

Inventory and Evaluation of Farmer and Rancher Training Programs in New Mexico

Phase 1 Final Report

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Introduction

Training a new generation of farmers is necessary to support and strengthen local food systems and communities in New Mexico. Such programs generally focus on skills needed to run a local, sustainable, small and mid-scale production. Many programs aim to recruit beginning farmers.

Curricula and delivery methods vary, from workshops, short classes, seminars, classroom education and online training. Place-based activities, including hands-on farm training, apprenticeships and farm incubators that use participatory learning methods, seem to be more successful than other training approaches. Farm incubators are trained to become independent farmers and are connected to farming and social networks.

Numerous farmer training programs have emerged throughout NM in the last 10 years. These are generally sponsored by state agencies, city and county governments, foundations, non-for-profit organizations, professional groups, and individual farmers. The overall purpose of training programs is to promote farming and increase the number of local, small farmers. Many also aim at addressing food availability and access and promoting cultural traditions and conservation of natural resources.

Farmer and rancher training programs are a worthwhile endeavor: there is evidence on the multilevel benefits of local food systems that facilitate food access and promote conservation and sustainability. Traditional farming practices and well-developed local food systems contribute to sustainable ecosystems, food production and access, economic development, human and social capital, and community resilience. Natural resource conservation initiatives reduce soil erosion, enhance water supplies, improve water quality, increase wildlife habitat, and reduce damage caused by floods and other natural disasters.

While there is anecdotal evidence on state-level efforts to encourage people to become farmers, a formal and reliable account of training programs in NM has not been conducted. This project aimed at fulfilling that gap, and to answer the following relevant questions: 1) how many farmer/rancher training programs are being implemented in NM, 2) what are the approaches, curricula, and delivery methods used by training programs in NM.

Goals and Objectives

1. Develop an inventory of existing training programs in NM.

Objective:

1a. Conduct a statewide search (e.g., internet, social media, key informants, snowball) to identify ongoing farmer and rancher training programs across NM and develop a database of active training programs. The database will be designed to include standard features, such as relevance, consistency, induplication, cascading, simplicity, execution, performance, and maintenance. It will include a variety of fields such as program's name, location, administrator(s) and funder(s), purpose, goals and objectives, recruitment, participants, training approach and curricula, expected outcomes, available resources, and other key information.

2. Conduct a case study to gather additional insights into training programs. The value of the case study approach is well recognized in the fields of business, law and policy, and in social and health sciences.

Objective:

2a. Select two training programs identified through the statewide inventory to allow for a more in-depth, multi-faceted exploration of complex issues in their real-life settings of farmer training programs. The case study lends itself well to capturing information on more explanatory, such as *how* is the intervention being implemented and received; *what* are "other" benefits resulting from the intervention –multilevel benefits; and *why* are some approaches recommended over others.

Methods and Procedures

This was a mixed methods retrospective and cross-sectional study consisting of quantitative and qualitative approaches. Primary and secondary data were collected through online searches, one-on-one interviews with key informants, and review of publicly available information. The study received approval by the University of New Mexico Institutional Review

Board (HRRC#: 24-206). Inventory participants were randomly selected to receive a \$50 merchandise card, and all interview participants received a \$50 merchandise card.

Training Program Inventory:

The evaluation team utilized multiple strategies to compile a list of farmer and rancher training programs in New Mexico. First, a meeting was convened by the Thornburg Foundation on April 10, 2024, which included Thornburg staff, the evaluation team, and stakeholders from across the state. At this meeting, the evaluation team presented the project and requested meeting participants to provide names of farmer and rancher training programs in the state of New Mexico. Stakeholders were also asked to provide feedback on data that would be important to collect about each training program (e.g., goals/objectives, etc.) for the inventory. The evaluation team also contacted all participants by email after the meeting and invited them to contribute to an online shared document where additional training program names were gathered. In addition to gathering names of training programs from Thornburg Foundation stakeholders, the evaluation team conducted online searches to identify any other training programs.

Once the training program list was finalized, the evaluation team conducted internet searches to identify publicly available contacts and information about each training program. Inventory data were collected through online searches using a variety of combined key words (e.g., New Mexico, apprenticeship, farmer training, rancher training). Program data were obtained from websites, public reports, media articles, etc. All training programs were then contacted and invited to provide information about their training program through a brief Qualtrics survey. Data were collected via Qualtrics and phone and email outreach to individual programs from June through September 2024. At the end of this process, six programs were randomly selected and received a \$50 merchandise card for participating.

Case Study:

Once the training program inventory was finalized, the evaluation team met to discuss selecting programs to invite to participate in the case study. Type of training program, location of the program, and populations served were considered when selected programs to invite to participate. The team aimed to enroll two established training programs to complete the case study which included in-depth, semi-structured interviews with key program staff and participants. Interviews were audio recorded and transcribed for qualitative thematic analysis. Up to 10 key program staff and participants were eligible to participate in interviews at each case study site. All case study interview participants received a \$50 merchandise card. Case study recruitment, enrollment, and interviews occurred in June and July 2024.

Results

Farmer and Rancher Training Program Inventory Results

Based on Thornburg Foundation stakeholder meeting feedback and online searches, 58 distinct farmer and/or rancher training programs were initially identified. Of those, the evaluation team determined 15 were not training programs based on internet searches and/or communication with the organization or program. Therefore, the final inventory included 43 programs; five of the 43 programs were Food Corps affiliated but located in different cities.

