California Farm to School Incubator Grant Program Evaluation: 2024 Progress Report

Acknowledgements

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This first annual California Farm to School Incubator Grant Program (F2S Grant Program) evaluation report provides an early snapshot of progress and barriers toward the goals established in California's Farm to School Roadmap. The report aims to provide insights to further strengthen California's farm to school movement and ensure its long-term success in nourishing students, supporting California's agricultural producers, and building resilient, sustainable communities. The findings may evolve as the grant-funded projects develop over time, and future evaluation reports will continue to build on these initial results.

For additional background information about the California Farm to School Incubator Grant Program Evaluation, including the Evaluation Team, the advisory committee, the evaluation plan, and other evaluation reports, please visit the California Farm to School Incubator Grant Program Evaluation (https://californiafarmtoschooleval.org) website.

Links to Resources:

California's Farm to School Incubator Grant Program
(https://www.cdfa.ca.gov/caf2sgrant/)

California Department of Food and Agriculture Office of Farm to Fork
(https://cafarmtofork.cdfa.ca.gov/)

Planting the Seed: Farm to School Roadmap for Success
(https://www.gov.ca.gov/wp-content/uploads/2022/02/Farm_To_School_Report_20220222-small.pdf)

Farm to School Incubator Grant Program Overview
(https://californiafarmtoschooleval.org/wp-content/uploads/2022/12/Farm-to-School-Evaluation-Fact-Sheet-12-7-2022-FINAL.pdf)

California Farm to School Incubator Grant Program Evaluation
(http://californiafarmtoschooleval.org)

Introduction

Photo courtesy of Yucaipa-Calimesa Joint Unified School District

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Background

Background

The State of California is making major investments to "establish an equitable, resilient, and scalable California farm to school movement that nourishes all students and provides schools, families, farms, and the environment the opportunity to thrive."[1] California launched a pilot grant program and began deploying tens of millions of dollars toward this vision in 2020.[2]

In February 2022, the California Department of Food and Agriculture (CDFA) released "Planting the Seed: Farm to School Roadmap for Success," (Roadmap) a comprehensive report that laid the foundation for the expansion and strengthening of farm to school programs throughout the state. The report, championed by First Partner Jennifer Siebel Newsom and CDFA Secretary Karen Ross, was the result of extensive collaboration between state agency leaders, farm to school practitioners, and food system experts.

The Roadmap outlined a holistic vision for the farm to school movement in California, recognizing the multifaceted potential benefits of farm to school programs in promoting nutrition security, public health, education, economic resilience, environmental stewardship, and racial justice. It set forth four key goals:

1

CULTIVATE EQUITY:

Create opportunities for those who have been historically excluded to improve the health and well-being of the people, places, and communities that define California's food system.

2

NURTURE STUDENTS:

Engage students with nutritious, delicious, culturally relevant meals that nourish their bodies and minds.

3

BUILD CLIMATE RESILIENCE:

Leverage school buying power to support California producers and incentivize agricultural practices that promote climate resilience and environmental sustainability, including organic systems, while educating students on the importance of environmental stewardship and agricultural sustainability into the future.

4

CREATE SCALABLE AND SUSTAINABLE CHANGE:

Implement policies and dedicate funding to create lasting impacts for local communities.

Building upon the vision and recommendations outlined in the Roadmap, the California State Legislature and Governor Gavin Newsom allocated significant new funding to California's Farm to School Program to advance these four goals. This investment was also intended to amplify local, climate resilient sourcing in coordination with California's first in the nation School Meals for All program, signed into law by Governor Newsom in 2021. To date, the F2S Grant Program has distributed $34M among two grantee cohorts (2021 and 2022 grantees).[3] Funding was also provided for 16 new regional staff positions, and for an independent evaluation to assess the grant program's economic, environmental, educational, and social impacts and alignment with the Roadmap's goals. This interim report is the result of the latter investment in program evaluation and presents early data from the 2022 F2S grantees.[4]

[1] "Planting the Seed: Farm to School Roadmap for Success" (https://www.gov.ca.gov/wp-content/uploads/2022/02/Farm_To_School_Report_20220222-small.pdf). 2022. Office of the First Partner and California Department of Food and Agriculture.

