

The background of the entire page is a photograph of green leaves, likely from a vegetable plant, showing significant damage from insect feeding. Numerous small holes and larger irregular holes are visible across the leaf surfaces. The lighting is somewhat dim, giving the image a slightly muted, naturalistic feel.

Barriers and Bridges to Success: A Mixed Methods Needs Assessment of Texas Small Producers

Stakeholder Report

Project funded by Southern Sustainable Agriculture Research and Education (SSARE) Graduate Student Grant (#GS19-211)

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Background & Purpose

The purpose of this report is to disseminate aggregated data from my graduate research to community stakeholders who serve small-scale and historically underserved producers. Data will be relevant to producer organizations who seek to develop projects or proposals serving an audience of small-scale, diversified, beginning, and/or first-generation farmers and ranchers in Texas. Data may provide insight for applied researchers, policymakers, or other decision-makers who aim to understand the challenges facing these non-conventional producers. Overall, I hope this report provides insight into an understudied population who has expressed the need for greater support from individuals, organizations, and institutions to succeed and grow.

In addition to this stakeholder report, I developed two research articles submitted to peer-reviewed journals. These articles include an analysis of factors affecting producers' success and predominant challenges (quantitative) and on perceptions of success and agriculture from the perspective of small producers (qualitative).

The report was written and developed by Katie Tritsch with assistance from her graduate committee members, Ken Mix, Michelle Edwards, and Manuel Piña, Jr. Representatives from Farm and Ranch Freedom Alliance, Farmshare Austin, National Center for Appropriate Technology – Southwest Regional Office, Ogallala Commons, Texas Center for Local Food, Texas Farm Bureau, Texas Small Farmers and Ranchers Community Based Organization, and University of Texas – Rio Grande Valley all contributed to this research by helping reach small producers throughout the state and/or by providing feedback on the concluding recommendations.

Introduction

Small producers are farmers and ranchers with gross cash farm income¹ under \$350,000 (Whitt, Todd, and MacDonald, 2020). 93-97% of Texas producers are considered “small” per USDA’s definition (NASS, 2017). Beginning, limited resource, socially disadvantaged, veteran, and women farmers also tend to operate smaller farms than the U.S. average (CRS, 2021; ERS, 2021). In this regard, understanding small producers can provide insight into historically underserved farmers and ranchers.

Research on small producers is extremely limited.² This project was the first to empirically evaluate the needs of small producers in Texas. I took a “big picture” perspective when framing the project and aimed to contribute knowledge about small producers’ greatest challenges, identify what contributes to their success, and understand their perceptions of success.

Due to sampling procedures, findings are not representative of Texas small producers as a population. Data will be most relevant to small, diversified producers who aim to produce sustainably, sell direct-to-consumer, and who are young (aged 35 or less), beginning (less than 10 years of experience in farming), and/or first-generation.

How the Study was Conducted

I conducted an online survey and semi-structured interviews. I developed both questionnaires with review from my committee members and, for the survey, with input from stakeholders at the 2019 Farm & Food Leadership Conference. I used registrants of the 2019 Farm & Food Leadership Conference to construct a list of 136 Texas small producers who were emailed the survey link. For interviews, I worked from a list of recommendations and contacted producers individually by email. I ended up with 48 usable responses from the survey and conducted 11 interviews with producers throughout the state.

Needs Assessment Data

I investigated predominant challenges, success factors, perceptions of success, and visions for the future using quantitative and qualitative methods. The following sections provide an overview of data collected.

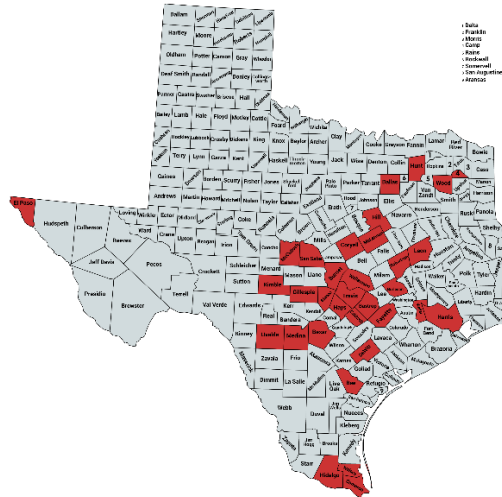
Survey

I received a total of 48 usable responses (41% response rate; 97% completion rate) from producers in 33 counties (Figure 1). 52% of respondents considered farming or ranching their primary occupation, while 48% held a primary off-farm job. 60% reported having an off-farm job at some point in the past year.

¹ Gross cash farm income measures farm revenue including sales of crop and livestock, government payments received by producers, and other income generated from the farm (Whitt et al., 2020).

² For a full literature review developed as part of this research project, please refer to our publication, [“What Makes a Small Farm Successful? A Review of Success Factors, Needs, and Challenges.”](#)

Figure 1. Respondents Represented 33 Texas counties.