All 43 programs were contacted by email and/or phone to collect inventory information. Seventeen (17) completed a Qualtrics survey; of those, 2 declined to share information publicly and these responses were not included in the final inventory. The final public-facing inventory is available here: https://unmm-my.sharepoint.com/:x:/g/personal/vrtotaro_unm_edu/EUy3zJngER1CuOs7koyexLAB2xzplKwOFNdrwbukjEue3g?rtime=R1zMjkHe3Eg

Of the 43 training programs, most were located in Albuquerque (n=10, 23%), Anthony (n=4, 9%), Corrales (n=4, 9%), or Santa Fe (n=3, 7%). Sixteen (37%) were located in Bernalillo County, six (14%) were located in Doña Ana County, and five (12%) were located in Santa Fe County. One program delivered training statewide and another delivered training online. The oldest active training program was established in 1996 while the newest programs were implemented in 2024. The average duration of training programs was 11 months (range = 2 days to 2 years). Three programs reported that the duration of the training program varied. The average number of participants was 85 (range = 3 to 400).

Of the programs that provided information via Qualtrics survey (17 survey respondents representing 21 programs), most reported funding through federal grants and the USDA (n=11). Several indicated combinations of funding and several indicated donations were a source of funding (n=9). Many programs indicated “anyone” could participate (n=12) while others indicated specific target audiences including youth (n=2) and refugees, immigrants and asylum seekers (n=1). Table 1 shows training programs’ responses to a question assessing the purpose of training programs.

Table 1. Summary of training programs’ responses regarding the purpose of programs

Advance a regional practice of climate smart agriculture solutions while removing individual and systemic obstacles for socially-disadvantaged and colonia farmers of the Chihuahuan Desert ecoregion and providing them with opportunities to prosper. Built on a growing network of small farmers through education, mentoring, and technical assistance, this program creates regionally distributed training opportunities and a community of practice.
Educate youth about ranching.

Educational programs for grass-fed livestock production, marketing, and business planning.
This organization established this farmer incubator program in 2023 in hopes of increasing the amount of young, beginner Indigenous farmers able to use farming on Tribal lands as a livelihood, foster healing and increase the amount of available locally grown produce and traditional/value-added foods.
Link acequia and land, with young local people who want to stay in community & create a healthy sustainable future
Providing schools garden education opportunities through our garden and justice-oriented curriculum.
Supporting new farmers
The purpose is to restore human lifeways and practices to a place of belonging to the natural world, and the sense of ecological responsibility that comes with that.
This is a training for Native American Farmers and Ranchers.
To cultivate a relationship with land and food to support community health.
To provide beginning farmers & ranchers with the basic understanding of whole farm/ranch planning and opportunity to experientially engage with simple templates that allow them to develop business management and production planning skills as well as network with other beginning farmers and ranchers.
To provide training and resources to farmers.
To teach aspiring farmers both traditional Native and modern farming techniques.
This is a program of Lutheran Family Services Rocky Mountains Refugee & Asylee programs in Albuquerque. Empowering New Americans through our agricultural programming—providing resources, education, and training to cultivate self-sufficiency, community integration, and strengthen cultural food security within New Mexico’s food landscape.
We create social, economic, and leadership opportunities for rural youth through sustainable food and agriculture.
Youth/adult agriculture and environmental education.

Table 2 summarizes major themes identified in responses to a question assessing training approaches utilized by training programs.

Table 2. Training approaches identified among training programs

Training approaches	n
Hands-on	10
Education	8
Partners and partnerships	6
Lectures and lessons	6
Advocacy	5
Mentorship	2
Online/virtual	2

Provision of resources	2
Technical assistance	2
Tours	2
Workshops	2
Mental health	1
Traditional knowledge	1
Videos	1

Most training programs reported implementing a formal or information evaluation. Many administered participant surveys and collected feedback from participants. One program reported, “We haven’t gotten there yet!” regarding implementing a formal evaluation.

Case Study Results

Separate from inventory data collection, five farmer and rancher training programs across New Mexico were approached to participate in the case study. Four expressed interest in participating but two were lost to follow-up. Therefore, two distinct farmer training programs ultimately consented to participate in the case study, the Center for Southwest Culture (CSC) and Grow the Growers, both of which are located in Albuquerque, New Mexico.

Importantly, CSC includes two training programs (CODECE and ¡Sembrando Salud!), both of which were included in this case study. From the CSC, three individuals were interviewed. From Grow the Growers, nine individuals were interviewed and additional data from annual reports from 2017 to 2023 were also incorporated. Below are the results of case study interviews with each of the training programs.

Summary of Findings

The three farmer training programs in this study—CODECE, Sembrando Salud, and Grow the Growers—share a common commitment to supporting underserved, underrepresented populations in farming through hands-on, sustainable agricultural education. They all incorporate personalized support, whether through mentorship, individual training plans, or adaptable curriculum. Additionally, each program emphasizes sustainability, community resilience, and food sovereignty, aiming to empower farmers to become more self-sufficient and connected to their land.

However, there are notable differences in their scope and structure. CODECE is focused on long-term, in-depth training for Indigenous and Mexicano/Chicano farmers, emphasizing both regenerative farming and business development over 1-2 years. The program goes beyond agriculture to include cultural tourism and marketing, with a goal of building economic security for participants. Sembrando Salud, while targeting similar communities as CODECE, takes a

more short-term approach, offering seasonal gardening education for families, with a primary focus on food security and sustainability rather than full-fledged farming businesses. *Grow the Growers*, in contrast, is tailored to a broader demographic range of aspiring farmers, providing a stipend for one year of training and offering a two-year incubation period where participants continue receive informal support, training, and mentorship. This program has a distinct focus on creating opportunities for those without land to start farming as a lifestyle or career.

