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Perceptions of Texas Small-Scale Producers on Success, Challenges, and the Future of Agriculture

Katie Tritsch Texas State University

Ken Mix Texas State University

Michelle L. Edwards Texas State University

Manuel Piña Jr. Texas State University

Abstract

The roles and survival of small farms are much debated, and their operators are not well understood. This exploratory study examines the perceptions of Texas small producers using a sample of mostly first-generation farmers who consider agriculture their primary occupation and who use sustainable practices. Semistructured interviews revealed six prominent themes related to small-farmers' success, challenges, and visions for the future. Of these, personal fulfillment, importance of community, and adaptability and versatility were the prominent themes regarding success. In terms of challenges, small producers felt they were at a disadvantage compared to larger farms. Participants expressed a desire for a more sustainable, equitable agriculture, and emphasized a desire for policymakers and consumers to recognize the value of small farms. We conclude that small farm success is multifaceted and first-generation, that other underserved producers face considerable hardships with land and capital acquisition, and community and governmental support are vital to the continuation of small farms.

KEYWORDS: challenges, first-generation farmers, qualitative, small farms, success

Introduction

Small farms are a somewhat controversial subject. The persistence of small farms has been described as a "wicked problem" by Effland (2010), where stakeholder views on the issue are polarized due to differing interpretations and values where no clear resolution exists. Small farm supporters cite their value in terms of traditional agrarian values (USDA National Commission on Small Farms 1998), rural community prosperity (Johnson and Endres 2013), local food production (Janssen 2018), crop genetic diversity (Boys, Ollinger, and Geyer 2015), and environmental sustainability (Ricciardi et al. 2021). On the other hand, some agricultural economists and theorists emphasize benefits of larger farms, whose mechanization and specialization undeniably led to massive productivity gains throughout the 20th century, while allowing a greater share of the U.S. population to seek higher wages off the farm (Nordhaus and Blaustein-Rejto 2021; Sumner 2014).

While efficacy of small farms is debated, there is little empirical knowledge of small-scale farmers as a population in the United States (Iles, Ma, and Erwin 2020; Tritsch et al. 2021).¹ This study delves into the lives and perceptions of small farmers using a sample of mostly first-generation farmers in Texas. Though the study's small sample size (n = 11) precludes representativeness of small farmers in Texas or beyond, results reflect unique worldviews of a new crop of 21st century agrarians, most of whom entered agriculture from nonfarming backgrounds, strive to produce sustainably, and reflect experiences of local food suppliers.

Historically, small-farm success evaluations used financial metrics, but recent literature suggests that small farmers perceive success in a more complex and multidimensional fashion (Cuykendall, LaDue, and Smith 2002; Pool 2014; Tritsch et al. 2021; Yeboah, Owens, and Bynum 2009). While small farmers have expressed profitability as important to success, they tend to value social indicators like quality of life or job satisfaction more (Cuykendall et al. 2002; Tritsch et al. 2021; Yeboah et al. 2009). Pool (2014) appears to have the only qualitative study in this area, finding that small farmers in the Willamette Valley viewed success in multiple dimensions: social, operational, quality of life, and financial. Most other studies pertaining to small-farm success have used survey methods, finding a multitude of different success factors ranging from personality type to debt load (Tritsch et al. 2021). Certainly, small farmers are not homogeneous (Iles, Ma, and Nixon 2021) and likely have differing opinions on what success means. Nonetheless, there is evidence to support the idea that small farming is a lifestyle choice shaped by social indicators, as much (if not more) as it is a career choice dictated by financial measurements (Iles et al. 2020; Tritsch et al. 2021).

Small farmers face many challenges, in part because operators are required to fill multiple roles as a farm entrepreneur (e.g., producer, marketer, distributor, recordkeeper). Access to land and capital are two significant challenges for small and beginning farmers (Brown 2017; Carlisle et al. 2019; Iles et al. 2021), which presumably require policy changes to address (Calo 2018; Hayden et al. 2018). Because small-scale agriculture is not integrated into the dominant agricultural system, small farm operators are undersupported by programs and policies (Iles et al. 2021). Qualitative researchers have uncovered a long list of stated challenges among small farmers, including land access and tenancy issues (Iles et al. 2021), pluriactivity (i.e., holding multiple, simultaneous jobs) (Iles et al. 2021), accessing capital, transportation, and labor (King 2016), accessing information (Goodwin and Gouldthorpe 2013), lack of agricultural knowledge among the general population (Goodwin and Gouldthorpe 2013), and lack of support from community and institutions (Iles et al. 2021; King 2016). General needs assessment studies addressing producer challenges and needs cover a vast range of topics (Bailey, Arnold, and Igo 2014; Bramwell et al. 2016; Sullivan 2011), alluding to the difficulty of pursuing farming as a profession, and supporting the notion of small farmers as underserved.