[2] The California Budget Act of 2020 appropriated $10 million from the General Fund to the California Department of Food and Agriculture for the California Farm to School Incubator Grant Program and to establish a Farm to School Working Group to advance farm to school implementation and explore how to create a more resilient and climate smart food supply in California.

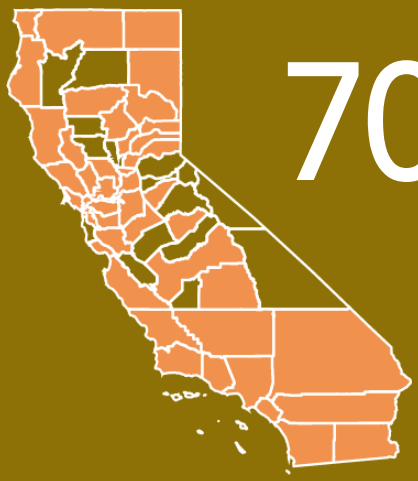
[3] The legislature and Governor Newsom also allocated $60M towards a third grantee cohort. Those grantees will begin their programs in fall 2024 and will be included in the Evaluation Team's next interim report.

[4] 2021 grantees are outside the scope of the evaluation. The Evaluation Team prepared a January 2023 Status Update (https://californiafarmtoschooleval.org/recent-reports/january-2023-report/) and October 2023 Legislative Report https://californiafarmtoschooleval.org/wp-content/uploads/2024/06/2024-Report-Joint-Legislative-Budget-Committee-FINAL.pdf) which includes analysis of the reach of 2021 grantees and summary of activities.

Grant Program Investments and Reach (2022 Grantees)

By the Numbers

2022 Grant Program Investments and Reach



70% of California's counties received grant funds.

84% of schools served by the program are Title I schools.

42% of California food producer grantees are BIPOC

94% of California food producer grantees are small to midsize

62% of California food producer grantees are women

71% of students served by the grant program are eligible for free or reduced price meals

100% of food producer grantees use or plan to use climate smart agricultural practices.

CDFA awarded $25.5M across 120 projects in 2022. The funds were allocated to projects within four "tracks," each with different eligibility criteria, which intended to focus funding across the farm to school supply chain (Figure 1). K-12 schools received the largest investment, followed by agricultural producers (farmers and ranchers), and partnerships that facilitate farm to school efforts. Early care and education (ECE) grants received the smallest investment, as this track was considered a pilot program for CDFA. More than 70% (42) of California's counties received grant funds (Figure 2).

2022 F2S Grant Program

Total Projects Awarded: **120**

Total Funds Awarded: **$25.5 Million**

K-12 Procurement and Education Grant (Track 1) **Projects: 53** **Funds: $12,930,376**	Farm to School Partnership Grant (Track 2) **Projects: 11** **Funds: $4,554,617**
Farm to Early Care Education Grant (Track 3) **Projects: 6** **Funds: $1,190,519**	Farm to School Producer Grant (Track 4) **Projects: 50** **Funds: $6,824,488**

Figure 1: 2022 F2S Grant Program funds awarded by track. Funds were awarded across four Tracks: Track 1 = K-12 Procurement and Education Grant, Track 2 = Partnership Grant, Track 3 = Farm to Early Care and Education (ECE) Grant, Track 4 = Producer Grant.[5]

[5] 2022 F2S Grant Program Recipient List (https://www.cdfa.ca.gov/caf2sgrant/docs/2022_CA_F2S_Incubator_Grant_Program_Award_Recipients_List.pdf)