72% were first-generation farmers and 59% were beginning farmers with less than 10 years of experience. 55% reported working on other farms prior to starting their operation.

100% of respondents had at least some college education, with 49% holding a college degree and 28% holding a graduate degree or higher.

15% were U.S. military veterans. 60% were males and 40% were female. 82% identified as white, while 14% identified as Hispanic/Latino, 2% as Black or African American, and 2% as American Indian or Alaska Native.

Farm Characteristics

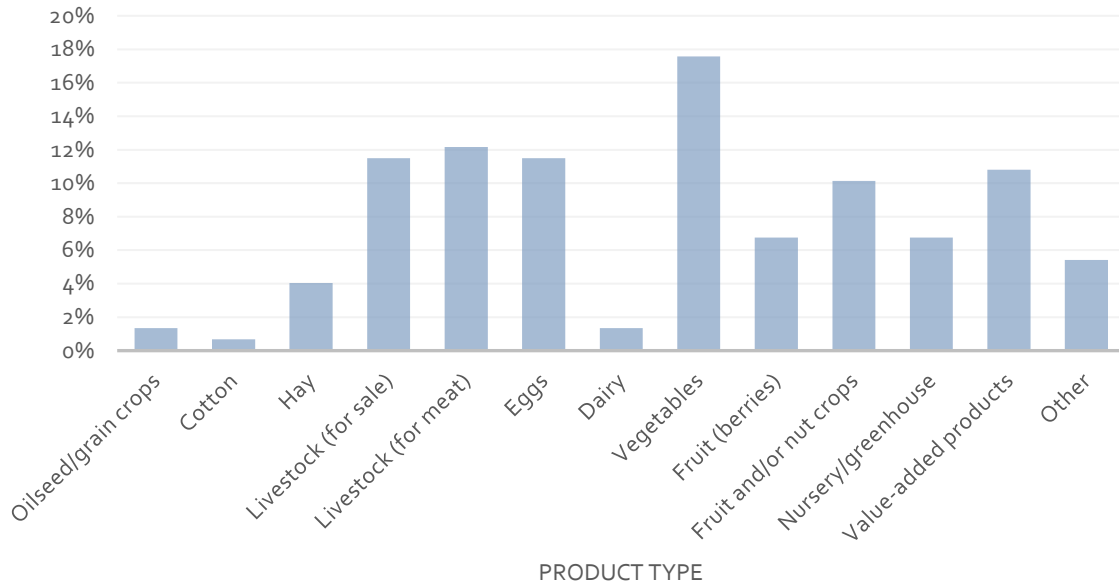
Respondents grew or raised a total of 148 different products for an average of 3 products per operation (Figure 2)

Respondents generally operated small acreage. 31% farmed on less than 9 acres, 27% operated 10-49 acres, 17% operated 50-199 acres, 19% operated 200-499 acres, and 6% operated 500 acres or more. 29% rented/leased land to operate their farm.

8% had at least a portion of their land under organic certification, and 97% said they used sustainable practices. Respondents reported using a total of 155 sustainable practices in total, an average of around 3 practices per operation (Figure 3).

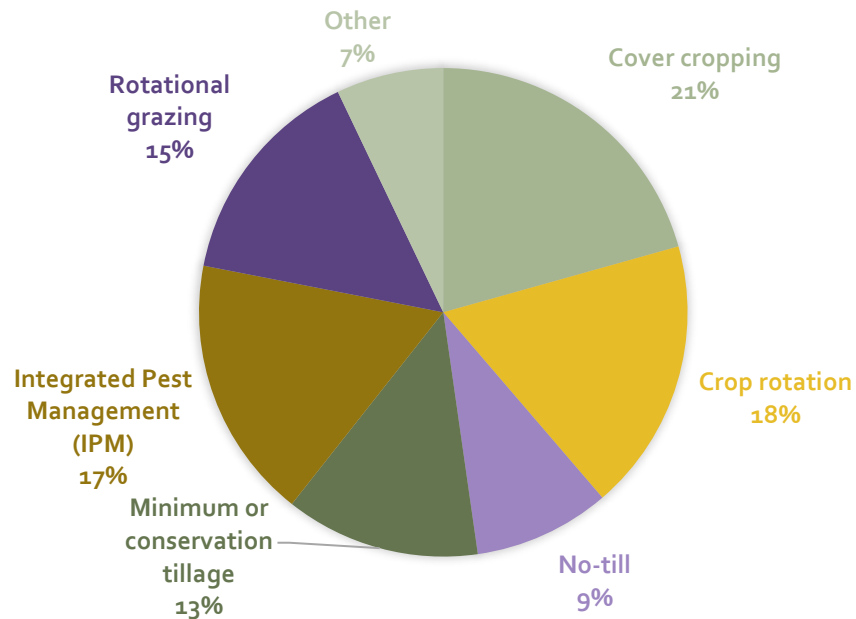
8% received payments through federal crop insurance (FCIC), Agricultural Risk Coverage (ARC), Priss Loss Coverage (PLC) or disaster payouts. 21% participated in federal conservation programs like Conservation Reserve Program (CRP) and Environmental Quality Incentives Program (EQIP).