In the scope of literature pertaining to small farms, our study contributes a unique sample of producers and fills a gap in social research related to Texas small farms. There is a huge body of literature on small farms in the developing world and on subsets of the small farm population (e.g., "socially disadvantaged" farmers, women farmers), yet our study seeks to understand small farmers in the United States as a group bonded, at least to some extent, by their challenges to grow viable businesses in a modern food system characterized by scalability, consolidation, and lack of access to critical resources. Our findings contribute themes around small-farm success and challenges while exploring agricultural ideologies and desired shifts in practices, programs, and policies impacting US agriculture.

Methods

We used purposive sampling and semistructured in-depth interviews to capture the perceptions and desires of small-scale producers with gross farm income below \$350,000. Texas State University's Institutional Review Board approved the study's qualitative methodology in June 2020 (#6598). Representatives of six agricultural nonprofits provided a total of 30 producer recommendations to contact for interviews. We stratified producers by regions of the state and aimed to capture a diversity of operation types. The lead author conducted virtual/phone interviews over four months. The guide is included in the end appendix.

Qualitative data analysis was guided by grounded theory, specifically by the Ünlü-Qureshi instrument (Qureshi and Ünlü 2020). We used line-by-line inductive coding, yielding 522 unique codes that were organized into nodes, then linked and further categorized until we developed final themes in three topic areas: success, challenges, and vision. In a way, our coding strategy was a mix of deductive and inductive, as we used pre-identified categories to sort codes, but also identified themes directly from the data.

In total, we interviewed 11 small producers; they operated farms in nine Texas counties from North Texas plains to the Hill Country to the Rio Grande Valley. There were slightly more women farmers (n = 8) and the majority were white farmers (n = 8) in the sample. One producer was a veteran of the US Army. All participants were well-educated with nothing below the 12th grade level and the majority (n = 7) holding at least a bachelor's degree. Ages varied from 27 years to 69 years, and years of experience in farming mostly ranged from four to eleven years. However, one producer reported a total of 43 years of experience. Ten of 11 participants were first-generation farmers. Producers operated a wide range of farm sizes, from a one-half acre market garden to a 2,000 acre cattle ranch. Their annual gross sales ranged from \$1,500 to \$250,000. All producers considered farming their primary occupation, and all but one producer operated private, for-profit businesses. In the discussion of results, person names are pseudonyms.

Results

We developed six major themes related to small-farm success, small farm specific challenges, and vision (Table 1).

| Topics and themes | Frequency across all interviews | Number of participants who referenced (n = 11) |
|--|------------------------------------|--|
| Success | 192 | 11 |
| Farming as personal fulfillment | 77 | 11 |
| Importance of community | 50 | 11 |
| Adaptability and versatility | 47 | 9 |
| Challenges (small farm specific) | 95 | 11 |
| Small farms in a large farm world | 70 | 11 |
| Vision | 95 | 11 |
| A more sustainable, equitable agriculture | 47 | 11 |
| Valuing small farms and local food | 37 | 6 |
| <i>Note.</i> We developed one additional theme on general challenges (More hours, more hands), but did not include it in this article in the interest of centering the most relevant themes. | | |

Table 1. Thematic Framework of 11 Small Producer Interviews

Success: Farming as Personal Fulfillment

Passion, quality of life, and loving what one does were some of the most prominent comments around success. Every participant emphasized farming as something more than their physical work or career choice; farming was lifestyle wrapped in identity, and it provided producers with a sense of personal fulfillment. For example, Meredith, a direct-to-consumer vegetable producer in north Texas, painted a passionate picture of what farming means to her:

You know, when we started on this adventure, a big part of it was living a less stressful life. I had worked in an office for ten years. [My business partner] had a very high stress job in Dallas. And there's a whole different set of stress that comes with farming, but I do a lot of stress management courses, I meditate, I do all these things that help me to not feel stressed and to really focus on the feeling that this is important. It's important for my community, it's important for the people who want this, and it's important for me to get to do what I want to do with my life and not feel like I... have to be something that I'm not.

For Meredith, doing what she loved and knowing her work made an impact on others contributed greatly to her success. This sentiment was echoed by several other producers. Georgia explained that in farming "you may not be making a lot [of money] . . . you've got to love the life." Similarly, Daniel stated that farming for money alone was futile; "you have to do it because you really like it." Lastly, Jamie believed that "being fulfilled . . . is the pinnacle of success for a farmer."

Producers were living a life of meaning on their own terms without bosses or rigid schedules. They measured success by how they performed socially and emotionally, how well their soil, plants, and animals were doing, and how happy their customers were with their products. Several producers earned a sense of pride by the quality of their products. Paula, a diversified farmer in the Rio Grande Valley, talked about the first time she met her delivery driver: "He was like, 'You have such beautiful produce.' But that to me speaks like, you don't need to meet me as long as you meet my produce first. That's what it is. That's what we're doing."