CODECE offers a highly individualized, long-term training program for small-scale farmers, particularly those from historically marginalized communities. The program stands out for its commitment to each participant for up to 10 years, providing ongoing, personalized support tailored to the unique needs of each farmer. CODECE emphasizes the revitalization of ancestral agricultural practices, regenerative farming techniques like soil health and water conservation, and business development to help farmers build sustainable and competitive farm-based businesses. A key feature is the inclusion of agritourism opportunities, such as farm stays and workshops, which allow farmers to diversify their incomes. CODECE also utilizes a hybrid training model that combines in-person activities with remote workshops, expanding accessibility, particularly in rural areas.

¡Sembrando Salud! takes a family-based approach to addressing food insecurity and promoting sustainability through gardening. It equips underserved families with gardening kits and provides hands-on training on regenerative gardening practices, water conservation, and soil health. Like CODECE, ¡Sembrando Salud! incorporates a hybrid model of in-person workshops and online content to engage participants, especially those in rural communities. The program specifically targets low-income families, many of whom are Indigenous or Mexicano/Chicano, and aims to empower them to grow their own food and foster self-sufficiency. ¡Sembrando Salud! is also culturally relevant, offering training in both English and Spanish, and integrates traditional food practices, ensuring the curriculum resonates with participants' lived experiences.

Grow the Growers focuses on addressing the shortage of farmers in the NM by offering comprehensive, hands-on training for aspiring farmers. They take a holistic approach to farm education, blending practical on-the-ground experience with classroom instruction. Participants engage in year-round, paid internships at the Gutierrez-Hubbel Open Space, receiving direct mentorship from experienced farmers, which allows them to build the skills necessary to start and sustain their own farm businesses. The training curriculum covers a wide range of topics, from crop production and sustainable farming practices to business management, marketing, and financial literacy. The training also motivates landless participants to pursue a two-year incubation period on-site, during which they receive informal support, training, and mentorship as they explore farming both as a lifestyle and a potential career. GtG ensures that participants

are prepared to navigate the challenges of farm ownership, while also addressing issues like food security, access to healthy food, and the environmental impacts of agriculture. By combining hands-on experience with robust educational support and an inclusive recruitment strategy, GtG contributes to a new generation of diverse farmers and expands access to farming opportunities.

Preliminary Best Practices

A number of best practices have proven effective across these three farmer training programs: Grow the Growers, CODECE and ¡Sembrando Salud!. While these practices warrant deeper exploration in Phase II of the study, they offer valuable insights for initial understanding.

- Customized training that addresses the specific needs and situations of each participant is crucial, as farming is not a one-size-fits-all endeavor.
- Community-based recruitment, utilizing word-of-mouth and local networks, has proven to be effective, particularly in rural and underserved areas.
- A bilingual and culturally relevant curriculum is critical, offering training in local languages and ensuring teachings reflect local cultural traditions, especially for Indigenous and Mexicano/Chicano communities.
- A hybrid learning model, combining in-person and online sessions, increases accessibility and flexibility, accommodating diverse learning preferences and busy farming schedules. Long-term commitment, such as 1-2 years of intensive training followed by mentorship and incubation, helps to build farmers' capacity over time.
- Emphasis on regenerative agriculture and ancestral practices that promote sustainability and environmental stewardship, while reconnecting participants to their cultural roots.
- Hands-on learning opportunities, such as site visits and soil testing, paired with mentorship, offer practical experience and guidance.
- Business development education, including financial literacy, marketing, and entrepreneurial skills, is necessary to ensure farmers' success in the marketplace.
- Creating connections between farmers and local food systems, helps increase visibility and economic opportunities for small-scale farmers.

Center of Southwest Culture: CODECE and ¡Sembrando Salud!

Program History

The Center of Southwest Culture (CSC), located in Albuquerque, New Mexico (NM), was established in 1992 and has served the community for 32 years. The mission of the CSC is to develop healthy Indigenous and Mexicano / Chicano communities through economic

development, cultural, and educational programs. CSC's work takes a linguistically and culturally supportive approach and is centered on cultural lifeways, traditional knowledge, and existing resources to increase overall community health. CSC includes in its vision statement the importance of modeling innovative and supportive partnerships and programs with its communities, achieving scalable and sustainable long-term results of, by and for its communities.

Aligning with CSC values of land, the earth, and water, the CSC currently implements two agricultural training programs, a farmer training program through their initiative, CODECE (Community Development Center), and ¡Sembrando Salud!, a gardening training program.

Background Information: CODECE

- **CODECE Overview:** The CSC Community Development Center (CODECE) has served communities across New Mexico since 2011. CODECE's farmer training program has collaborated with over 75 Indigenous and Mexicano/Chicano-owned farmers to conserve their land-based cultural practices and natural resources through economic development. CODECE is a long-term farmer training program for Indigenous and Mexicano / Chicano people in New Mexico who are interested in farming and potentially starting their own business. The program supports regenerative agricultural concepts and education in financial literacy and business development and is highly individualized for each participating farmer to foster long-term economic security.
- **Methodology:** CODECE's farmer training is delivered in-person and remotely, through an innovative hybrid model that started during COVID and has been maintained to support reach and accessibility. In-person activities that are part of CODECE's individualized training include soil and water testing, food safety training, and food risk assessments performed by CSC's master farmer. Online training includes workshops, often held online/via Zoom, focused on a number of topics selected based on participant demand. CODECE makes a 10-year commitment to each trainee, and trainees are offered stipends or time/travel compensation for training when grant funds allow. Currently, CODECE is working with 43 active farms across New Mexico with approximately 6 receiving direct attention including site visits and/or active business plan development. The number of active participants tends to rotate throughout the year and from year to year.
- **Target Trainees:** CODECE targets Indigenous and Mexicano / Chicano people in New Mexico who are interested in learning about farming and potentially starting their own business. Many participants are small farmers with less than a few acres or even less than one acre of land. There is no specified selection process and anyone that is interested may participate by first filling out an Intake Form online. Participants are

