

Extension Education

Linking Research and Practice: The Role of Extension on Agritourism Development in the United States

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Abstract

Agritourism is a critical farm diversification strategy for farmers to enhance income and profit potential with benefits related to rural community development, increased awareness of sustainability practices, and local heritage preservation. For rural community and economic development professionals, agritourism has become an important strategy to develop local tourism, grow small businesses, and enhance regional economic diversification. We propose that the agritourism ecosystem would arguably benefit from more robust Extension programming and network development. A discussion of two state case studies, Vermont and California, provides an overview of the critical elements necessary to build a statewide agritourism program. The role of Extension in rural development and tourism underscores the opportunity to utilize agritourism as a broader development strategy. Finally, we make recommendations for growing the role of Extension in agritourism. More robust training and education for Extension professionals, stronger connections to state tourism departments, and more robust advocacy with university and state-level decision makers on the value of agritourism investments are all highlighted as crucial next steps.

1 Introduction

The term “agriturismo” was coined in Italy in the 1980’s and was adapted for use in the United States and around the globe to address concerns of farm viability and rural community vitality (Lamie et al. 2021). As agricultural producers are faced with volatile commodity sales and increasing input prices, farm owners and managers, especially operators of small- to medium-sized farms, are looking for ways to diversify their income streams. In addition, as the share of consumer income spent on food has been decreasing over time, resulting in less profit potential for producers, consumers’ interest in the experience economy has increased (Pine and Gilmour 2019), as shown in Figure 1. The rising interest in experiential tourism creates potential strategic advantages for agriculture and tourism alike, especially within the multifunctional and post-productivism view of agriculture and the intersecting interest and concern for sustainability.

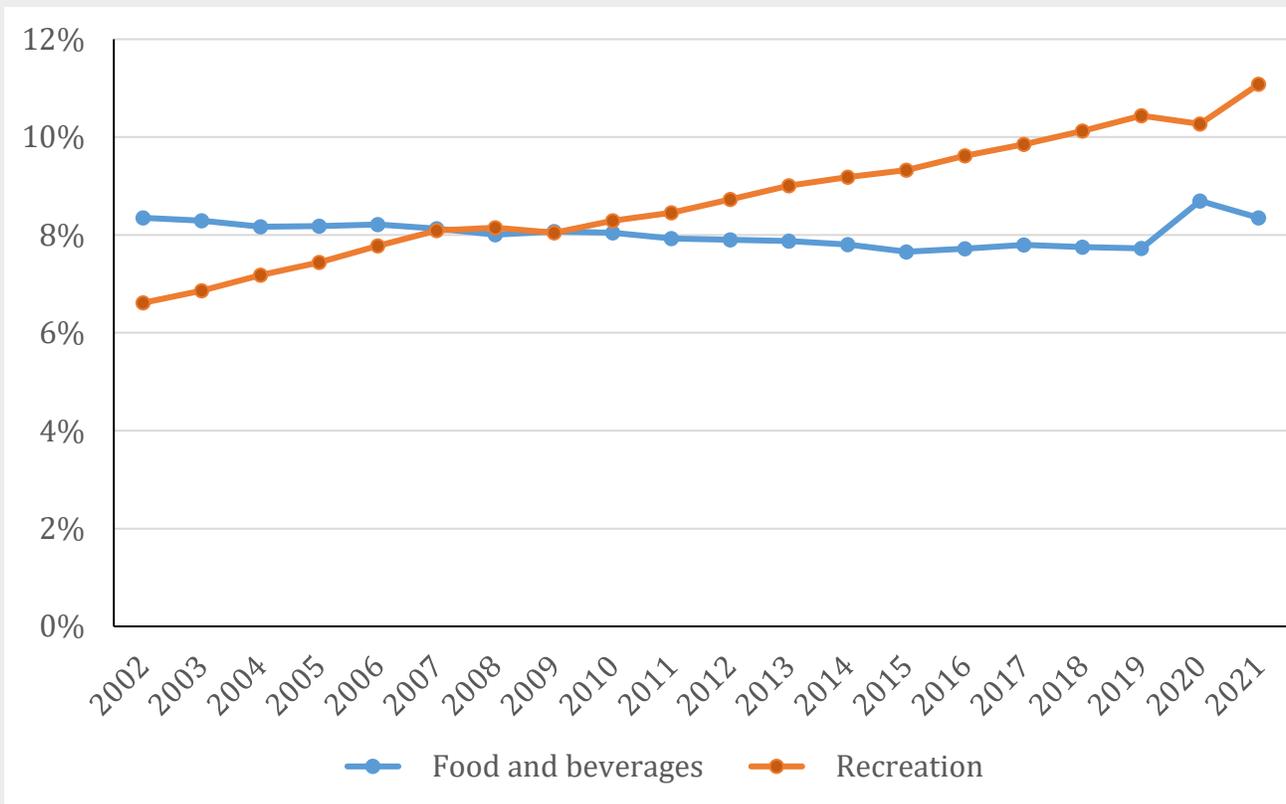


Figure 1. Percentage of Household Consumption Expenditures (Chained \$2012)

Source: BEA (Real Person Consumption Expenditures by Major Type of Product and by Major Fuction)

As a “consumer-driven innovation” (Van Sandt, Low, and Thilmany 2018, p. 592), research has shown that agritourism can be a driver of rural economic growth and leverage the growing outdoor recreation and tourism economy in the United States (Thilmany et al. 2019). Agritourism is a farm diversification strategy oriented toward sustainability and community-based tourism, representing a novel hospitality strategy grounded in sustainable development values (Palmi and Lezzi 2020; Barbieri, Sotomayor, and Gil Arroyo 2019). Abundant evidence points to the mix of economic (e.g., increase in revenues and paid jobs for family) and noneconomic benefits (e.g., heritage preservation of cultural traditions as well as heirloom products, decreasing social isolation) that agritourism brings to farmers and ranchers and their families (Barbieri 2013). Many of these benefits have a ripple effect on surrounding communities, as they stimulate the (re)vitalization of local businesses, help retain rural youth, and contribute to food sovereignty (Schilling, Sullivan, and Komar 2012). Agritourism also has a positive impact on visitors by promoting agricultural literacy as well as health and wellness. Beyond recreational gains (e.g., escapism, experiencing the farm lifestyle, being outdoors), agritourism improves visitors’ attitudes toward and intentions to purchase local foods, ultimately strengthening local food systems (Brune et al. 2021).