Other producers emphasized fulfillment in terms of relationships to their animals and to their customers. Cameron, a military veteran farmer in central Texas, reported,

It is the most rewarding piece to know that I have right now, I'm responsible for 85 [souls]. In the military we said 85 souls, right? There's 85 things that depend on me to make sure their quality of life is good, so the end result is a great product for the consumer.

Across the board, participants stated profitability was an important component of success; several producers commented lack of financial planning and business skills would lead to being unsuccessful. Yet, personal fulfillment seemed to play a bigger role in how producers perceived their own success and that of their farm. Georgia, a fourth-generation farmer in west Texas, had some particularly poignant views on success. Compared to other producers, Georgia had been doing it the longest. She was raised in a traditional farm family who grew cotton, and she had expanded into market gardening over 15 years prior to the interview. She explained how the farm "succeeds and fails on a daily basis," but as long as the farm is in business, they are successful. She explained success was measured in the little things:

Success is really measured in that crop each year . . . a crop of salad blend or arugula or spinach might be the prettiest it's ever been in the last three months. And I'm really, really proud of that crop. So that's success. When we breed our cows, breeding a certain cow to a certain bull and having a calf that you just—the genetics lined up and then that mating got you another really good bull or really good cow—those are successes that a farmer talks about more than their bank account or how many tractors do I have or how much land do I own.

Success: Importance of Community

Beginning farmer-training programs and agricultural conferences helped several participants as they were starting out, as did programs like the Texas Department of Agriculture's Young Farmer Grant and Farm Service Agency's (FSA) microloan program. The greatest emphasis, however, was placed on peer-to-peer interaction. Paula reflected that the most impactful part of her beginning farmer program was "just meeting other farmers and knowing their successes and failures." Similarly, Jamie and Isaac both highlighted opportunities to exchange ideas with other producers as the most important part of farm groups and organizations.

Several participants emphasized farmer-to-farmer mentorship as critical to small farm success. Jed, a market gardener in central Texas, was particularly passionate about mentorship, explaining, "getting into farming after just reading a book," and not learning from other peoples' mistakes and techniques, would leave farmers "dead in the water pretty soon." This may have been true for Daniel, a livestock and poultry producer in south Texas. He spent hours studying what he needed to do for his operation, but asserted his greatest resource was visiting another farmer with a larger, more mature operation. Daniel said he maintained communication with that farmer after his visit, and they continued to provide each other with support and troubleshooting years later.

The concept of community extended beyond peer-to-peer learning into the general population. Paula defined success as "growing what I want to grow and then being able to give that to customers and get them excited about it." Georgia also raved about the importance of community, particularly in her local farmer's market. During COVID-19, Georgia reflected on how hard people in her city had been hit, but they came to support her farm and the market regardless: "It isn't what it was last year, but we're still in business and we're all doing what we love and the grace of the people; it's really been amazing." Finally, Olivia reflected on the value of community in agriculture:

I think back when I was rural farming and for-profit farming, something that I really felt like I needed more of was a community connection and community engagement. I didn't grow up in the small town that I was working in, and neither did the family that I worked for. And so, as kind of transplants into this community and doing a really different style of agriculture than was typical in this community, it was really hard to build the valuable neighborly connections that are so useful in farming.

Farming is not done in isolation. Producers clarified success was not just their own, but a result of relationships with peers, neighbors, and the broader community they served.

Success: Adaptability and Versatility

Producers' ability to adapt to changing circumstances and possess a variety of skills were expressed as determinants of success. Meredith explained how diversification and scale impact small-farm success:

If a hailstorm . . . comes and wipes out the whole place . . . I chop stuff down, plant new things, in a month we're up and growing again . . . whereas cotton farmers . . . they're just done for the season.

In this scenario, small-scale diversified production provided a type of insurance for Meredith because she had the ability to start over quickly. Cameron similarly explained that small farms "can see changes faster than you can in large scale because it's small and you can see everything that's happening simultaneously . . . you can spot problems . . . adapt and change."

The shifting nature of farm work, season to season and year to year, was a common idea with somewhat paradoxical implications. On one hand, producers discussed how management decisions were more

complex on small acreage or how they lacked enough land to do proper rotations, yet their adaptability was also a boon to their success. Jed explained how rigidity can make a farmer unsuccessful:

Farming is completely dynamic. It's always changing. Just because something worked last year, it's not going to mean it's going to work with this year's problem. And you need to adjust and move on. You know, it's a bumpy, bumpy road and you need to install a pretty nice suspension—psychological suspension—to handle it.

In this quote, Jed touches on both the farm's adaptability as well as the farmer's versatility as essential to success. Particularly in small-scale production, farmers are expected to perform a multitude of roles, from producer to marketer to business owner. Heidi, a vegetable producer in north Texas, summarized the need for adapting and learning on the farm:

You've got to figure out how to build something that you've never tried your hand at before. You need to be a mechanical engineer at the same time as you're an artist. So, you have to be really ingenious in order to solve the problems that you're going to face, because the problems are going to look different every season. You can grow the same twelve plants every summer and every summer you're going to find new problems.