generally younger farmers, between mid-30s to 60 years of age. CODECE may also recruit participants that are completing or have completed the ¡Sembrando Salud! program, a regenerative gardening program for families described in detail below. Participant recruitment tends to work best through word of mouth and prior participation in the ¡Sembrando Salud! program. In addition, recruitment in communities that place heavy emphasis on farming and agriculture such as Isleta Pueblo and the South Valley is a successful approach.

- **Training Content:** CODECE farmer training programming and curriculum were developed and are implemented collaboratively with communities, participants, and stakeholders. According to CSC's website, *"Our programming collaboratively designs curriculum and resources alongside project participants, prioritizing their expressed needs. Our approach involves frequent outreach, engaging in candid, one-on-one conversations with participants, and using those conversations to shape the direction and growth of our projects."* CODECE has a particular emphasis on revitalizing ancestral and traditional cultivation practices among farmers across New Mexico and cultural tourism which may be land-related but not necessarily farming-related. CSC staff note many participants are very interested in cultural tourism projects such as U pick farms, overnight at the farm stays, roadside stands, workshops and cooking classes, and others. Trainings generally start with regenerative methodology including soil health and water conservation, soil testing and analysis, and cover cropping. Then, training moves into business practices (e.g., marketing, value-added products, cultural tourism, and helping trainees understand possibilities within the land and resources they have). CODECE also works with farmers who are interested to develop a business plan. Overall, the training program builds in phases with enough time for each trainee to complete the process, therefore the training is not a specified time period but usually lasts approximately 1-2 years. Importantly, CSC uses feedback to change curriculum as needed and if a niche training is identified, people are identified to help build new curriculum. CSC may also engage community partners to update, expand, and create new trainings such as the Sprouting Kitchen in Albuquerque and the New Mexico Farmers Marketing Association (NMFMA).
- **Adoption of Practices:** CSC staff note that the highly individualized approach to training is what makes CODECE's farmer training program unique and impactful. Additionally, being able to offer trainings in English and Spanish and to interact with participants one-on-one is very impactful. Finally, it is critical to recognize that Mexicano and Indigenous producers have been historically shut out of food system, therefore CODECE strives to promote visibility of local producers within local food systems and support them in viability. CODECE hopes that through the training, farmers are able to build up capacity

to market themselves, brand themselves, and to be able to compete with producers that have dominated the landscape for a very long time.

- **Challenges in Implementation:** Challenges include retention of trainees since most are working full-time, though farmers tend to stay consistent with the program if dates of trainings and expectations are clearly set up front. There is also an ebb and flow of participants from season to season and year to year, depending on other life and work obligations. Farmers may also struggle with attending scheduled workshops so CSC records workshops and they are available to participants online.
- **Management Structure:** CODECE and ¡Sembrando Salud! both utilize CSC's master trainer to implement curriculum. CSC staff and program managers also help with trainings, recruitment of participants, and follow-up with participants. Both programs are led by program managers with organizational oversight from the CSC Executive Director and Co-Director.

Background Information: ¡Sembrando Salud!

- **¡Sembrando Salud! Overview:** ¡Sembrando Salud! is a sister program to CODECE's farmer training program. ¡Sembrando Salud! is a family-based gardening program with an emphasis on regenerative practices, fostering resilience and sustainability, and empowering communities and families. ¡Sembrando Salud! translates in English to "Sowing Health!" and seeks to address food insecurity in underserved New Mexico food desert communities by providing hands-on workshops and demonstrations on gardening practice and methods. The program is meant to serve as an entrance program to CODECE for those interested in growing in a larger capacity. The program has engaged over 800 families across the state and extended to 15 new communities in the spring 2024 season alone. The ¡Sembrando Salud! conceptual framework is illustrated here:

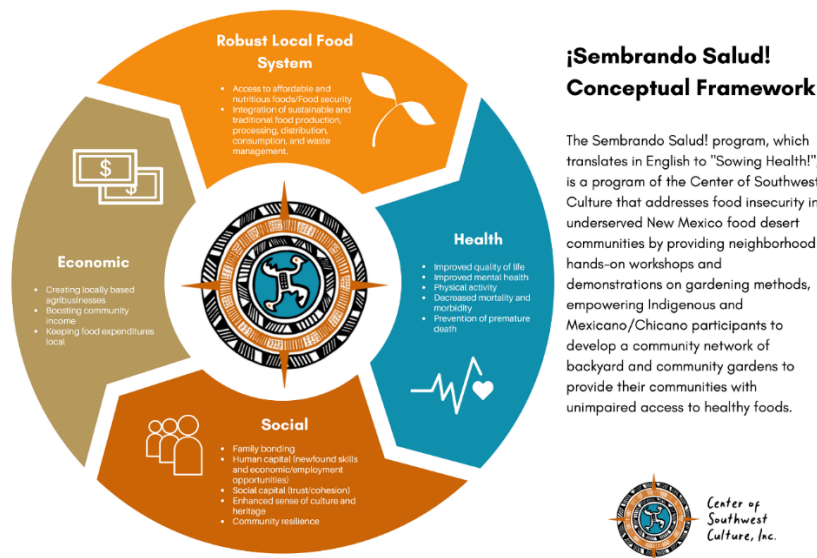


Figure 1. ¡Sembrando Salud! Conceptual Framework

Source: Center of Southwest Culture, Inc. website: <https://www.centerofsouthwestculture.org/en/sembrandosalud>

