technical assistance such as identifying markets and transition off the incubator farm site (NIFTI, 2016).

According to recent survey information provided by NIFTI, there are approximately 220 farm incubator programs in the United States—up from 62 in 2013—representing almost 20,000 acres of agricultural land (Overton, 2014; NIFTI, 2016). The majority of funding for these farm incubators comes from federal or foundation grants. About 70% of land was leased to operate the incubator programs. Most farm incubator programs have no more than 2

full-time and part-time staff members. Almost 60% of former program participants are still farming or working as primary farm operators (NFITI, 2016). The farmable acres and size of plots vary significantly among farm incubator programs depending on location and availability. Only a few are certified organic, while others practice organically or are undergoing the process of becoming certified based on program participants' preferences.

The majority of program participants use the food they grow for their own consumption, donate produce to charity organizations, or share with others. Most program participants have some prior farming experience, but this is not a required component when enrolling in many farm incubator programs. Program participants have very diverse demographics and operating categories, similar to the profile of beginning farmers in the United States as reported by the USDA. Interestingly, many program participants are non-English speakers, but only a few programs offer multilingual programming and support. Marketing channels for farm incubator participants include Community Supported Agriculture (CSA), farmer markets, food hubs, schools, and food co-ops (Overton, 2013; NIFTI, 2016). Some of the most popular training topics include business planning, marketing, farm management, crop production, and sustainable practices. Most farm incubator programs face challenges in funding, infrastructure, and staffing. (NFITI, 2016)

Challenges and Implications

Farm incubator programs introduce a new way to engage farmers in food networks to enhance relationships between farms and communities. Some program participants have limited prior farming experience, so becoming a farm operator represents a new career choice for them. It could also be a daunting task for beginning farmers to learn everything from production to field management, marketing, and financial analysis in 3–5 years, the average length of time supported by farm incubator programs. While beginning farmers receive benefits to obtain affordable experiential learning opportunities from the farm incubator programs, they are also encouraged to test innovative ideas and explore new opportunities to serve their communities. Program participants often develop a sense of community and appreciation to support each other by sharing information and stories (Overton, 2014). With guided support, participants would be more likely to sustain a collaborative interest to help others by being actively engaged in local food movements. Farm incubator programs seem to serve an important role in motivating entrepreneurial relationships to support a new paradigm of co-independent decision-making processes within a food network (Liang, 2018).

Beginning farmers have become a focal point of several agricultural policies, and many policy makers believe that beginning farmers are critical to rural development and food security (Ahearn, 2011). Farm incubator programs support the interests of beginning farmers across age, gender, education, experience, race, and ethnicity. However, there are many challenges and policy implications to consider:

- The top challenges faced by most farm incubators are lack of funding, lack of access to infrastructure, and lack of staff. Since most programs receive funding from government agencies or foundations, there is a need to assist farm incubators to seek private–public, collaborative-funding opportunities. Private enterprises could also contribute to 1) technology and staff development by offering training and education, 2) volunteer and mentoring services, and 3) fundraising support to host events.
- Many farm incubator participants are non-English speakers. Dealing with language barriers will be critical to support both program staff and participants.
- The locations of farm incubator programs may or may not fulfill the need to stimulate rural development or to balance the rural–urban divide.
- Small-scale beginning farmers are more likely to produce more than 20 types of crops at the same time. Promoting and supporting niche products through incubator programs to accommodate diversification may be a way to improve profitability.
- There is a need to support farm incubators in designing, developing, and delivering scale-relevant technology. New technology like hydroponic production, aquaponics production, and GIS-guided smart farming systems will be essential for a new generation of farmers.
- There are discussions about the growing interests in ethnic markets, food as natural medicine, and other types of use of food in the health service industry. Farm incubator programs could offer training and support for beginning farmers to explore and access information to create new opportunities.

- Farm incubators need to include educational materials for customers to identify and properly use specialty crops and niche products. Developing apps or web-based information platforms are good examples.

Summary

Farm incubator programs offer shared resources and opportunities to support beginning farmers. These programs also support participants to develop entrepreneurial relationships which strengthen the capacity and functions of regional food networks. This article discusses the challenges faced as well as the opportunities provided by incubator farms, including suggestions as to future changes these programs might take to improve the success of their beginning farmer participants.

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