In many cases, agritourism is also conducive to protecting wildlife; conserving land, agricultural, and heritage resources; and adopting sustainable practices as a means to increase farm tourism appeal (Barbieri 2022). For diverse reasons, there is an increased interest in rural economic development and activities that can expand upon and complement traditional base industries (such as farming and forestry) and adjacent but complementary innovation and entrepreneurial activities (e.g., green energy, technology solutions). However, despite the benefits of business models rooted in innovation and sustainability and rising consumer interest, agritourism operators still face challenges of farm

profitability, farm sustainability, and farmer livelihood (Hollas et al. 2021). To address these needs, the Cooperative Extension System has developed integrated research and outreach efforts to support producers diversifying into agritourism enterprises. This paper begins with an overview of the ecosystem of agritourism operators in the United States, also highlighting the role and evolution of Extension programming around agritourism. Next, we provide two brief case studies from Vermont and California to illustrate the development and evolution of a statewide agritourism network. Then, we connect agritourism to key Extension efforts around rural development broadly, including supporting local small business clusters. We conclude with the next steps and a call for future agritourism programming efforts and investments.

2 The Ecosystem of Agritourism in the United States and the Role of Extension

Before we can address Extension specifically, we describe the landscape of agritourism support in the United States. We then describe the role(s) Extension has played in this development and how well Extension is positioned to provide meaningful support going forward.

2.1 Tracking Agritourism Development in the United States

Agritourism – sometimes referred to as agricultural tourism, agrotourism, or farm tourism – does not have a consistent definition throughout the United States, although a frequently cited definition is “farming-related activities carried out on a working farm or other agricultural settings for entertainment or education purposes” (Gil Arroyo, Barbieri, and Rich 2013, p. 45). There is disagreement about the boundaries and characteristics of agritourism, including the setting, types of experiences, and characteristics of visitors. At the core of agritourism are experience and product sales offerings that take place on a working farm or ranch and are deeply connected to agricultural production (Chase et al. 2018). For example, visiting an apple orchard to pick your own apples, touring a sugarhouse to learn how maple syrup is made, or having dinner on a farm using that farm’s products are all considered core agritourism activities. In contrast, peripheral activities, that may take place on a working farm or ranch but may not be deeply connected to agricultural production, are not typically considered agritourism. For example, gatherings on a farm for a family reunion, wedding, or another event that does not use the local farm products and does not include education about agriculture would be considered peripheral. In addition, any activity that does not take place on a working farm or ranch, even if connected to agriculture, would also be considered peripheral (e.g., harvest festivals, farmers markets, and agricultural fairs that do not take place on working farms or ranches).

The United States Department of Agriculture (USDA) National Agricultural Statistics Service (NASS) Census of Agriculture, which is conducted every five years, is, by its own definition, “the only source of uniform, comprehensive, and impartial agriculture data for every county in the nation.”¹ However, the two questions that are meant to capture agritourism and direct sales² have limitations. The “agritourism and recreational services” question is subject to interpretation by survey respondents who may not understand the full breadth and scope of agritourism activities and may not consider themselves

¹ See: USDA NASS FAQ: <https://bit.ly/3Q9pz03>.

² In the questionnaire for farms and ranches, two questions were included that pertain to agritourism (USDA NASS Census of Agriculture 2017):

(1) “Report the gross dollar amount received before taxes and expenses in 2017 for income from agritourism and recreational services, such as farm tours, hayrides, hunting, fishing, etc.”

(2) “How much was received in 2017 for the food produced and sold directly to consumers: farmers markets, on-farm stores or farm stands, roadside stands or stores, u-pick, CSA (Community Supported Agriculture), online marketplaces, and so on? Include edible agricultural products for human consumption. Exclude nonedible products such as hay, cut flowers, Christmas trees, nursery products, and so on; commodities produced under production contracts; products purchased and resold.”

included as it is described. The NASS “agritourism” question understates the broader concept of agritourism that includes on-farm direct sales and a wide variety of activities on working farms and ranches that are deeply connected to agriculture. For example, overnight farm stay hosts may not consider themselves as “agritourism” by the limited NASS wording and may not include their income in this question (or anywhere on the Census of Agriculture). Direct sales of farm products are expressly excluded from the “agritourism” question. This means that sales from a u-pick operation or the maple syrup that a visitor bought after a free tour of a sugarhouse would not be captured as “agritourism.” The NASS question about direct sales is focused on edible agricultural products for human consumption; however, there are problems using these data to understand the direct sales component of agritourism. For one, it is not possible to distinguish between on-farm and off-farm direct sales. Another problem is its delimitation to “edible agricultural products for human consumption,” which excludes Christmas trees, ornamental plants, and fibers that may be important components of agritourism for some farms and ranches. As an example, visiting a Christmas tree farm and cutting their own tree is a tradition for many families and a primary source of income for Christmas tree farms in several regions of the United States.

As agritourism grows throughout the United States, a strong case can be made for the collection of detailed data related to the many facets of on-farm experiences and product sales as well as off-farm agricultural experiences and direct sales. Anecdotal evidence suggests that much of the income from “agritourism and recreational services” reported in the USDA NASS Census of Agriculture results from hunting in rural areas in the Southern part of the country including Texas. In contrast, farm tours may be a higher percentage in the Northeast and West Coast (Tew and Barbieri 2012). This level of detail is not currently available from the Census and would be of great interest for research and Extension programming if the USDA NASS were to collect this information regularly.