- **Methodology:** ¡Sembrando Salud! training is delivered through a hybrid model of in-person activities and online workshops and trainings over the course of the training season. The program provides a gardening kit including seeds (6-8 varieties depending on season), a 20-page booklet covering many gardening-related topics, a small drip irrigation system, and a bag of soil to all participating families. Families also receive access to educational workshops and ongoing support but no monetary stipend is provided. Training generally lasts for one season (spring and fall) and ¡Sembrando Salud! accepts a new cohort each season. Participants may participate in multiple seasons of training. Generally, during the training season, workshops are held on Saturdays, in English and Spanish, via Zoom.
- **Target Trainees:** Like CODECE, ¡Sembrando Salud! targets Indigenous and Mexicano / Chicano families in New Mexico who are interested in learning about regenerative practices and gardening. There is no specified selection process and anyone that is interested may participate but recruitment focuses on under-resourced families, low-income families, and people of color. Recruitment tends to work best through word of mouth and social media in larger cities like Albuquerque. In rural areas, however, recruitment can be more challenging. This year, CSC hired community recruiters to focus on recruitment of participants from rural areas of the state and staff note great success with this recruitment approach. CSC is aiming to double the amount of people served by the program in future seasons.

- **Training Content:** ¡Sembrando Salud! follows a formal curriculum that may change according to grant funding and funder requirements. While curriculum may change from year to year, all trainees receive training on water conservation, soil health, and general gardening methods. Each year, basics are covered at the beginning, then cooking videos are introduced to encourage participants to try new ingredients in traditional cooking. Workshops vary based on the season. CSC's master trainer usually delivers live and recorded content.
- **Adoption of Practices:** CSC staff note that the individualized approach to training is what makes ¡Sembrando Salud! unique and most impactful. Additionally, being able to offer trainings in English and Spanish and in a hybrid format has led to increased participation in trainings and retention of participants during the training season.
- **Challenges in Implementation:** Challenges include retention of trainees, though CSC staff note that families with children and women tend to stick with the program.
- **Management Structure:** CODECE and ¡Sembrando Salud! both utilize CSC's master trainer to implement curriculum. CSC staff and program managers also help with trainings, recruitment of participants, and follow-up with participants. Both programs are led by program managers with organizational oversight from the CSC Executive Director and Co-Director.

Results and Outcomes:

- **Performance Metrics:** Other than participation and expansion noted above, performance metrics were not collected as part of case study interviews. CSC staff indicated that formal evaluation of programs can be difficult, but they are getting better about doing more formal evaluations as tracking capabilities are improving. CODECE does follow-up with farmers that they work with through check-in calls up to twice annually. Personal relationships are built with farmers through CODECE and keeping in touch is important. CSC staff also note that all participants are surveyed and, additionally, recruiters will be conducting approximately 15 in-depth surveys in their communities, especially rural/tribal communities in the future to see what the training process was like, take photos, and learn more about what could change and how to better serve communities in New Mexico. CSC is also currently figuring out the best platform(s) to allow past trainees to communicate after they finish participating (e.g, Facebook page, etc.).
- **Quantitative Results:** Quantitative data were not collected as part of case study interviews other than participation numbers reported above.
- **Qualitative Outcomes:** Table 1 includes a summary of themes identified through three interviews with CSC staff about CODECE and ¡Sembrando Salud!.

Lessons Learned:

- **Insights and Reflections:** Table 1 includes a summary of themes identified through three interviews with CSC staff about CODECE and ¡Sembrando Salud!.
- **Best Practices:** Unfortunately, we could not recruit current or former CODECE or ¡Sembrando Salud! trainees to interview about their experiences and/or recommended best practices.

Table 1. Themes derived from interviews with Center of Southwest Culture (CSC) Staff on CODECE and ¡Sembrando Salud! training programs

Theme	Quote
Focus on underrepresented populations (Mexicano/Chicano, Indigenous, people of color, rural) using inclusive, bilingual training approaches	<p><i>“Well, we very intentionally and very specifically try to recruit and serve Indigenous, and Mexicano and Chicano, or really any farmer of color who's working in New Mexico. We're looking for small farmers generally. So sometimes that means somebody who's farming less than an acre.”</i></p> <p><i>“I have seen the way that our Mexicano and Indigenous producers are kind of shut out of the local food system and their communities as well.”</i></p>
Individualized training in both agriculture and business	<p><i>“It's a very individualized; it's not a, you know, one size fits all kind of training.”</i></p> <p><i>“We do make that 10 year commitment to each farmer. So that means that what works for one farmer may not work for another one. So everything is very tailored to what works for the individual farmer.”</i></p>
Continuous refinement of curriculum and workshops based on trainee needs	<p><i>“So learning about the soil health, learning about regenerative agriculture, water conservation, and then moving into training, like ... marketing and ... value-added products.”</i></p> <p><i>“... People ... give us feedback or identify ... places that they want more information. We tend to use that to ... think about how we can build on ... subsequent training programs for them ... And if we need to, we'll identify people who can help us build that curriculum if it's not necessarily our area of expertise.”</i></p>
Recruitment success with word-of-mouth and community-based approaches	<p><i>“We recruit through different events that we attend. We also recruit a lot of it is through word of mouth ... that we have farmers who kind of speak about the work that</i></p>