Figure 2. Farm Products of Texas Small Producer Respondents.



16% always used hired labor, 56% sometimes used hired labor, and 27% never used hired labor. 20% had a hired farm manager and 27% hired a bookkeeper or accountant to help with financial recordkeeping.

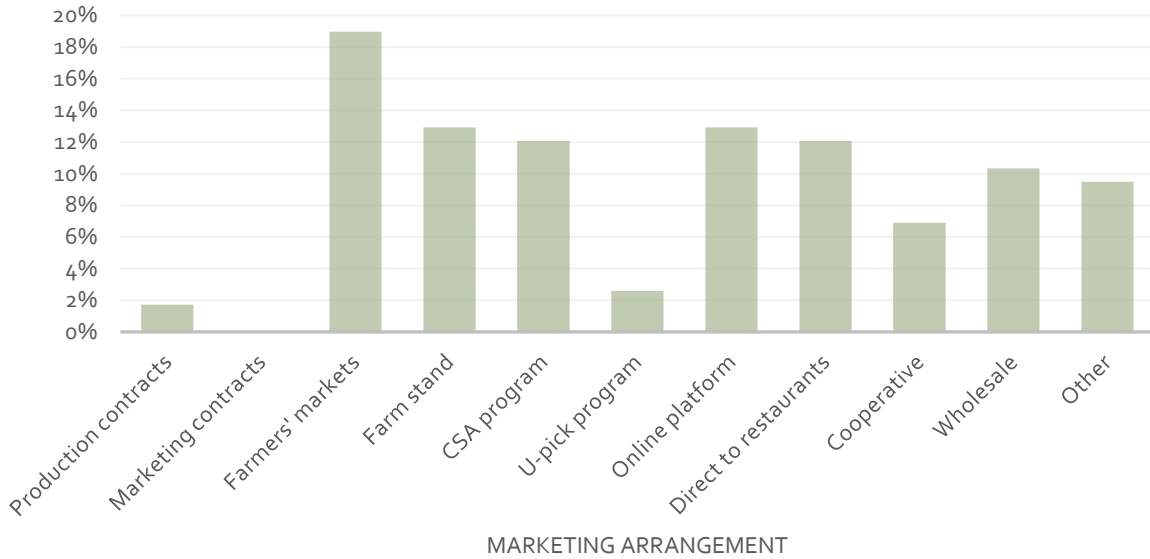
Figure 3. Sustainable Practices used by Texas Small Producer Respondents.



48% were structured as sole proprietorships, 31% as LLCs, and 15% as nonprofit or institutional farms. Less than 5% were partnerships or corporations.

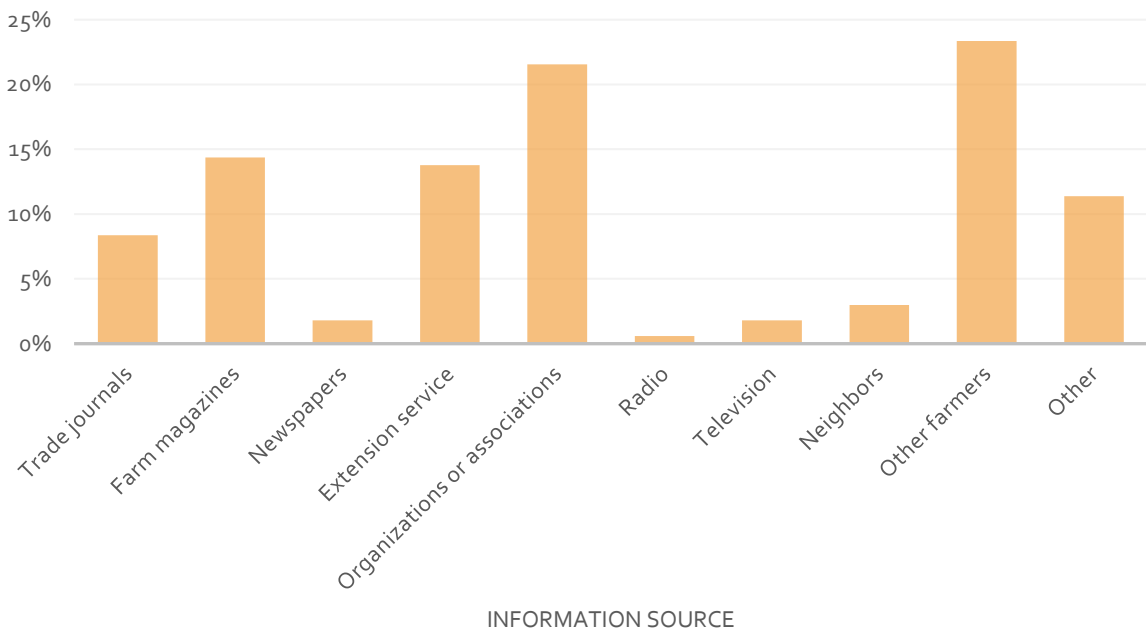
Respondents mostly sold direct-to-consumer. They reported a total of 116 marketing arrangements, for an average of around 2 marketing strategies per operation (Figure 4).