Challenges: Small Farms in a Large Farm World

Small producers felt excluded from traditional, large-scale agriculture, mainly in terms of the public farm-support system. Most excerpts in this section come from responses about access to capital, which was the top-rated challenge in a prior survey. All but one producer, Georgia, agreed capital was the biggest challenge facing small producers, particularly when starting out. Georgia approached access to capital as a matter of patience and frugality, explaining, "If somebody says they're having trouble with access to capital, then they have to look in the mirror and say, why am I such a risk?"

Aside from Georgia, a common complaint from producers concerned the design and accessibility of government farm programs, specifically FSA loan programs, federally subsidized crop insurance, and other Farm Bill programs. The predominant feeling among these small producers was government subsidizes large-scale agriculture, putting small farmers at a disadvantage. For example, Meredith described how cotton farmers in her region can make more money when their crop gets destroyed by hail because they have subsidized crop insurance, something she does not have access to. Cameron had a similar complaint about the Beef Checkoff Program, expounding on how small farms oversee their own marketing: "Beef Checkoff doesn't help me at all. I have to do my own marketing. I have to do my own sales, my own distribution. And they get subsidies for all of that in Big Ag."

Accessibility was a related concern about farm-support programs, in terms of both awareness and process. Olivia said one of the most challenging parts of being a beginning farmer was navigating farm programs:

You get the sense that there are tons of programs and resources available . . . but how do you actually access them? What paperwork do you need? Which office do you need to talk to? What does the application look like?

Cameron echoed that sentiment, expressing how he spent more money starting his farm than he needed to due to lack of awareness of government programs, and he had to find resources on his own. While several producers cited benefits from US Department of Agriculture (USDA) programs, there was a decent amount of confusion and frustration regarding farm-finance processes. Jamie described farm-support programs, including grants, as "going through hoops that keep you from farming," while Meredith described her experience with the FSA as tumultuous:

Our experience with the FSA has been tumultuous, really. We had applied for a grant through the NRCS [Natural Resources Conservation Service], but we needed a whole folder with the FSA, so I just went into the office . . . and I guess people don't do that. I don't know. I didn't go through 4H and things like that . . . so just walking into the FSA, I mean, immediately I was hit head-on, like you need your warranty deed, you need this. And I'm like, okay, I'll get you all that. And then instead of telling us everything we needed to make a comprehensive folder for a farm track number and all of these things, it was like piece by piece, and we filled one form for now. And then they were like, well, you don't have this. We didn't know we needed that. And so, it just definitely wasn't helpful . . . they want you to know how to do it all, and I assume people know how to do it all. I just don't.

Vision: A More Sustainable, Equitable Agriculture

Producers desired several types of structural transformation within agriculture. They wanted to see agriculture shift toward ecological and sustainable practices, increased public funding and support for small farms, and more opportunities in agriculture for those who wanted it. Combined, we interpreted these visions as desired advancements in sustainability and equity, where farm operations caused less environmental degradation and where small, young, and beginning farmers had access to the same volume and quality of resources as large-scale operations.

About half the producers expressed concern regarding industrial farming practices like reliance on synthetic chemicals and expensive inputs, monocropping, tillage, soil erosion, and biodiversity loss. Paula expressed feeling "hurt" by the lack of cover cropping among larger farms in the Rio Grande Valley and suggested, "small farmers know the value of that [covering the soil] a little bit more." Participants seemed to view small-scale, diversified farming as an alternative model that enhanced agricultural sustainability, particularly in relation to soil health and its importance within the production system. Cameron explained:

I don't think that our traditional ag model with synthetic fertilizers is, it's not benefiting our soil, right? It's not a sustainable model. The farmers that are locked into that loop, keep paying for those chemicals. And it's not helping their soil. It's degrading their soil. So, I really want to see a shift away from the traditional model.

These small producers wanted to see sustainable and regenerative methods of production as the status quo, and they recognized the need for transition support. Heidi brought up the need for public conservation incentive programs, specifically those providing direct cash payments to small producers:

I think that we would be better served with incentive programs to get people to reduce their tillage, reduce their chemical inputs, protect biodiversity. People aren't going to do it unless there's a financial benefit to them.