	<p><i>we do. ... We do a lot of food safety training in the community so we're also able to recruit that way."</i></p> <p><i>"...but when you don't really trust social media, or you're not too sure if it's if it's something that will actually happen ... getting that same information from a neighbor definitely works out more than just some post."</i></p>
<p>Sustainability – in promoting family gardening to feed households, in creating self-sustaining farming businesses, and in 10-year training commitments</p>	<p><i>"The work that I do is intended to promote the visibility of these producers within the local food system, and to also support them in their viability to ... create a sustainable business, but also a regenerative business."</i></p> <p><i>"My hope is that through the training farmers are able to build up their capacity to market themselves, to brand themselves, and to actually be able to compete with these other producers who've been ... kind of dominating this landscape for a really long time."</i></p>
<p>Growing interest in agritourism/cultural tourism</p>	<p><i>"We learned that a lot of our farmers are actually interested in agritourism ... We've already ... started providing some training on agritourism opportunities: what kinds of agritourism options there are, you know, like opening a roadside stand, or providing on farm tours, or providing workshops or cooking classes ..."</i></p>
<p>Flexibility is key in training program implementation [curriculum and topics, mode (Zoom vs in-person), length of program, trainee participation year-to-year, resources provided, etc.]</p>	<p><i>"...what climate change has done to the state of New Mexico, what water scarcity has done. We realize that we actually need ... very individualized farmer training ... before we can even think about ... developing co-ops or building businesses."</i></p> <p><i>"People really like the convenience of being able to just meet via Zoom, especially if they're further out in rural areas. And it's asking a lot for a farmer or a person to come and travel to Albuquerque for ... a 1-hour workshop."</i></p>
<p>Cultivating relationships with trainees is important to promote participation and long-term follow-up</p>	<p><i>"It's like we have very personal relationships with the farmers that we work with. So it's more like a friendly phone call [to check in on our past trainees]."</i></p>

Grow the Growers Farmer Training Program

Program History

In response to the growing need for sustainable agricultural practices and the preservation of agricultural land within Bernalillo County, New Mexico, the **Grow the Growers (GtG) program** was conceived. This program is funded by Bernalillo County and is a part of their Open Space program aimed at protecting agricultural land and promoting community-based business and food systems. The Grow the Growers (GtG) program is a farm training and business acceleration program designed to help beginning farmers with attaining agricultural knowledge and grant them access to farmland in the South Valley in Albuquerque. Rather than letting county owned plots of land lay dormant, Bernalillo County Open Space prioritizes the sustainable development of those open spaces.

In November 2016, Bernalillo County contracted with Agricultura Network to manage the GtG Program, which was piloted in 2017. The program takes place on 10 acres of Bernalillo County Open Space property in the South Valley of Albuquerque, New Mexico. Prior to the establishment of the GtG program, the People of the Land program, managed by the American Friends Service Committee-New Mexico (AFSC-NM) laid the groundwork for agricultural training in the region. From 2009 to 2016, this program focused on revitalizing sustainable farming in New Mexico by training new farmers, developing farmer cooperatives, and advocating for food sovereignty in Hispano and Indigenous communities. The People of the Land laid the foundation for the organizing principles of GtG.

The initial recruitment for the GtG program began in the winter of 2016-2017, with a series of eight core competency classes offered through the NMSU Bernalillo County Extension Service, focusing on farming in the Rio Grande Valley. Although only two participants from these classes initially applied to the GtG program, additional recruitment efforts included social media postings on Bernalillo County and ACN websites and the distribution of flyers. As a result, six full-time and four part-time trainees joined the program in its inaugural year. By the end of 2017, four full-time and two part-time trainees had successfully completed the program, with three full-time and one part-time graduate applying for incubator land in 2018.

In 2018, the program expanded, accepting eight full-time trainees, six of whom graduated. Three graduates from the 2017 cohort returned as incubators. In 2019 the GtG program continued to grow with five full-time trainees and three volunteers completing the program. The number of incubators also increased. That same year, Bernalillo County contracted with the College of Population Health's Assessment, Planning & Evaluation Lab (APEL) at the University of New Mexico to monitor and evaluate GtG. An evaluation plan was developed, assessing the program's impact and identifying areas for improvement. This evaluation included baseline and year-end surveys and interviews with participants providing both quantitative and qualitative insights. The UNM APEL team has continued to perform evaluations for the program ever since.

As the program stands in 2024, four organizations are involved in the implementation of the program: Bernalillo County Open Space, Agricultura Network, Ciudad Soil and Water Conservation District, and New Mexico State University Agricultural Extension. Bernalillo County Open Space provides agricultural land, supplies, water access, and budgetary considerations for overall planning. The AgriCultura Network plays a significant role, offering field training, curriculum development, and trainer support. The Ciudad Soils and Conservation District acts as a fiscal agent, but also provides some in-field education. Additionally, the NMSU Agricultural Extension Office provides valuable educational resources and on-call support, primarily to address the entrepreneurial efforts of the new farmers.

Background Information

The Cultivating Bernalillo County 'Grow the Growers' (GtG) program is a comprehensive initiative aimed at farm training and business acceleration to attract new and emerging farmers into professional food production. Bernalillo County, along with its program partners, is dedicated to strengthening the local food economy by nurturing the next generation of food entrepreneurs. Through this program, they are committed to fostering growth and development within the local farming community.