Figure 4. Marketing Arrangements of Texas Small Producer Respondents.



Respondents received information about farming and ranching from a variety of sources, mostly through other farmers and organizations/associations (Figure 5). "Other" was mostly characterized by online sources like social media.

Figure 5. Sources of Production Information among Texas Small Producer Respondents.



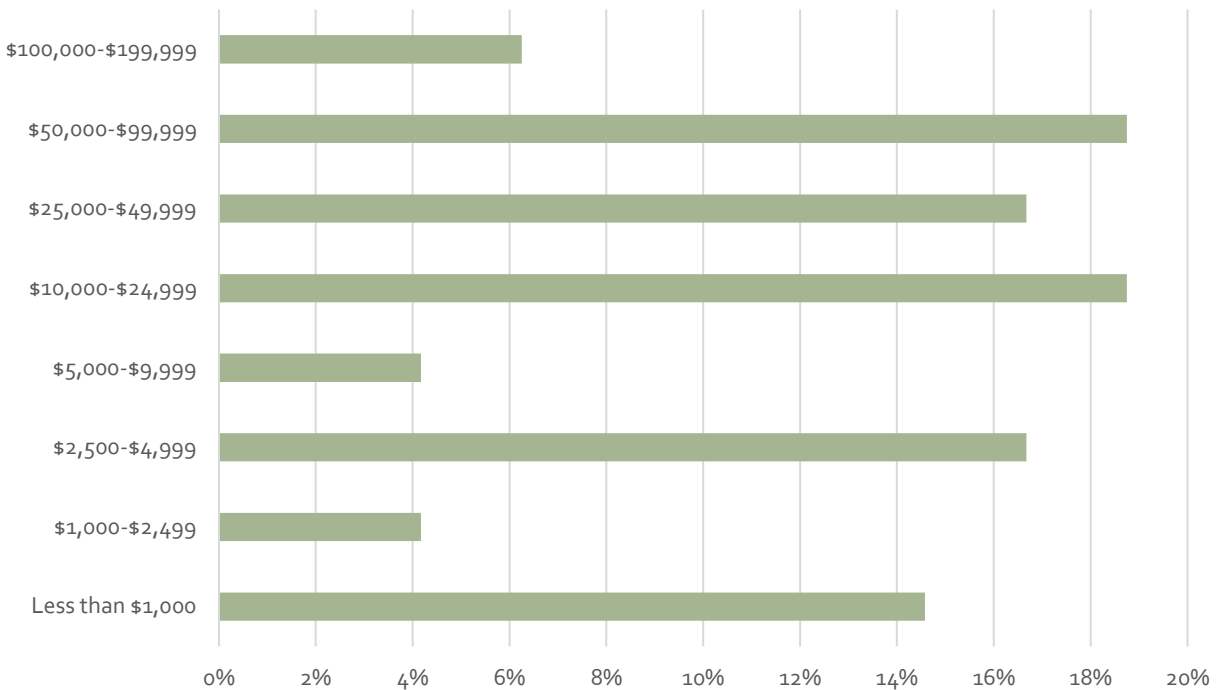
In terms of future farm plans, 74% expand their operation's size and/or enterprises, 13% wanted to maintain their current levels of production, and 2% were planning to retire. 13% selected "Other" – "pass down to the next generation," "purchase my property and plant added value crops," "stay in ag... making some changes with more diversity," "pass on operation to my children," "agritourism."

Success

15% of respondents did not identify as successful, 33% were unsure, and 53% said they were successful at some level.

Producers had a variety of farm income ranges, but all were under \$200,000/year (Figure 6). 38% utilized credit to operate their farm or ranch. 21% indicated they were profitable in the past year, 33% reported "breaking even," and 46% reported being unprofitable.

Figure 6. Gross Farm Sales of Texas Small Producer Respondents.



Producers more consistently reported that quality of life was a greater contributor to their success than profitability (Figures 7 & 8).

Figure 7. Respondents' Perception on the Importance of Profitability to their Success.