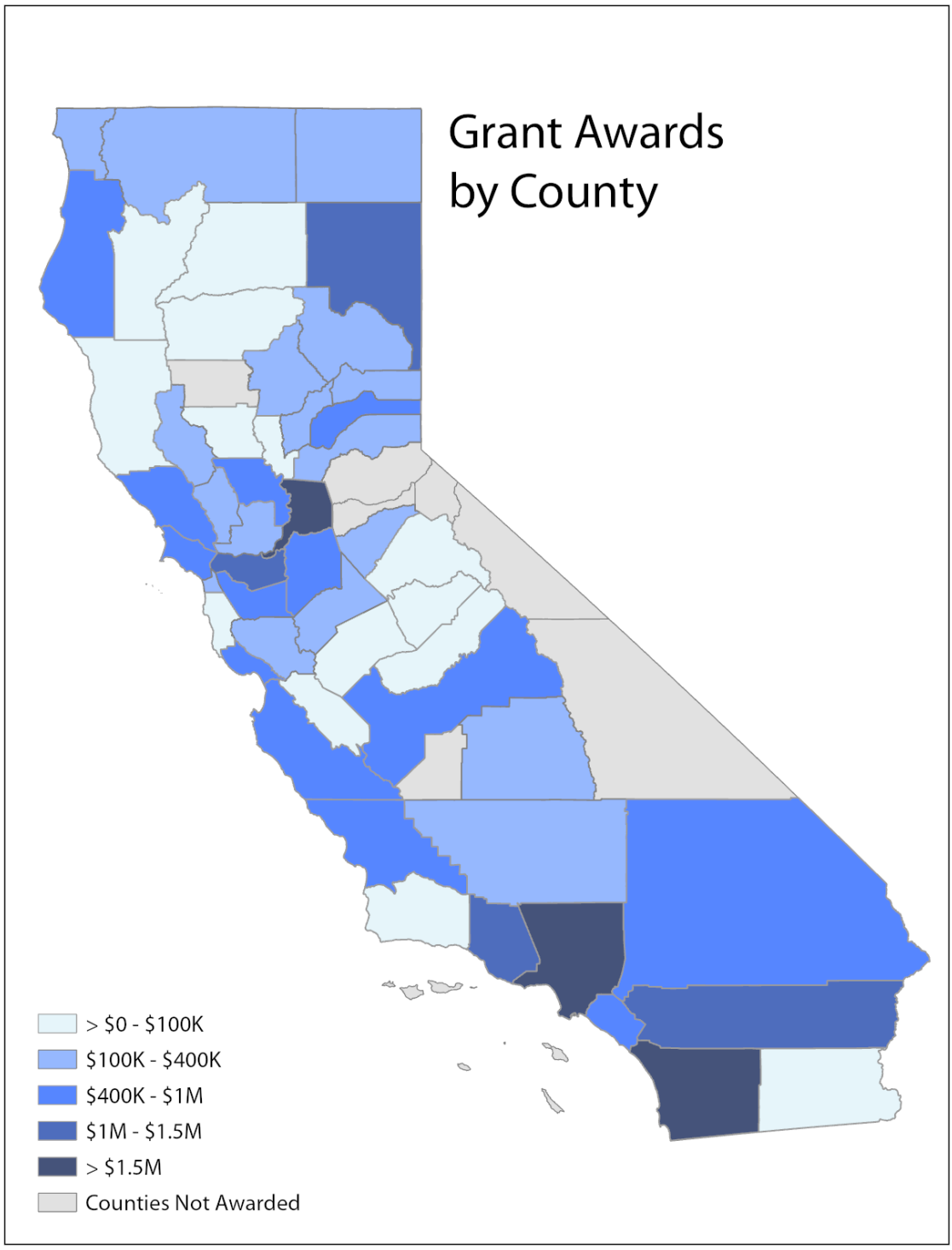


Figure 2: 2022 F2S Grant Program funds awarded by county

The 2022 F2S Grant Program awarded $12.9M to 53 K-12 school and district (including charter school and county office of education) grantees through the K-12 Procurement and Education grant track (K-12 school grantees). According to their applications, grantees collectively aim to reach more than one in five (23%) of California's 5.9 million public school students. Most school district grantees are located among priority populations that are vulnerable to the impacts of climate change and engage students from underserved communities. Of the 53 K-12 Procurement and Education grants, 71% of students served by the grant program are eligible for free or reduced price meals. Forty-one grantees planned for their projects to have districtwide reach. Twelve grantees focused their projects on specific schools within their districts. Of 64 schools being served directly, 84% are Title I schools. The six early care & education (ECE) grantees aim to reach an additional 984 children ages birth through 5 years and 200 school-aged children.