GtG, operational since 2017, focuses on training as its main operation. Trainees learn both in the classroom and on the field. The training lasts from March to November every year. The trainees have access to a two-acre plot off Isleta in the South Valley of Albuquerque. Trainees concentrate on certain parts of the field at different times. The focus of the training is solely on produce, there are no livestock involved. The produce includes garlic, squash, onions, sweet potatoes, carrots, radishes, leeks, leafy greens, tomatoes, cucumbers, beets, bell peppers, and more. Their key practices are varied and dependent on the trainer, however they use a mix of traditional agricultural practices with no pesticide inputs.

GtG aims to attract new and emerging farmers into professional food production and strengthen the local food economy by nurturing the next generation of food entrepreneurs.

Farmers are currently grappling with a range of challenging issues, including increasing production costs, scarce natural resources, and the impacts of climate change. The aging farming population is further exacerbating these difficulties, as conventional agriculture's reliance on pesticides, heightened water usage, and environmental degradation add to the strain. Additionally, farmers face emerging, unfamiliar markets for high-value specialty crops, compounded by a lack of knowledge in developing strategic plans for managing sustainable and profitable farm businesses. The situation is further complicated by a decrease in social and human capital at the local level, limited access to affordable nutritious foods, and a worsening ecological environment.

The investment in the Grow the Growers (GtG) program includes significant contributions from various entities and resources. Bernalillo County supports the initiative through its Land Management, Public Works, and Open Space departments, providing both land and facilities. The GtG staff, alongside a diverse group of trainees with varying backgrounds in gender, farm experience, educational levels, and resources, play a crucial role in the program's execution. Partnerships with organizations such as Agri-Cultura Network, New Mexico State University (NMSU), Holistic Management International, and the Ciudad Soil and Water Conservation District further enhance the program's capabilities. Additionally, UNM College of Population Health contributes junior researchers, student graduate research assistants (GSRs), and senior researchers who act as mentors.

GtG focuses on developing farmer training programs tailored to local input availability, constraints, and marketing opportunities. Our efforts include creating curricula available in both electronic and print formats to ensure accessibility. These core topics and curriculum modules offer a comprehensive instructional methodology for beginning farmers. GtG works to establish new community resource linkages and develop evaluation tools for all phases of classroom, mentoring, and experiential learning within the small farm programming. Our experiential learning opportunities, such as workshops, field days, and webinars, are integral to our approach. Additionally, GtG applies for grants to support and enhance the program's capacity and develop a long-term plan to guide program activities, including planning, implementation, and evaluation.

We reach emerging farmers and community members who are interested in contributing to the local food system or starting their own small-scale food production businesses. Our outreach also extends to funders and granting agencies, as well as institutions and industries such as hospitals, schools, community-based organizations (CBOs), restaurants, and the hospitality sector. Additionally, we engage with similar programs to foster collaboration and share best practices.

Goals and Objectives

In the short term, GtG aims to train at least eight new growers each year and retain at least five trainees to become incubators, while also retaining five existing incubators. The program seeks to ensure the full and sustainable use of land at Hubbell Open Space before expanding to Arenal Open Space. Trainees are expected to gain essential skills and competencies, such as completing baseline records and budgets to link production and marketing decisions, acquiring community business contacts, and accessing local business resources. They will assess the seasonal labor requirements of their operations and feel confident and prepared to advance in

their farming journey. Additionally, GtG focuses on increasing access to information and resources, including culturally relevant ones, and understanding cost-effective production strategies. Trainees will also learn safety and health practices to support their plans to start or continue farming.

In the mid-term, GtG aims to retain at least 12 incubators per year and establish a mentor network consisting of at least five small growers. The program will work to expand its ability to grow food for donation, targeting at least one recipient such as a community center, clinic, or food bank. GtG will establish plots at Arenal Open Space and regularly host student volunteers or interns. Additionally, the goal is to graduate at least five incubators to Independent Business status each year, ensuring the sustainability of the program. Efforts will also focus on revitalizing traditional and community knowledge and increasing the number of families purchasing and consuming local food. Participants will estimate production costs for their enterprises or whole farm plans and implement their business plans to achieve stated production and marketing goals within their risk management parameters. GtG will support participants in implementing learned production and marketing strategies, as well as adopting behaviors related to health and safety.

In the long term, GtG aims to train 12 new growers each year and provide farmland for lease to program graduates. The initiative will establish regular recipients for donated produce, including community centers, clinics, and food banks. GtG plans to create and fund an intern/volunteer youth program and graduate at least 10 incubators to Independent Business status annually. The program will contribute to building human capital by fostering economic opportunities and providing professional training and education. It will also enhance social capital by improving the social and economic environment. Health outcomes are expected to improve by reducing the incidence of chronic diseases such as diabetes, hypertension, and obesity, while environmental conditions will be bettered through sustainable practices. GtG aims to advance the ability to combat hunger and ensure global food security, striving for a thriving and sustainable local food system. Barriers to entry into new markets for new and transitioning farmers will be reduced, and efforts will focus on improving farmers' quality of life, decreasing occupational injuries, and strengthening community resilience.

Training Principles

The training is premised on a combination of classroom learning through lectures and workshops, hands-on training, and visits to other farms. While the structured components are well-planned, the informal aspects can be unpredictable due to the nature of farming, which requires flexibility as conditions change. The curriculum is designed to adapt, so activities like

pulling onions may shift based on timing. Overall, the training delivers on its promises and often exceeds expectations. Trainees receive a syllabus at the start, and most of the experience aligns with it. Although things can change, particularly in the fields, the training strives to meet its commitments as closely as possible.