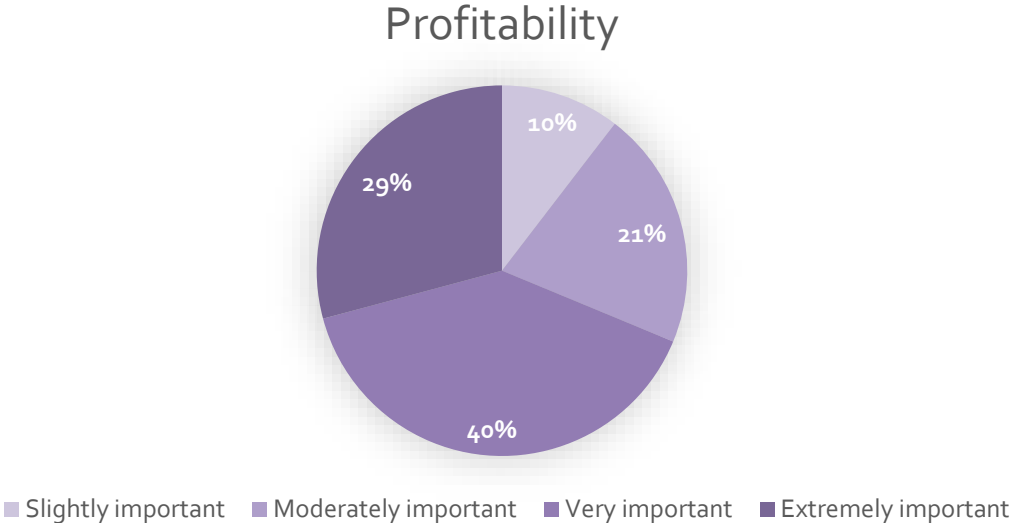
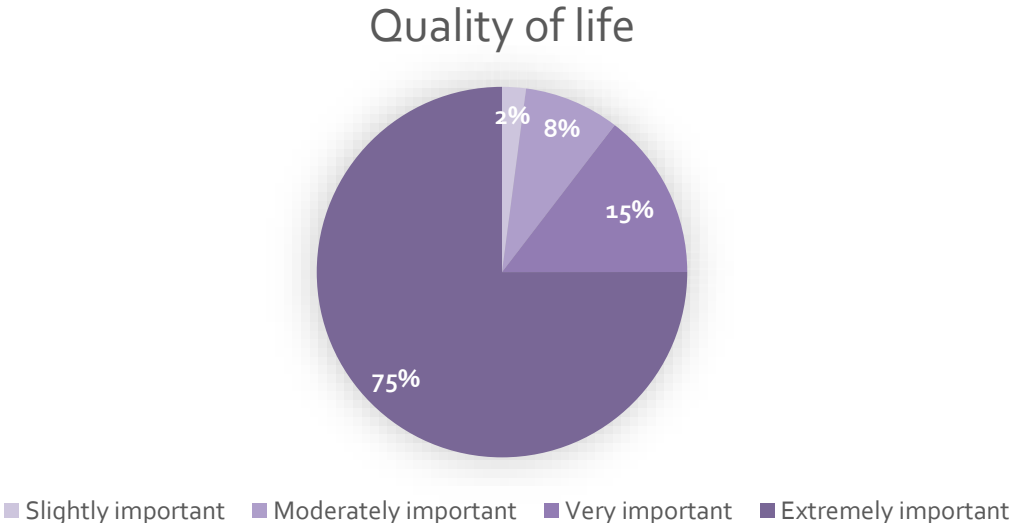


Figure 8. Respondents' Perception on the Importance of Quality of Life to their Success.



Challenges

Producers rated seven “challenge categories” in terms of difficulty and cited specific examples under each category. Parentheses indicate the number of respondents who selected each response.

Challenge categories	Percent identifying category as a challenge	Average difficulty rating (1-5 scale)	Specific issues ¹
Capital	67	3.5	Purchasing equipment (48%); securing loans or other external funding (33%); finding labor (27%); accessing land (25%); water availability (21%); other (2%)
Production	71	3.29	Soil health (52%); crop pests and diseases (44%); weed management (38%); crop fertility (27%); diversification strategies (25%); livestock nutrition (13%); livestock diseases/parasites (10%); other (8%)
Marketing	56	3.63	Direct marketing techniques (46%); advertising and labeling (40%); lack of consumer education (35%); wholesale marketing (21%); technology (17%)
Legal	69	3.21	Food safety regulations (54%); voluntary food safety programs (29%); organic certification (15%); other (15%)
Financial	60	3.45	Accounting (42%); cashflow projections (35%); recordkeeping (35%); spreadsheets/software/tech issues (31%); determining profitability (27%); understanding financing options (21%); other (6%)
Informational	38	3.28	Cannot afford to attend events (23%); do not have time to attend events (21%); lack of workshops or training (19%); resources do not meet needs (15%); not sure where to find resources (13%); other (6%)

Challenge categories	Percent identifying category as a challenge	Average difficulty rating (1-5 scale)	Specific issues ¹
Social	33	2.94	Family relations (19%); training and managing labor (17%); retaining labor (17%); hiring labor (15%); power struggles (4%); other (2%)

¹Percentages expressed as a ratio of total respondents (n=48).