Nevertheless, the USDA NASS Census of Agriculture currently is the most comprehensive database representing producers throughout the country. According to the 2017 census, a total of 130,056 agricultural producers (6.4 percent) sold US\$ 2.8 billion of agricultural edible goods direct to consumers. Additionally, US\$ 949 million was earned by 28,575 agricultural producers for “agritourism and recreational services.” Combined, agricultural producers earned US\$ 3.8 billion, with 25 percent from agritourism and 75 percent from direct sales. Using the Census of Agriculture data, the spatial distribution of counties with agritourism activity (exclusive of direct sales) across the United States is illustrated in Figures 2 and 3. These figures show the change in the share of agritourism revenue from the 2007 to the 2017 Census. An interesting trend is that this activity is increasingly moving toward the coasts. However, the reasons for the difference in growth patterns across counties and regions is largely unknown. Van Sandt et al. (2018), when examining the determinants for agritourism hot spots, actually found that these are more likely to be located in areas with less population. The share of agritourism income appears to be decreasing in Texas, where anecdotally more hunting is offered than the “typical” agritourism activities, and it is increasing in the Northeast. While certain locational factors that benefit agritourism cluster development have been identified in previous NIFA-funded research (Van Sandt, Low, and Thilmany, 2018), more research is needed to determine the impact of sociodemographic factors, the regulatory and policy environment, and the extent of cooperation needed between local businesses and local government (i.e., farm operators and food businesses) as well as the role and impact of Extension.

Given the motivation, funding, and increased scholarship, Extension efforts focused on agritourism activities and impacts are no surprise. Developing agritourism comes with inherent burdens for agricultural producers, and a support system has emerged and evolved over time to enhance the business readiness of emerging entrepreneurial farmers.

2.2 Entrepreneurial Ecosystem

Transitioning to a service industry—tourism—requires attaining or strengthening a set of interpersonal skills (e.g., emotional labor), business competencies (e.g., customer service, direct marketing), and