Participants wanted increased public support for small farms in general. Avery brought up several important avenues to support small farms: grants for start-up costs, lower interest rates on operating and farm ownership loans, lower down payments on property purchases, tax breaks, cheaper insurance, and urban land conservation for food production. Despite existing USDA programs, producers still perceived discrepancies between their ability to farm compared to Big Ag. Cameron objected to Farm Bill subsidies that pay farmers not to grow a crop (presumably NRCS' Conservation Reserve Program, though small family farms receive the bulk of Conservative Reserve Program payments (Whitt, Todd, and MacDonald 2020)), saying farmers will still plant corn or soybeans and reap a double profit. While stating it was radical, Cameron exclaimed, "If you want to shift agriculture in this country, turn the Farm Bill off. I'm not saying we should do it. It's an extreme example. But if you turn the Farm Bill off, agriculture in this country will shift overnight." Cameron alluded without government support, agriculture would inevitably shift to more

sustainable processes. Olivia contributed to this viewpoint, adding all economically sound farms she knew were subsidized either via government programs, off-farm income, or retirement income, and policy was the solution to more self-sufficient small farms:

The US government already subsidizes a lot of farms and at a policy level, we get to make decisions about what sorts of farms and what sorts of practices we want to subsidize and support and what we don't. I don't feel called to be part of the policy work and policy discussions—it's way beyond me and really intimidating— but I feel like that's the level at which the conversation has to happen.

Jamie explained how there needs to be more first-generation farmers who are "legitimately farming; not homesteading, not hobby farming," and to get there they need education and access to land. Other producers expressed the need for farming to become a more viable career path.

Vision: Valuing Small Farms and Local Food

Based on responses from six producers, one pathway to a more sustainable and equitable agriculture was an increase in value, both economically and socially, of small farms and local food. Producers were unambiguous about the monetary value of their food and importance of consumers supporting small farmers. As Jed explained, "Produce is worth a lot of freaking money. It costs a lot to grow it, to grow good stuff, and to grow it well. It's a lot of work." He went on to discuss how narrow the margins are in farming, and he believed small farmers who were able to make a profit should be "more stable financially." These producers believed if people were more connected to their food and realities of small farming, they would be willing to pay more for their products. In this vein, participants perceived consumer education as a critical component of small-farm success. Georgia theorized about the lack of appreciation for small farms, saying:

There is a big disconnect between [farmers and consumers]. Even in my county . . . we've done away with the county fairs. It used to be, boy, there was competition. Every mom in the county had to bring their tomatoes to the county fair to see if they can win a blue ribbon. And I don't know, we've lost those things out of our culture, and I hate that.

Discussion

This article provides a glimpse into the perceptions and desires of small producers in Texas who farm as their primary occupation, use sustainable practices, and sell direct to consumer. Almost all were firstgeneration farmers, and several fell into historically underserved producer categories like beginning, minority, or veteran. Results are not representative of any specific population but mark an important exploration into the experiences of an understudied group. Small producers are heterogeneous (Iles et al. 2021), so it is likely a larger and more diverse sample would yield additional themes.

Producers perceived success in terms of personal fulfillment, community, and their ability to respond to change on the farm. Other researchers have touched on fulfillment, finding small-farm success includes a quality-of-life component (Pool 2014), and contentment and satisfaction were important indicators of success (Cuykendall et al. 2002). Relatedly, Yeboah et al. (2009, p. 5) found that "love of farming seemed to be the driving force behind the farmer's view of success [and not profit]." Small farmers may feel pressured to consider nonfinancial measurements of success given their relatively small economic potential, but their focus on fulfillment in interviews suggests the business side of agriculture is not their priority. Given their statements around Big Ag, small producers seem to be—advertently or inadvertently—challenging the merits of large-scale, industrial agriculture from operational, environmental, and policy standpoints and positioning their scale and production methods as desirable alternatives. By choosing to perceive agriculture as a lifestyle rather than a business, they can still feel successful despite struggling financially.

Other small-farm success factor studies we reviewed did not touch on impact of community. Our results support Pool's (2014) findings regarding multiple dimensions of success, including a social component. These small producers needed communities of their peers to learn and grow, and looked to their geographic communities as potential supporters (i.e., customers). Community-based initiatives and consumer education projects would likely bolster the success of small farms, including development of formal or informal networking opportunities for small producers. On the demand side, local food procurement initiatives (e.g., Farm to School, Local Food Purchase Assistance Cooperative Agreement Program), technical and financial support for community farmers markets (e.g., Farmers Market Promotion Program), and support for consumer education, including transparent labeling practices, provide numerous opportunities to help small producers succeed.

Previous small farm success studies also have not touched on farmers' adaptability or versatility as contributing factors to success. Most participants perceived small farms as more resilient than large farms due to their flexibility, adaptability, and diversification. Participants were frustrated by lack of access to subsidies and other government programs relevant to their production, yet proud of their ability to make it on their own and respond to changes quickly. Moreover, they viewed their farms as the way of the future. Given unknown environmental impacts of climate change and known harms of tillage and chemical use, they saw their operations as important steps toward sustainability. However, participants also highlighted the need for more technical and financial support for diversified and sustainable operations. Programs like the Natural Resource Conservation Service (NRCS) Environmental Quality Incentives Program are critical to helping rural and urban farmers produce more sustainably, as are grant or other incentive programs like the On The Ground Conservation Program in Texas. Similarly, grant programs that help community organizations demonstrate and evaluate sustainable-production practices and disseminate conservation-program information to small and underserved producers will continue to be needed.