Marketing was rated the most *difficult* by respondents, followed by capital, financial, legal, production, informational, and social.

large-scale farming, what the best and worst part of farming was, what they would like to do to change their operation, and the direction in which they would like to see agriculture move.

I discovered seven major themes and one sub-theme related to success, challenges, and vision, and have included a few quotes demonstrating each theme below.

Success

Farming as personal fulfillment

- "And I really believe if you - if your work is something you're passionate about, then there's no other option but success there. Even if this place fails to make money, and I can't do that part of it anymore, it won't ever be a failure because I poured my heart and my soul and everything into this place."
- "You know, you may not be making a lot by the time you pay your expenses at the end of the year. You've got to love the life."
- "My biggest fear is not getting to go to work tomorrow. So, I think every farmer that feels that way will tell you well, we're successful, we're in business this year... Every fiber in their body is getting up and try to go beat Mother Nature today. Beat the markets today... Problem solving. And you really do get up every day knowing something's going to be broke, something's going to be sick. The weather dealt you bad cards today, but you learn how to deal with it and how to problem solve. And you win some, you lose some every day."
- "I mean, I really enjoy raising good food for people. It makes me feel very good. I like to see how this ranch is responding to the changes that we're making. That's very exciting. It just excites me, the whole thing, it's very fulfilling."
- "We don't have a boss, we are running our own business and getting to call all the shots, which comes with it a huge burden of responsibility and worry and sleepless nights sometimes, but it just can't be traded. It's just so wonderful to be able to do, to be able to lead your life in the direction that you want to lead it - is just bliss. It's just so great. So we are so thankful that we have been able to pull this off as long as we have and hope that we can continue."
- "Dollars is not the only success, right? What are we doing socially, environmentally? All of those other things that that play in your life that we define happiness by. So you have to think about your family. What do you want for your family? What do you want for your employees if you have employees? What's the quality of life you're after?"

Importance of community

- "The beginning farmer program has probably been the most positive in terms of training and mentorship, incubation periods, and then just meeting other farmers and knowing their success or failures and that kind of thing."
- "It's just real fulfilling to watch the market work every week. I mean, kind of takes you back to a time that maybe every small city all over the world, actually, but in the United

States, they came to market, they sold their wool or sold their beef or chicken, anything they had to sell at the market. And so it was very social.”

- “I want to tell all these people that we work with... These are the mistakes we made. These are the funny stories behind it. But if you look at it overall, it's not a funny story. This is how you can improve your model or be detrimental to your model - the whole thing is education. We've got to help each other out. The more we talk, better we are. So, communication's key.”

Adaptability and versatility

- “I mean, the job is farming. And you gotta have some skin in the game. You got to adapt because there's always going to be crap going wrong. So that's just what we do.”
- “So I think innovation is the way that the small farmer is going to be successful. Got to figure out how to... integrate multiple systems of production.”
- “The work is really, really physical, you've got to be willing to do the mind over matter. You have to be willing to enjoy that kind of a challenge and not find yourself in a mindset of suffering, you know, so that is both a joyous challenge and really hard. So that's the endurance.”

Challenges

More hours, more hands

- “How we seem to run out of time to do it all – to till up and harvesting and planting and keeping all of that going is the biggest challenge.”
- “But part of it for our area is it's real difficult for me to get much larger because of lack of farm labor. That's my main obstacle. And we could grow every year... We can literally grow the things that we're selling, but we could grow the business. But everything we do on the farm is hand labor, and that's just really difficult. We live about thirty-five miles from the closest city. So it's a 70 mile round trip for someone to come out and work on the farm.”
- “I need a eight the day week and a 36 hour day, so if you can make that happen for me. I do. It's just the days go too fast. The weeks go by, the months go by. And for a farmer, everything's measured in a season. So my summer season is gone. I wasn't ready for it in a lot of ways.”
- “The work life balance. It's weird because we home school our kids, we're both here all the time, but we're not ever like we're around each other constantly, but we're not ever together kind of thing. So that's probably my biggest challenge.”
- “[The most difficult part of farming is] making money , but also it's the dailiness, especially in the summer, in the heat, the fact that you have this – you have a certain number of chores you've got to get done no matter if it's one hundred eight degrees and you've got to do them seven days a week sometimes and the not being able to get away.”

Small farms in a large farm world

- "Some of those roadblocks are a lot of these programs are designed for a cotton farmer that farms a thousand acres and maybe they get two hundred and fifty thousand dollars a year from the federal government. And so they have a specific designated person who knows how to fill out all of the forms and knows how to do all of that."
- "I feel like there is a lot of talk of government help and then you really have to go through hoops. That keep you from farming to get what you need to farm."
- "But like the FSA program, halfway through it, we realized that the people that it is best for are families whose children are trying to buy farms from the parents because they're going to wait around for something to close. Like if you're buying it from your parents, it can take as long as you want. You're getting a great interest rate, its basically just legally changing hands type of thing. You're not inheriting it. You're buying it from them. So I think that these things have good intentions... They're just not very user friendly."
- "So they will call specific people to let them know, hey, LFP is there. And you've got 5000 acres and a thousand head, the programs available for you to have some relief. But they're not going to call me. I have to find the program and figure it out. So that's a huge one."
- "I think that's a big part of why I changed over from working on a for profit farm, to going back to school and now staying in this institutional farming type setting, because the farm I was working on was 12 years in and it was still in the red and they were able to do that because they both had retired and had the money to spend on it. They didn't need it to make money. But as a young person thinking about building a career in this field, I can't do anything for 12 years in the red."