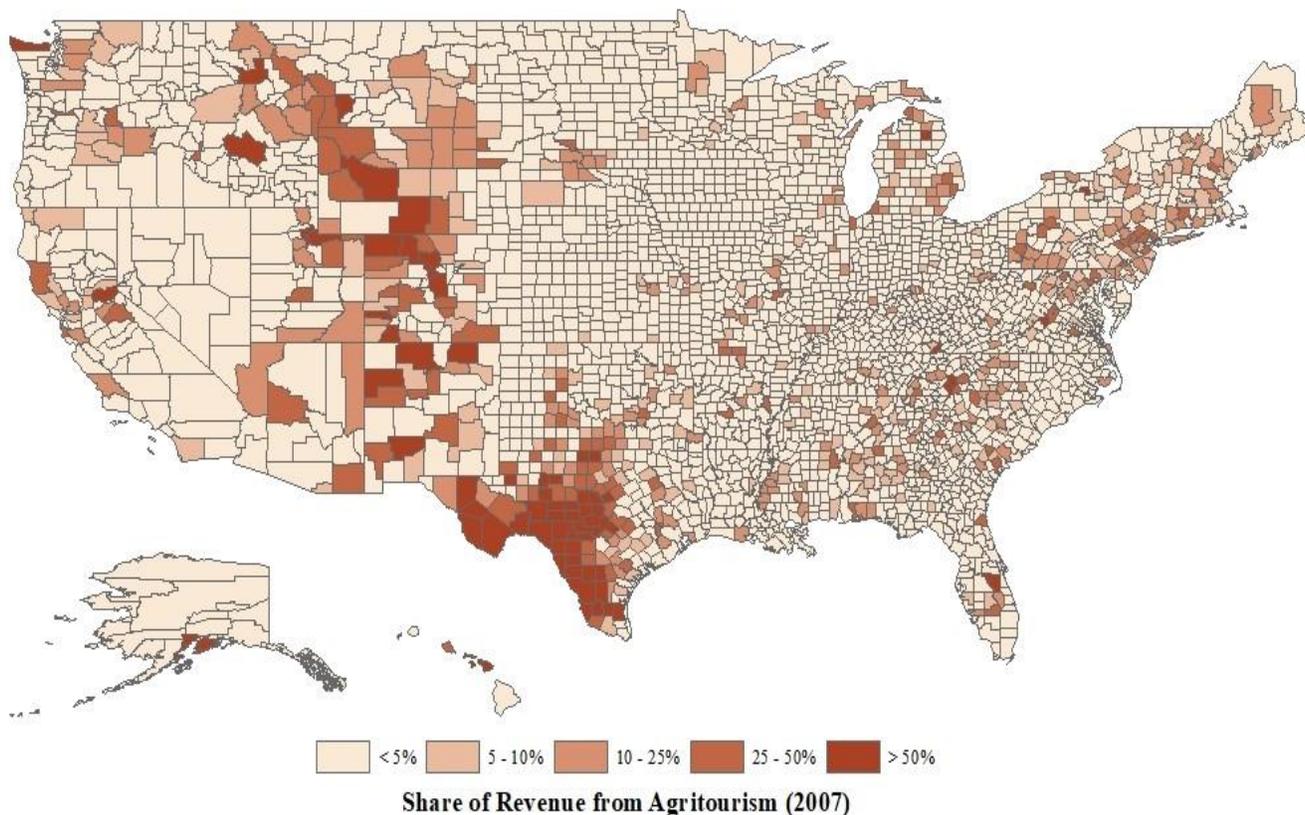


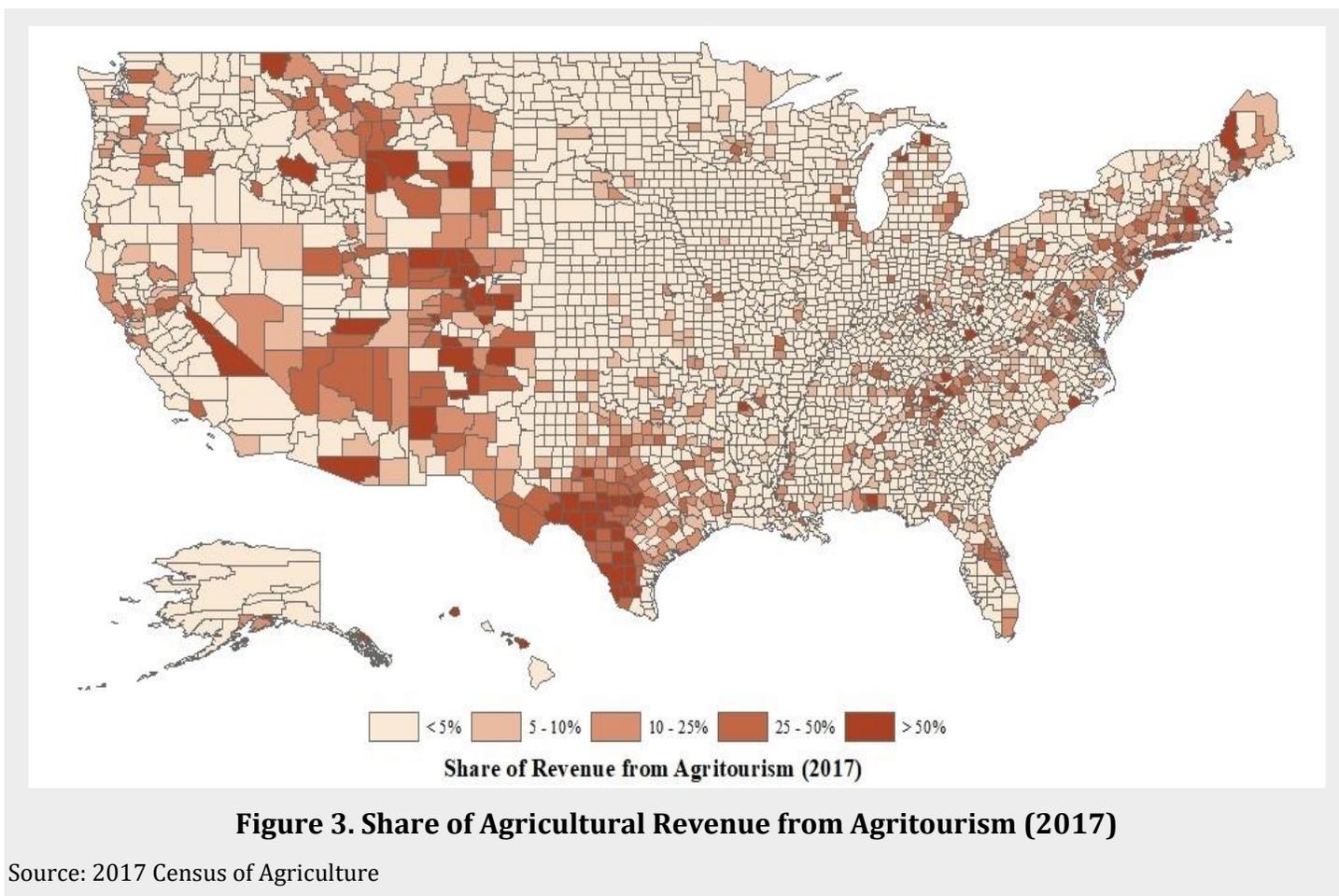
Figure 2. Share of Agricultural Revenue from Agritourism (2007)

Source: 2007 Census of Agriculture

networks beyond agriculture (e.g., specialty vendors, Destination Management Organizations) that farmers do not frequently possess (Sharpley and Vass 2006). The agritourism support system includes membership associations, tourism bureaus, private and nonprofit initiatives, municipal organizations, conservation authorities, Extension services, and others. However, these support systems are very different across the United States.

Membership associations, such as farmer-to-farmer associations, provide their members with a mix of private incentives that respond to individual needs (e.g., networking opportunities, referrals to suppliers) and public incentives that strengthen a common interest or industry, such as lobbying and setting up industry standards (Bennett 1998). Li and Barbieri (2020) found that agritourism associations provide private and public incentives to their members, which they classified in four groups: education (e.g., business advice specialized in agritourism), economic (e.g., how to increase profits), networking (e.g., events, professional development), and policy and advocacy (e.g., lobbying, public awareness of agritourism). Among these benefits, associations play a key role in building social capital and expanding business networks among agritourism farmers. Specifically, agritourism associations foster strong relationships and cohesive values among their members, which yields high levels of trust, cooperation, and reciprocity among members (Li and Barbieri 2020). Strong social capital and extensive networks are important to facilitate information sharing and resource mobilization among a group of people (Sebastian, Namsu, and Kerk 2009), and Extension specialists can be a catalyst to build producer associations at the state level.³

³ For example, Penn State Extension has been instrumental in developing the Pennsylvania Cider Guild.
<https://www.ciderculture.com/pennsylvania-cider-guild/>