The overarching theme around challenges was the disadvantage of small farms within an industry favoring larger operations. Prior needs assessments broadly support this finding, as researchers have cited government regulations, legislation, and/or assistance as notable challenges to producers (Bramwell et al. 2016, Goodwin and Gouldthorpe 2013; King 2016, Sullivan 2011; Suvedi, Jeong, and Coombs 2010). Research on beginning and disadvantaged farmers has also documented access to government programs and resources as considerable challenges (Ahearn 2011; Ostrom, Cha, and Flores 2010). Seven participants were beginning and/or socially disadvantaged producers, which may help explain the prevalence of criticism about governmental programs and funding. More research is needed to explore the prevalence of this attitude among small-scale producers, but our findings suggest a clear gap between government agencies and some small, underserved producers. Greater and more targeted outreach programs, particularly those that help build capacity among community organizations to provide technical assistance to producers, could create improvements in this area. Going a step further, researchers and advocates may want to consider evaluating existing agricultural support and safety net programs and policies in terms of how well they serve the needs of small producers. Finally, recruitment and retention of small and historically underserved producers into leadership positions (e.g., FSA county committees, state boards) could help address gaps in support and ensure their voices are being heard in the enactment of agricultural programs.

All but one participant agreed access to land and capital were the greatest challenges they faced entering into agriculture. The fact that all first-generation farmers agreed on land and capital as the greatest challenges supports the idea that small, first-generation producers operate outside the traditional agricultural system, and therefore struggle with accessing financing and resources from public institutions. If decision-makers want to see the number of successful small to midsized farms expand, it follows land and capital acquisition support is a critical need. The recently launched Increasing Land, Capital, and Market Access Program may be a good step in the right direction; moving federal resources toward expanding financing options, land

purchases, subsidies, or other financial mechanisms to improve ownership and equity among historically underserved producers is certainly needed. As land and capital are structural issues (Calo 2018), it will undoubtedly require action on many levels to remedy accessibility issues. Funding for agricultural land trusts, tax incentives for land transfer to new farmers, and state land set asides have been proposed as solutions to assist young farmers in accessing capital (Ackoff, Bahrenburg, and Lusher Shute 2017). In Texas, relatively small changes to the Texas Department of Agriculture's Young Farmer Grant could help address equitable access to capital for some small producers by allowing cost share on equipment over \$5,000, offering reduced cost-share rates for underserved producers, and/or providing funds up front instead of via reimbursement. Overall, there are few opportunities for producers to access land or capital when starting out, especially if they cannot qualify for traditional or government lending programs.

Conclusion

This study provides context around how some small farm operators in Texas view their position in US agriculture, and what they need to be successful. Future investigations should seek a larger sample size representative of Texas small producers. Though small farmers face many uphill battles, a combination of community initiatives, institutional support, and ground-up leadership could put them on a more promising course to contribute meaningfully to the agricultural economy.

We suspect small farms contribute to our agricultural systems in ways not currently quantified, which decreases our understanding of their full societal benefits. To provide food, fiber, and energy to a growing human population, small farms need not be positioned as an alternative to the status quo, but as piece of a complex system. Small farms increase diversity and redundancy in our food systems and social networks. In this regard, increased understanding and support for small farms will lead to a more resilient agriculture for small producers in Texas and beyond.