To stay or to grow? (sub-theme)

- "You're kind of in between, like you want to take advantage of those time saving equipment, but you don't want to buy it yourself. That's hard for small farmers."
- "So, you have to go up a point that you've got almost automatic collection type systems to make it worthwhile, in which case you need a thousand chickens. So, you know, the difference between 200 and a thousand means you're no longer a vegetable farmer. You're a chicken farmer full time."
- "That all comes down to scale like I would be out of business if I grew several rows of cabbage every season, but if I had a hundred acres and three tractors that could put in miles of cabbage at a time, that scale would change the profitability of that crop."

Vision (what should be)

A more sustainable, equitable agriculture

- "Some things have to collapse for other things to grow, and so I don't see chemicals working forever and so I think so many things would have to move and shift to bring that about, to have less chemicals in our society, in our farming, you know?"
- "I think that we would be better served with incentive programs to get people to reduce their tillage, reduce their chemical inputs, protect biodiversity, like people aren't going to do it unless there's a financial benefit to them. And I don't see something like carbon credits doing the job. That's going to be like a long term thing."
- "I think my big picture goal would be to get more people interested in farming, more people educated on how to run a business farming, and then make it possible or easier for first generation farmers to not only get education, but to get land, because if they can't acquire land, they can't farm."
- "[Farming] is not something that most people would want to do, but the people who do want to do it should have an opportunity to do it. That's what we're hoping for. And there's a lot of young people that do want to do it."
- "My personal political thought on the matter is that it isn't appropriate for [nutrition programs] to be a part of the of the way that we're supporting farming and should probably be brought under, like, Health and Human Services or something like that instead, so that those political resources devoted to the agricultural branch of our government can focus more on supporting and really completely overhauling the way that we farm, the way that we grow food for people in this country."
- "I would like to see people who want to be farming be able to be farming and for it to be financially solid enough that they can feel secure in that as a as a life path."

Valuing small farms and local food

- "Some farmers think I charge way too much for my produce, and they can't believe that a half pound of mustard greens is five dollars, but I put a lot of value into what I'm doing because I value myself. I value my dream and if more farmers would like hold that value instead of being like, oh, cotton is sixty three cents a pound or I mean it's like something really low and so you have to grow thousands and thousands of pounds of it to make any money, then we'd be in a better place if we could you know, learn the value of that a little bit more and be willing to pay it just like you would pay two dollars for a giant avocado. Like why don't you pay two dollars for a turnip that was grown in your hometown?"
- "I'm trying to get people to understand the that you may not taste the difference in organic food to conventional food, but that there is a difference in longevity or buying from a small local farmer versus buying it from the big grocery stores and how it lasts longer and how it's going to taste better. And so in the long run, you may spend a little bit more money, but you are doing double fold by supporting your local farmers, as well as actually spending less money because you're not having to re-buy that every three days versus maybe one to two weeks."

- “That is something the general public doesn't understand at all. I don't know where that gap is between education, just basic education of how long it takes to get your food here. And I’ve realized that even more this year because people were desperate for me to have available things that one, the soil temperature wasn't warm enough in March to even plant it and when I did get to plant it in April we’re 90 days from harvest. Like what? It takes 90 days to grow a... whatever they want. And even a radish, which is one of the fastest crops I can grow is 21 days in, there were adults that had no idea, none at all, which just... I mean, that's my naivete from being grown up on a farm is I guess, and being in an agricultural community where we live, is that I think most people do know that and obviously they don't.”
- “So I think for the future to be more value for the farmers, be more valued, receive more aid, more help and just for governments to make plans to save space for farmers, to make it easier.”

Conclusion

Based on the survey and interview data, I identified four “performance needs” (Davidson, 2005) of Texas small producers:

1. An improved ability to access land, labor, and capital.
2. The ability to effectively implement multiple sustainable production practices.
3. To be supported by consumers in the market.
4. To be supported by institutions in the provision of resources.

I worked with Michelle Akindiya of Farmshare Austin, Sue Beckwith of the Texas Center for Local Food, Judith McGeary of the Farm and Ranch Freedom Alliance, and Phil Ross of the Texas Small Farmers and Ranchers Community Based Organization to refine a list of recommendations to help Texas small producers thrive.