State tourism departments have been traditionally tasked with marketing and promoting tourism in their respective states. These departments typically promote all tourism initiatives in their respective states, including large and small attractions located in urban and rural areas. In a review of state tourism organization websites, 20 of 50 states directly and thematically promote agritourism, while an additional five state tourism departments indirectly promote agritourism through site searches. In addition to the promotion of rural tourism and agritourism, many state tourism organizations are beginning to shift efforts to utilize marketing funds to assist in not only promotion, but also the development of rural communities through activities like agritourism. These examples include the Utah Office of Tourism and their “Utah Tourism” initiative, the Colorado Tourism Office and their Colorado Rural Academy for Tourism (CRAFT) program, and the South Carolina Office of Tourism and their *Undiscovered South Carolina* grant program (U.S. Travel Association 2018). The Ag and Art Tour is a Clemson University Extension collaborative effort that has grown dramatically over the past few years in South Carolina and illustrates the important intersection with state Extension professionals. In 2021, the Ag and Art Tour had expanded to 11 South Carolina counties over 5 weekends, including self-guided farm tours and local artisans.⁴ Efforts such as these allow Extension educators to collaborate with tourism professionals in their state to help shine a spotlight on agritourism businesses and initiatives and fuel rural development. In addition, county-based destination marketing organizations (DMOs) increasingly advertise agritourism operations on their websites and facilitate collaborations and trails between producers, often in collaboration with local business bureaus and conservation authorities.

⁴ See SC Ag and Art Tour: <https://bit.ly/3zd0Kdz>.

2.3 Evolution of Extension Programming

Given the varied nature of agritourism, including crop and livestock production, tourism asset development, retail hospitality service management, and other activities, there is no doubt that the knowledge base necessary for developing high-quality Extension programs requires an interdisciplinary approach. However, at the same time, it requires Extension specialists to bring these resources together to synthesize and share with their clientele. Extension has the ability to assess technological potential and curate examples and relevant applications that busy farmers may not have the time to do.⁵ However, producers in these communities often turn first to their state's Extension service despite the availability of online resources from Extension services across the country. As farmers look for information on diversified agritourism options, providing state and regionally relevant information is especially crucial for understanding the local agricultural production options (e.g., lavender, maple syrup). In addition, the legal constraints and business requirements for these activities (e.g., farm stays, recreational activities) can differ significantly across states, further highlighting an additional role for Extension.

Figure 4 shows currently active agritourism Extension programs in the United States, which provides only a snapshot of current programming.⁶ We define an active program by having at least three of the following criteria: recent (or regularly updated) Extension articles that are accessible to agricultural producers, educational materials written specifically for this state, a dedicated contact person, or regularly trained multiple agents/specialists and programming in the past three years (green). The light green states indicate programs that are currently under development. The focus of Extension business personnel in the Midwestern states could be contributing to the slower growth of agritourism in those parts of the United States. In addition, funding opportunities (discussed further in the next section) in the North Central region may demonstrate less focus on agritourism, though this cannot be confirmed without data on submitted proposals.

2.3.1 Funding of Agritourism Extension

Since agritourism is a relatively novel research and Extension area, funding at the federal level started about 20 years ago. From 2006 to 2020, USDA's National Institute for Food and Agriculture (NIFA) funded 11 projects with a total value of about \$2.56 million.⁷ These projects are mostly integrated projects, meaning that they have a research and Extension component. One of these projects is highlighted in section 3.1. Grants from Extension Risk Management Education Centers (ERME)⁸ and Sustainable Agriculture Research and Education (SARE) have been instrumental in helping Extension specialists develop agritourism programming in their states. Since 1997 SARE has funded 18 agritourism projects nationally through its four regions for a total of \$1.1 million. The Southern region had the most projects funded (6), and 38 percent of the total funding, closely followed by the Northeast (five projects, 33 percent of funding)⁹; the Western and North Central regions tailed with four and three projects, respectively, and securing slightly less than 30 percent combined. Since 1997, there were only three years (2008, 2010, and 2016) that the SARE program funded more than one agritourism project; in 11 of these years, there were no agritourism projects funded. The USDA's Risk Management Education Center has funded 27 agritourism-focused projects since 1997, with almost 50 percent of the funds going toward

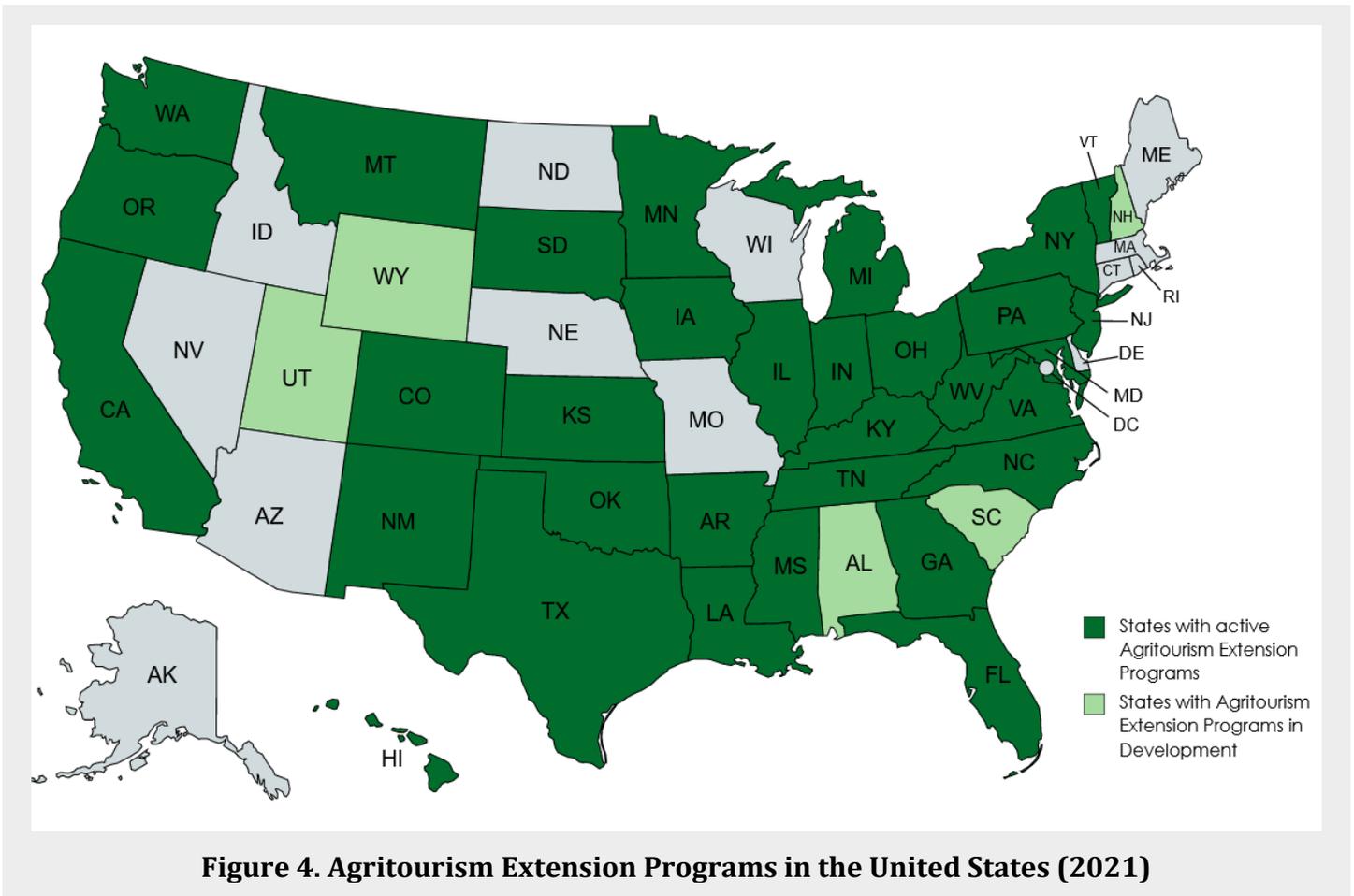
⁵ See for example University of Vermont's Extension "Comparison of Farm Stay Listing Sites": <https://bit.ly/3apzZlh> and Lamie, Barkley and Markley (2011).