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References

- Ackoff, Sophie, Andrew Bahrenburg, and Lindsey Lusher Shute. 2017. "Building a Future with Farmers II: Results and Recommendations from the National Young Farmer Survey." Retrieved Sep. 20, 2022. (https://www.youngfarmers.org/wp-content/uploads/2018/02/NYFC-Report-2017.pdf).
- Ahearn, Mary Clare. 2011. "Potential Challenges for Beginning Farmers and Ranchers." *Choices.* Retrieved Mar. 16, 2022. (https://www.choicesmagazine.org/choices-magazine/theme-articles/innovations-to-support-beginning-farmers-and-ranchers/potential-challenges-for-beginning-farmers-and-ranchers).
- Bailey, Nikki E., Shannon K. Arnold, and Carl G. Igo. 2014. "Educating the Future of Agriculture: A Focus Group Analysis of Programming Needs and Preferences of Montana Young and Beginning Farmers and Ranchers." *Journal of Agricultural Education* 55(2):167-183. doi:10.5032/jae.2014.02167.
- Boys, Kathryn A., Michael Ollinger, and Leon L. Geyer. 2015. "The Food Safety Modernization Act: Implications for U.S. Small Scale Farms." *American Journal of Law and Medicine* 41(2015):395-405. doi:10.1177/0098858815591524.
- Bramwell, Stephen G., Sarah Moorehead, Aslan Meade, Rebecca Sero, Sheila Gray, and Miles Nowlin. 2016. "South Puget Sound Agricultural Producer Needs Assessment." Retrieved Mar. 16, 2022. (https://s3.wp.wsu.edu/uploads/ sites/2056/2014/01/South-Sound-Agricultural-Producer-Needs-Assessment.pdf).
- Brown, Tanya. 2017. "Access to Land, Capital Biggest Obstacle for Beginning Farmers." USDA Results. Retrieved Mar. 16, 2022. (https://www.usda.gov/media/blog/2013/01/31/access-land-capital-biggest-obstacle-beginning-farmers).
- Calo, Adam. 2018. "How Knowledge Deficit Interventions Fail to Resolve Beginning Farmer Challenges." *Agriculture and Human Values* 35(2018):367-381. doi:10.1007/s10460-017-9832-6.
- Carlisle, Liz, Maywa M. de Wit, Marcia S. DeLonge, Adam Calo, Christy Getz, Joanna Ory, Katherine Munden-Dixon, Ryan Galt, Brett Melone, Reggie Knox, Alastair Iles, and Daniel Press. 2019. "Securing the Future of U.S. Agriculture: The Case for Investing in New Entry Sustainable Farmers." *Elementa: Science of the Anthropocene* 7(17):1-20. doi:10.1525/elemen-ta.356.
- Cuykendall, Charles, Eddy LaDue, and R. David Smith. 2002. "What Successful Small Farmers Say: The Results of a Survey of Successful Small Farm Operators." Retrieved Mar. 16, 2022. (https://ecommons.cornell.edu/bitstream/handle/1813/65024/Cornell_Dyson_rb0201.pdf).
- Effland, Anne. 2010. "Small Farms, Cash Crops, Agrarian Ideals, and International Development." *Agricultural History Society* 84(1):1-19. doi:10.3098/ah.2010.84.1.1.
- Goodwin, Joy N., and Jessica L. Gouldthorpe. 2013. "'Small' Farmers, Big Challenges: A Needs Assessment of Florida Small-Scale Farmers' Production Challenges and Training Needs." *Journal of Rural Social Sciences* 28(1):54-79. Retrieved Mar. 16, 2022. (https://egrove.olemiss.edu/jrss/vol28/iss1/3).
- Hayden, Jennifer, Sarah Rocker, Hannah Phillips, Bradley Heins, Andrew Smith, and Kathleen Delate. 2018. "The Importance of Social Support and Communities of Practice: Farmer Perceptions of the Challenges and Opportunities of Integrated Crop-Livestock Production Systems and Organically Managed Farms in the Northern U.S." *Sustainability* 10(2018):4606. doi:10.3390/su10124606.
- Iles, Keri, Zhao Ma, and Anna Erwin. 2020. "Identifying the Common Ground: Small-Scale Farmer Identity and Community." *Journal of Rural Studies* 78(2020):25-35. doi:10.1016/j.jrurstud.2020.06.018.
- Iles, Keri, Zhao Ma, and Rebecca Nixon. 2021. "Multi-Dimensional Motivations and Experiences of Small-Scale Farmers." Society & Natural Resources 34(3):352-372. doi:10.1080/08941920.2020.1823540.
- Janssen, Brandi. 2018. "Small Farms, Big Plans: Mechanization and Specialization as Measures of 'The Middle." *Culture, Agriculture, Food and Environment* 40(2):96-104. doi:10.1111/cuag.12221.
- Johnson, Nicholas R., and A. Bryan Endres. 2013. "Small Producers, Big Hurdles: Barriers Facing Producers of 'Local Foods."" *Hamline Journal of Public Law and Policy* 33(1):49-121.
- King, Hannah Jo. 2016. "Needs Assessment of Black Farmers on the Delmarva Peninsula: New Research to Recommend Intervention Priorities." Retrieved March 16, 2022. (https://www.thecommonmarket.org/assets/uploads/reports/Needs-assessment-of-black-farmers-on-the-delmarva-peninsula-screen-publication.pdf).
- Nordhaus, Ted, and Dan Blaustein-Rejto. 2021. "Big Agriculture is Best." *Foreign Policy*, April 18. Retrieved March 16, 2022. (https://foreignpolicy.com/2021/04/18/big-agriculture-is-best/).
- Ostrom, Marcia, Bee Cha, and Malaquías Flores. 2010. "Creating Access to Land Grant Resources for Multicultural and Disadvantaged Farmers." *Journal of Agriculture, Food Systems, and Community Development* 1(1):89-106. doi:10.5304/jafscd.2010.011.011.