Table 1. Recommendations to Enhance the Success of Texas Small Producers

Performance Need	Decision-makers	Recommendations
Improved ability to access land, labor, and capital	State of Texas/Texas Department of Agriculture	<ul style="list-style-type: none"> • Develop statewide funding opportunities for land trusts, cooperatives, and other land-holding entities to purchase and hold land for agricultural operations run by small and historically underserved producers (Ackoff, Bahrenburg, & Shute, 2017). Ensure participating producers have a pathway to land ownership and that they are meeting requirements of FSA loan programs. • Establish financial incentives for counties and cities that set aside land for small-scale agriculture.

		<ul style="list-style-type: none"> • Create tax benefits for landowners who pass on their land to new and beginning farmers (Ackoff et al., 2017). • Identify state-owned land that can be leased for small-scale agriculture (Ackoff et al., 2017). • Increase funding for the Young Farmer Grant and allow cost-sharing on equipment purchases over \$5,000. • Consider development of a Texas Local Food Grant to assist small-scale farmers and farmers markets raise capital on a cost-share basis. • Create a Food Safety Cost Share Reimbursement Program for small and historically underserved producers to invest in necessary food safety equipment, infrastructure, and training.
	Farm organizations and service providers	<ul style="list-style-type: none"> • Develop a Texas land link program and a statewide farmer mentorship program to connect new and existing producers. • Evaluate interest and opportunities for small producers to cooperatively purchase health and workers compensation insurance (Sullivan, 2011), as well as equipment and inputs. • Provide trainings that target youth on the benefits of farm labor, as well as entrepreneurship and farm ownership (Sullivan, 2011). Work with high school and university agricultural programs to develop internship opportunities for students on small, local farms. • Fundraise from foundations and private investors to provide grants or no-interest loans to small farm and food businesses in Texas.
	Consumers and communities	<ul style="list-style-type: none"> • Advocate for increased agricultural education in primary schools, particularly for high school students entering the job market.
Ability to effectively implement multiple	State of Texas	<ul style="list-style-type: none"> • Ensure the On-the-Ground Conservation Program receives adequate state funding appropriations. Evaluate program outcomes relative to producers' conservation goals.

sustainable production practices	Farm organizations and service providers	<ul style="list-style-type: none"> • Pursue projects that provide direct technical and/or financial assistance to producers implementing sustainable practices. • Research and demonstrate the efficacy of sustainable practices and share results with the small farm community.
Support from consumers in the market	Consumers and communities	<ul style="list-style-type: none"> • Support Texas small producers by purchasing directly from them. This can be done at farmers markets, CSA subscription programs, local restaurants, and increasingly through online ordering. • Push for local food procurement in Texas institutions like schools, hospitals, event centers, and other large businesses or organizations. • Work with local farmers and farm organizations to host agricultural events where community members can interact and learn about small-scale farming in Texas. • Connect with farm organizations, service providers, and agencies who impact the success of Texas agriculture. Join, donate, and volunteer when you can. • Seek education on food and farming issues and advocate for increased agricultural education for young people in your community.
Support from institutions in the provision of resources	Farm organizations and service providers	<ul style="list-style-type: none"> • Conduct outreach and advocacy work that removes barriers for small and historically underserved producers to access local, state, and federal financial resources and farm support programs. • Develop relationships with government agency representatives that serve the farmers and ranchers you work with. • Encourage small and historically underserved producers to enter into leadership positions with USDA, state agencies, and agricultural nonprofits. • Host leadership and advocacy trainings for small and historically underserved producers. • Receive training on the requirements and processes of USDA programs to effectively

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- communicate to producers on-the-ground.
- Assess the needs of the producers you serve (Davidson, 2005). Share results with USDA, Texas Department of Agriculture, and other agencies.
 - Tailor activities to the needs and desires of your audience (e.g., addressing cultural barriers to participation) (Ostrom, Cha, & Flores, 2010) and learn to evaluate programming from an equity lens.
 - Measure success relative to producer goals (Ahearn, 2016). Small producers are diverse and will be looking to achieve different outcomes.

Note. This table was taken directly from my original thesis, submitted to the Texas State University Graduate College in November 2021.

This project contributes new and unique data on the needs of Texas small producers, though not without limitations. Representative sampling methods would strengthen data and results, and I would be interested in collaborating with other researchers in pursuit of a representative sample.

There is much more work to be done in terms of research, outreach, and extension for small and non-conventional farms. This project helped to clarify the barriers these farmers face are largely external (i.e., institutional, market-related), which suggests the need for support beyond training and technical assistance that address “knowledge deficits” (Calo, 2018). In other words, how can practitioners begin to address the structural barriers facing small producers?

If small farms are valuable to achieving sustainable agriculture, then meeting their needs is critical. The recommendations above are a good starting point but will not be enough without transformation of federal level policies and programs that provide risk management, price incentives, production subsidies, and other services that comprise the backbone of the U.S. agricultural support system (FAO, UNDP, & UNEP, 2021).

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