⁶ We determined that status using website searches and contacting Extension specialists in the respective states.

⁷ Reference database. <https://cris.nifa.usda.gov/cgi-bin/starfinder/>. We searched the database for projects that had the name agritourism in their titles.

⁸ ERME was established in 2001, and the centers are funded through the USDA NIFA (<http://www.nerme.org/>).

⁹ A multistate project (NJ, VT, DE, and ME) led by Rutgers University has developed educational material that is widely used by Extension services in the Northeast: <https://agritourism.rutgers.edu/training/>; https://projects.sare.org/sare_project/ene11-121/.



Western projects. Further funding is provided by programs like the State Departments of Agriculture Specialty Crops Block Grants, USDA’s Beginning Farmer and Rancher Development Program, Rural Development Centers, Community and Economic Development, and USDA Rural Business Development Grants.

To better understand the landscape of agritourism Extension programs, the following section discusses two agritourism Extension programs—in Vermont and California—and how these began and have been sustained. While these states on opposite coasts are just two of the many examples of Extension programming supporting agritourism throughout the United States, they both benefit from large urban populations within a day’s drive. As agritourism grows throughout the nation, different factors may contribute to the success of agritourism operations, such as the farm scale, product mix, agritourism offerings, and experience and gender of the operator (Hollas et al. 2021). These differences across states and regions have varied impacts on the relative needs of Extension programming to support agritourism operations (Hollas et al. 2022).

2.3.2 Agritourism Extension in Vermont

Beth Kennett of Liberty Hill Farm in Rochester, Vermont, played a leading role in helping agritourism spread throughout Vermont and the United States. Her dairy farm began hosting overnight guests in the 1980s as an income diversification strategy as milk prices plummeted (Chase and Grubinger 2014). A few years after her successful farm stay business was launched, she was contacted by a University of Vermont Extension specialist in community and economic development, who told her that she was on the leading edge of a national movement called agritourism. Their collaboration over the coming years led to the creation of the nonprofit organization Vermont Farms! Association. The organization was established to

provide educational opportunities about agriculture to the public as well as to sustain and further develop the rural working landscape that characterizes Vermont. Key principles for Vermont Farms! Association membership are for farms to be engaged in agriculture and that the farms were insured properly and took safety and regulation seriously. These elements set a standard that led to the development of Vermont's agritourism reputation as an authentic, educational, and safe experience for visitors of all ages (Kennett, personal communication, 2021). The collaboration between the University of Vermont Extension and Vermont Farms! Association continued as the organizations partnered to develop resources, offer training, and provide marketing support for agritourism in Vermont and around the country, as other states became interested in agritourism. Over time, Vermont Extension, Vermont Farms! Association, and other partner organizations developed the Vermont Agritourism Collaborative,¹⁰ which provides resources and training for producers and service providers. Today, the Vermont Agritourism Collaborative works closely with the Vermont Tourism Research Center¹¹ and the National Extension Tourism Network to integrate agritourism research and Extension outreach. Vermont's experience illustrates the importance of collaboration, along with the value that Extension can play in state agritourism efforts.

2.3.3 Agritourism Extension in California

During the 1990s, pressures of urbanization led to San Francisco Bay Area farmers' interest in alternative approaches to maintaining profitable agricultural enterprises. The agricultural area is uniquely positioned geographically as over 4.5 million visitors travel to the Point Reyes National Seashore annually and being situated within one hour's drive of the approximately 7 million people who live in the Bay Area. These factors prompted Ellie Rilla, director and farm advisor of the Marin County University of California (U.C.) Cooperative Extension to conduct research into agritourism programming. Her work included learning about farm tourism practices through visits and interviews with 100 farmers and host agencies in England and East Coast states (Rilla 1999). This cross-fertilization of knowledge and ideas was brought home to Northern California where a local agritourism working group, involving Extension professionals and agritourism operators, formed with assistance from Small Farm Center.