Of the 50 producer grantees in 2022, 42% are at least 50% owned by people who identify as Black, Indigenous, and People of Color, and 62% are at least 50% owned by women. Nearly all (94%) are small to midsize. All food producers funded by the F2S Grant Program report that they use or plan to use climate smart agricultural practices in their operations during the grant period.

Within the first six months of the 2022 F2S Grant Program (April - October 2023), more than half (56%) of the K-12 school grantees intentionally procured foods from the grant program's priority producers: small-to-midsize producers, socially disadvantaged producers, veteran producers, limited-resource farm households, and producers that use climate smart agriculture practices and production systems. Over half of producer grantees (57%) made sales to schools between April 1, 2023 and September 30, 2023, representing an average of 33% of their total revenues. Three producer grantees reported that the F2S Grant Program funding likely prevented them from going out of business.

Photo courtesy of Cooperative

Evaluation Plan and Methodology

Evaluation Plan and Methodology

The F2S Grant Program has funded three cohorts of grantees (2021, 2022, and 2024) to date and intends to fund one more in 2024.[6] The F2S Grant Program evaluation was funded to assess the 2022 and 2024 grantee cohorts. This evaluation progress report only includes 2022 grantees. The F2S Grant Program Evaluation Team includes more than 20 researchers and experts across multiple disciplines.

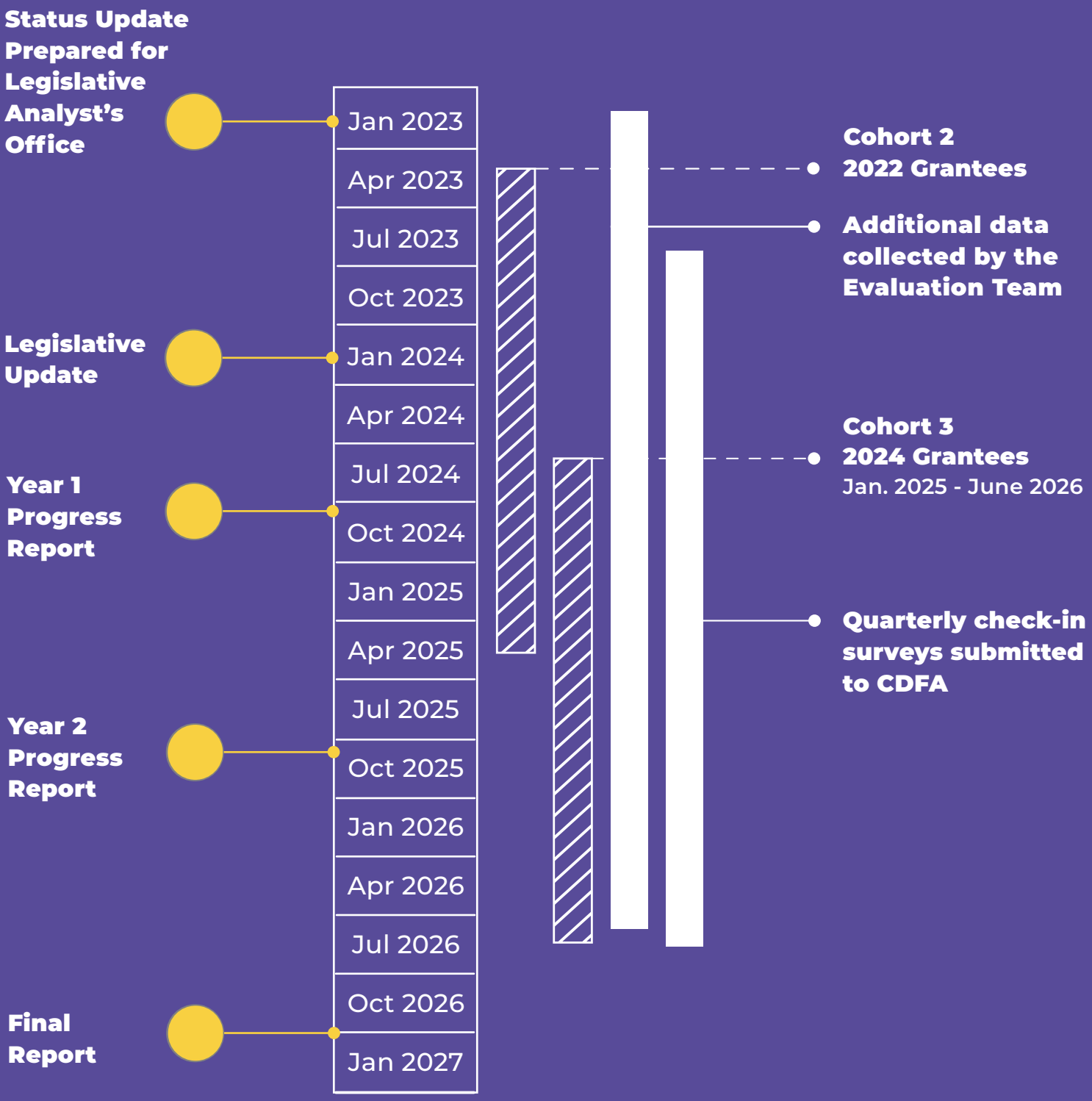
This report is organized by farm to school supply chain actors, which include grant program administration by CDFA, agricultural producers, K-12 schools, and early care and education organizations. Case studies are presented to illustrate barriers and enabling conditions observed across individual supply chains, which include agricultural producers, K-12 buyers, distributors (such as food hubs), and, where relevant, partner organizations that facilitate farm to school activities in a given supply chain. Early findings for each of the supply chain actors are presented across four common outcome areas of interest, as applicable: equity, environment, economics, and education.[7] Conditions that support or impede farm to school efforts, which we refer to as enabling factors and barriers, are also described.