- Pool, Kristin E. 2014. "Farmer Perspectives on Success and Challenges: A Study of Small Farms in Oregon's Willamette Valley." Oregon State University, Corvallis, OR. Unpublished manuscript.
- Qureshi, Henna A., and Züleyha Ünlü. 2020. "Beyond the Paradigm Conflicts: A Four-Step Coding Instrument for Grounded Theory." *International Journal of Qualitative Methods* 19:1-10. doi:10.1177/1609406920928188.
- Ricciardi, Vincent, Zia Mehrabi, Hannah Wittman, Dana James, and Navin Ramankutty. 2021. "Higher Yields and More Biodiversity on Smaller Farms." *Nature Sustainability* 4(2021):651-657. doi:10.1038/s41893-021-00699-2.
- Sullivan, Sarah. 2011. "Farm Needs Assessment: Farm Labor and Farm Infrastructure." Retrieved Mar. 16, 2022. (https://www.sare.org/Learning-Center/SARE-Project-Products/Northeast-SARE-Project-Products/Cheshire-Labor-and-Infrastructure-Needs-Assessment).
- Sumner, Daniel A. 2014. "American Farms Keep Growing: Size, Productivity, and Policy." *Journal of Economic Perspectives* 28(1):147-166. doi:10.1257/jep.28.1.147.
- Suvedi, Murari, Eunseong Jeong, and John Coombs. 2010. "Education Needs of Michigan Farmers." *Journal of Extension* 48(3). Retrieved Nov. 18, 2021 (https://archives.joe.org/joe/2010june/rb7.php).
- Tritsch, Katie, Ken Mix, Michelle L. Edwards, and Manuel Piña, Jr. 2021. "What Makes a Small Farm Successful? A Review of Success Factors, Needs, and Challenges." *Journal of Extension* 59(2). doi:10.34068/joe.59.02.18.
- USDA National Commission on Small Farms. 1998. A Time to Act: A Report of the USDA National Commission on Small Farms. Retrieved Mar. 3, 2022. (https://www.iatp.org/documents/a-time-to-act-a-report-of-the-usda-national-commission-on-small-farms).
- Whitt, Christine E., Jessica E. Todd, and James M. MacDonald. 2020. *America's Diverse Family Farms: 2020 Edition*. U.S. Department of Agriculture Economic Research Service, EIB-220.
- Yeboah, Anthony K., John P. Owens, and Jarvetta S. Bynum. 2009. "Factors Influencing Successful Small-Farm Operations in North Carolina." Paper presented at the Southern Agricultural Economics Association. Corpus Christi, TX. Feb. 5-8. doi:10.22004/ag.econ.98815.

Appendix: Interview Guide and Questions

Thanks very much for your willingness to speak with me about your experience as a farmer or rancher in Texas. I want to briefly remind you that the purpose of this interview is to talk about your perceptions of success and about your challenges and needs as a farmer. Your responses are confidential, and your participation is completely voluntary. You do not have to answer any question that makes you feel uncomfortable, and you can end the interview at any time. Do you have any questions for me before we start?

Okay, I am going to begin recording now. We will begin with some basic questions about you and your farm.

Opening/Demographics

- 1. How old are you?
- 2. What is your gender?
- 3. What is your race?
- 4. Are you a U.S. military veteran?
- 5. What is your highest level of education?
- 6. Is farming your primary occupation? If not, what is?
 - a. Do you or your spouse/business partner have off-farm income?
- 7. How long have you been farming?
- 8. What do you primarily grow or raise on your farm?
- 9. How do you usually sell your farm products?
- 10. How many total acres do you operate?
- 11. In what Texas county is your farm located?
- 12. What is your farm's annual gross income?
- 13. Can you tell me a little bit about your production practices? Do you consider your operation sustainable? Are you certified organic?

Transition

- 14. How did COVID-19 impact your farm operation?
 - a. Did you have to change your marketing tactics? Are you growing more/less now? Any other changes?
 - b. Based on your knowledge, how have other small farmers in your area fared during the COVID-19 crisis?

Key Questions

- 15. Generally, what do you think makes a farmer successful?
 - a. How important do you think profitability is to success? How else can success be measured?
- 16. What do you think could make a farmer *unsuccessful*?
- 17. How can external factors impact the success of small farmers?
 - a. Can you give me any examples? Outside services? Information? Policies?
- 18. Think back to when you started farming or ranching. How have your needs changed from then to now?
 - a. What are your biggest needs as a farmer now?
- 19. I conducted a survey of small farmers in Texas. Respondents said their top challenge was capital acquisition (accessing land, equipment, labor, etc.) What do you think about this result?
 - a. Are there challenges small farms face that large farms do not? Why or why not?

Extra

- 20. What is the most difficult part of farming for you?
- 21. What is the best part of farming for you?

Ending

- 22. Suppose you could wave a magic wand and do one thing to improve your operation. What would you do?
- 23. When you try to envision the future of agriculture in 20-50 years, what do you see?
 - a. What would you like to see? How can your vision become reality?

Final

24. Regarding the needs, challenges, and successes of farming in Texas... is there anything else you would like to share?

Thank you so much for your time.