In 2003 a team of statewide farm advisors published an Agriculture Issues Center brief about obstacles in the Agritourism Regulatory process in 10 California counties that inhibited any agriculture operation from diversifying into on-farm public and educational offerings. The work group also assisted in the passage of Assembly Bill 1258, a Farm Stay bill that provided more flexibility with regard to local food codes for agriculture producers, and publication of a comprehensive handbook including best practices that enable local agritourism. Rilla and George published two editions of the book "Agritourism and Nature Tourism in California", which has been used by other extension specialists in the US to establish their agritourism programs (Rilla and George 2005). In 2009, the state working group collaborated with the U.C. Small Farm Program to hire a statewide Agritourism Coordinator. The coordinator brought together the many diverse stakeholders involved in California agritourism (e.g., Cooperative Extension advisors, tourism bureaus, farm bureaus, farmers and ranchers, county staff) to organize multiple regional workshops, professional development trainings, webinars, and regional and statewide convenings of the many diverse stakeholders involved in California agritourism. The current Statewide Agritourism Coordinator manages the U.C. Cooperative Extension Agritourism program and writes the California AgTour Connections e-newsletter. The California experience echoes the Vermont experience and highlights the importance of a bottom-up approach and the advocacy of local stakeholders and farmers interested in agritourism. It also reinforces the importance of broad-based collaboration and the development of robust networks to build a successful state agritourism program.

¹⁰ Vermont Agritourism Collaborative: <https://www.uvm.edu/Extension/vtagritourism>.

¹¹ Vermont Tourism Research Center: <https://www.uvm.edu/vtrc/agritourism>.

3 Connecting Research with Extension

Agritourism's connection with rural development requires engaged scholarship strategies, including co-creation and community-driven research questions. Furthermore, the tourism–agriculture intersectionality of agritourism requires that outreach efforts integrate the farmer's needs (suppliers) with the visitors' expectations (consumers), along with the engagement with diverse stakeholders influencing both industries, such as regional tourism offices, local governments, boards of education, nongovernmental organizations, and insurance providers, to name a few (Barbieri 2022). This section highlights some research projects that have been translated into Extension work.

3.1 Rural Development

The unique relationship between agritourism community-based resources and place-based factors (including physical assets, social networks, and leaders) must be understood to help guide the applied research agenda for rural development. In 2018, a team of researchers from Colorado State University, University of California at Davis, University of Northern Colorado, and the USDA Economic Research service completed a USDA NIFA grant, "Place-Based Innovation: An Integrated Look at Agritourism in the Western United States," with research, Extension, and teaching activities guided by agritourism sector leaders and targeting local decision makers. The regional development focus of this project was key since enhanced agritourism activities would reach a variety of "winners," from individual farm/ranch employment and income increase to the surrounding community economy, and even the broader state tourism office. For example, communities benefit from agritourism visitors' economic impacts through their expenditures on lodging, dining, gas, and other recreational endeavors. However, those travel support sectors should be well developed to enable the farms' ability to fully realize its potential experience for visitors. Therefore, travel and agriculture services and offerings are synergistic and mutually reinforcing. In addition to being dependent on the unique geographical context of the rural community (such as its agricultural, ranching, or tribal heritage), agritourism may complement and provide increased visitation capacity for regions that have become increasingly popular as the traveling public visits state and national parks, and forests and monuments in record numbers. Such questions emerged from community-based discussions and guided the project's focus on the relationship between national parks, byways, and agritourism (Van Sandt et al. 2018). These discussions also framed the Extension technical assistance activities and case studies that helped communities determine the "right fit" strategies of how to leverage that relationship within their home regions.¹²

3.2 Agritourism Cluster Development

Recent studies have underscored the urgency of innovation in creating competitive advantages; this is especially true for sectors where customers are bombarded by a wide variety of product offerings, as in the tourism sector (Paulauskaite et al. 2017; Presenza, Petruzzelli, and Sheehan 2019; Petruzzelli, Natalicchio, and Albino 2020). Given the growing importance of and requests for authenticity and experience-oriented travel opportunities, agritourism's potential as a strategy to use tradition and authenticity as a driver of innovation is important. The strengthening of initiatives for more responsible travel coupled with the "good food movement" have given rise to a new creative class of sustainable entrepreneurs. There are many opportunities to expand and leverage agritourism as it relates to rural and community development, but there are also barriers to accomplishing this. Partnerships and alliances (agritourism clusters) may help overcome many of the inherent disadvantages individual producers face, and also simultaneously overcome the geographical and infrastructure challenges that many rural areas face. Clusters as a form of development and innovation can be approached not only for product development but also to improve sales and marketing activities, capacity building, access to

¹² Project website: <https://agritourism.localfoodeconomics.com/>.

funding mechanisms, and lobbying. Extension specialists in California and West Virginia have encouraged the development of agritourism clusters to enhance the tourism value proposition using authenticity and tradition to generate innovation around sustainability and to enhance value capture (leveraging community-engaged stakeholders). Continuation of these strategies should likely be encouraged in any future Extension programming focused on agritourism development.

3.3 Research to Practice—Women in Agritourism and Extension

Recent research on the role of women in agritourism highlights potential opportunities for Extension's engagement in this area. The agritourism system recognizes a multilayered decision-making process, in which the entrepreneurial farmer decisions (inner layer) have to be negotiated with the farm family welfare and resources (central layer), which in turn are subject to societal factors (outer layer) that operate as enablers or constraints (Barbieri 2017). In this line of thought, Savage, Barbieri, and Jakes (2022) found that farmer values, farm family attributes, and societal trends—notably the patriarchal structure of agriculture—affect the functional success of women in agritourism in their farming and entrepreneurial roles. The role of women in agriculture in the United States is gaining recent attention in applied economics research (Ball 2019; Fremstadt and Paul 2020; Schmidt, Goetz, and Tian 2021). Although gender roles in agritourism have received research attention since the early 2000s (McGehee, Kim, and Jennings 2007), still more effort is needed—especially to close the gender gap in practice (Savage et al. 2022).