Workshops and training topics include:

- Fundamentals of growing: planning, prepping, planting, propagation, weeding, water/irrigation, and harvesting
- Holistic regenerative practices: building healthy soil, organic growing practices, and seed saving
- Growing science: plant nutrition and disease, bug identification, plant identification, and organic compound cycles
- Business principles: planning, preparation, and taxes
- Other topics include climate change awareness and cultural and community practices

The program provides trainees with a comprehensive range of resources to support their learning and practical needs. Essential supplies such as seeds, plants, and tools are all provided to ensure that participants have what they need to get started. Educational materials include a syllabus, PDFs, book recommendations, handbooks, and packets from teachings, which help reinforce and expand on the knowledge gained in classes. Additionally, the program offers base knowledge and pointers to find further information and is committed to sourcing any necessary items if trainees require additional support.

Recruitment

GtG seeks to attract a diverse group of young trainees to cultivate a new generation of farmers with a rich array of perspectives and life experiences. By recruiting individuals from varied backgrounds, GtG aims to infuse the farming community with fresh insights and innovative approaches. The hope is that an influx of diverse new farmers will bring a wide range of viewpoints, skills, and experiences to the field, fostering creativity and adaptability in agricultural practices. The program is committed to creating an inclusive environment that encourages the participation of individuals from different cultural, economic, and educational backgrounds, ultimately enriching the local food system and driving sustainable agricultural development.

The GtG farmer training seeks trainees who demonstrate self-sufficiency and the ability to work independently without constant supervision, showcasing strong leadership skills and the capability to bring out the best in others. Ideal candidates are inquisitive and self-aware,

comfortable admitting when they don't know something, and open to role modeling and learning. A background in science and an appreciation for history, along with a view of age as an asset, are valued traits. Adaptability and a willingness to learn are essential, as is the ability to build connections and contribute to community building with both trainers and peers. Trainees should approach their work with a light-hearted attitude, maintaining a fun and positive environment. A lack of bad farming habits and a high interest in learning new things, coupled with optimism and persistence, are key qualities. GtG values motivation, good communication skills, and diversity, recognizing that these traits contribute to a successful and fulfilling career in farming.

The program recruits participants primarily through word of mouth and social media. It leverages local networks, such as community events and personal connections, to spread the word. Despite some skepticism in the community, the program attracts interest by offering financial support, which appeals to those who have been farming independently or seeking formal learning opportunities. Social media platforms, such as Instagram, and personal recommendations from friends and acquaintances are key methods for reaching potential candidates.

There are four main organizations involved in the implementation of GtG: Bernalillo County Open Space, Agricultura Network, Ciudad Water and Soil Conservation District, and New Mexico State University Agricultural Extension. Bernalillo County Open Space is responsible for providing land and water access, budget management, and overall planning for the program. Agricultura Network provides field training, supervision of the trainers, helps to set the curriculum, and oversees the daily operations. Ciudad Water and Soil Conservation District is the fiscal agent for the training program and provides in-field education. New Mexico State University Agricultural Extension provides education, resources, and on-call support for trainees, trainers, and others involved in the program.

As of 2024, the current trainers are both graduates of the program. The main trainer has five seasons of experience in operating and managing a farm site, while the second trainer is involved in both an onsite incubation project and providing assistance to the main trainer. This is a testament to the program's potential for building human capital in the community, and specifically in agriculture related careers.

Program Evaluation

To measure the impact of the GtG program, the evaluation utilizes a comprehensive social ecological framework, focusing on five key areas:

Environmental Impact: The program's effectiveness in promoting sustainability is assessed by examining its ability to create a harmonious relationship between human activities and the environment. This includes evaluating how the integration of sustainable practices contributes to a healthier planet, enhances environmental quality, and drives economic growth.

Local Food System: The impact on the local food system is measured by analyzing the program's approach to sustainability across various stages of the food chain—production, processing, distribution, consumption, and waste management. Key metrics include the sustainability of the local food supply chain and improvements in food security and access to nutrition.

Health Impact: The program's health outcomes are evaluated based on its emphasis on safe farming practices and knowledge dissemination. Indicators include changes in mortality and morbidity rates, prevention of premature deaths, and overall improvements in the quality of life. The evaluation also considers the impact of promoting physical activity through sustainable practices on community health.

Economic Impact: The economic benefits of the program are measured by assessing its contribution to community wealth and local employment opportunities. This includes evaluating increases in local farmers' incomes, the effect of encouraging residents to spend their food dollars locally, and the economic value generated from repurposing vacant lots into productive spaces for job training and employment.

Social Impact: The social dimension is measured by examining how the program fosters human capital development and creates new economic opportunities. Metrics include the development of new skills, the strength of social networks, and overall improvements in social well-being through enhanced trust and cohesion within the community.

Performance Metrics: Key indicators used to assess the impact of the training program (e.g., yield improvements, cost reductions, animal health improvements).

In 2023, the trainees successfully cultivated over 12,000 pounds of food. This substantial harvest was then distributed to various food banks, providing crucial support to individuals and families in need. Additionally, the produce was utilized to enhance Community Supported Agriculture (CSA) programs, specifically targeting those who rely on food stamps. This dual approach not only addressed immediate food security challenges but also contributed to long-term sustainability and nourishment for the community.