Projects in North Carolina and Pennsylvania (Schmidt et al. 2020) highlight the research-Extension connection under a gender lens. Projects in North Carolina sought to increase the opportunities for the success of women in agritourism (Halim et al. 2020; Savage et al. 2022), given the increase of women farmers statewide. There was also increasing evidence indicating women's prominent role in agritourism operations and their overall entrepreneurial underperformance (e.g., Bock 2015; McGehee et al. 2007). The project's Extension outputs were originally conceptualized as a series of technical workshops for women farmers and Extension personnel (train-the-trainer model). However, the results indicated that the lack of farmer-to-farmer and farmer-to-Extension networks and the low recognition of women as farmers were the major factors hindering their success, which challenged the extended belief of technical knowledge as the biggest barrier to success for women farmers. Thus, outreach efforts were adjusted to include more in-person interaction and networking opportunities among women farmers and Extension specialists.

4 Conclusion and Agritourism Extension Outlook

Extension specialists that support agritourism efforts must regularly evaluate their research and educational programs to ensure they are meeting the specific needs of farmers, their families, and the communities they serve. At the same time, Extension specialists must acknowledge the set of opportunities (e.g., supporting tourism resources) and barriers (e.g., reduced labor supply) their community posits. Such a tailored approach can be challenging, considering that opportunities and barriers are dynamic and subject to fluctuating (e.g., policy directions, prices) and localized and/or one-time (e.g., natural disasters, COVID-19 pandemic) changes in the external environment. The fluid and intersectional context that is the agritourism system calls for strong Extension-research connections to address farmers' needs adequately. A translational research approach is needed, in which investigators respond to on-the-ground needs, and results are disseminated through Extension personnel; and the outcomes, lessons, and revisions are fed back into the systems learning cycle.

Producers and educators alike would benefit from increasingly diverse and multifunctional Extension risk management programs that create a more proactive educational model to help traditional producers turned sustainable agritourism entrepreneurs meet their triple-bottom-line missions. Many Extension professionals suggest that paying careful attention to how employees (and managers) interact

with the customer is crucial for success in all direct-to-consumer types of businesses. Many choose to formalize this by having program participants take part in any number of available personality tests (e.g., Myers-Briggs, Color Code) and spending program time going over these results either individually or grouped with other program participants with the intention of creating the context for them to make wise strategic staffing decisions. More research focused on how such staffing decisions translates into agritourism enterprise success is needed to refine Extension programming in this domain. Emerging issues that researchers and practitioners should pay closer attention to include specific support at the destination level, cluster/alliance level, and enterprise level. Specific issues include profitability, sustainability practices, infrastructure development, designing functional clusters, business, and marketing support (including social media), and regional collaborations among others.

By definition, agritourism straddles the sectors of agriculture and tourism. Therefore, Extension professionals must straddle several areas of expertise, often outside of their scope and capacity. These include hospitality and direct product sales, business development and marketing (including social media), placemaking and rural economic development, Extension activities and research, and building agritourism support networks. Addressing these needs are difficult considering the few agritourism Extension experts and limited institutional resources dedicated to agritourism. In several states, for example, agritourism-related responsibilities may fall solely on one person with other responsibilities and priorities to juggle, or a group of professionals within the Extension system that deal with agritourism-related issues on an ad hoc basis. Agritourism Extension programming too often mirrors agricultural entrepreneurship/value-added/specialty crop direct marketing programming, largely swapping out enterprises, and in addition, it is typically approached in a similar manner as when an agent adds another crop or value-added product to their portfolio. However, the agritourism “product” is more of an experience consisting of intangibles that agribusiness Extension personnel are not typically trained to provide support for or be able to effectively evaluate (for example, pricing, legal issues, land use and zoning issues, and community conflicts).

A few strategies may be employed to alleviate this burden and create a support network for Extension professionals interested or tasked with providing support to agritourism operators. First, specialized and comprehensive training is needed to increase the number and levels of expertise of agritourism Extension specialists. State tourism departments offer annual tourism summits and regional tourism-related workshops for destination marketing professionals in their respective states. These educational conferences and workshops provide opportunities for Extension specialists and educators to increase their tourism-related knowledge, as well as network with other tourism industry professionals, which may lead to further collaboration and related initiatives.

Similarly, a national network of agritourism Extension professionals could provide training, resources, and models for Extension delivery and institutional and ecosystem frameworks. The National Extension Tourism Network¹³ may be able to support this effort on national and regional levels. In some regions, a conceptual shift to fully integrate agritourism into agricultural viability (e.g., farm business development, agricultural zoning) instead of an “add-on” activity, may bolster understanding and support of the sector. In other regions, better collaboration with the tourism industry is warranted. To encourage investment in agritourism Extension, more research is needed to validate and quantify the benefits of agritourism. One possibility would be to analyze the connection between funding agritourism Extension and changes in agritourism earnings over time. In addition, there is an opportunity to package existing research into a toolkit to make the case for agritourism to universities, local decision makers, and other Extension professionals.¹⁴ An important next step is for Extension colleagues to collaborate across their

¹³ <https://Extensiontourism.net/>

¹⁴ This is the goal of a current NIFA project: “Creating an Effective Support System for Small and Medium-Sized Farm Operators to Succeed in Agritourism (2020–2023).” <https://aeese.psu.edu/research/areas/agriculture-and-food-systems/agritourism>

own networks and with other service providers and researchers to demonstrate the need for increased investment and develop programming that meets the needs of farmers and ranchers, their families, business alliances, and their communities. Finally, assessing the economic impact and articulating the potential value of investing in agritourism to local and state rural development officials may result in opportunities to build a stronger network of partners to develop and grow these initiatives.

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