The Evaluation Team designed an evaluation approach drawing on a variety of data sources, including interviews with grantees, grantee partners, applicants, local nonprofit agencies, the National Farm to School Network, the Strategic Growth Council, and CDFA staff; focus groups with producer grantees; surveys of grantees and applicants; invoices, applications, and quarterly check-in surveys submitted by grantees to CDFA; and USDA/NASS Agricultural Census data. Data analysis techniques included descriptive statistics; social network analysis; thematic analysis using Excel, STATA, R, and qualitative data analysis software; qualitative comparative analysis of case studies; and coding of interviews using a grounded theory approach. A more detailed description of the data sources and methods used in developing this report are provided in the Appendix.

[6] Grantees for 2024 were announced shortly before publication of this report and have not yet been included in our analysis. Applicant demand by California counties and legislative districts can be viewed on the 2023-24 California Farm to School Incubator Grant Program Total Requested Amount by County and Legislative District Maps (https://californiafarmtoschooleval.org/wp-content/uploads/2024/06/2023-24-CA-F2S-Incubator-Grant-Applicants-Map.pdf). Applicants requested a total of over $129 million for $52.8 million available funds at the time the request for applications opened.

[7] Data collection and analyses for some outcome areas of interest are in progress and will be included in future interim reports.

Evaluation Project Timeline



Preliminary Findings

Prelimary Findings

F2S Grant Program Administration: CDFA

The evaluation of the F2S Grant Program's administration reveals success in reaching priority populations (detailed below), aligning with the Roadmap's equity goals, and responding to high demand for farm to school funding. Challenges related to the grant timeline, application process, and internal agency capacity highlight areas for improvement and continued refinement.

The F2S Grant Program's popularity and relevance are evident in its consistent oversubscription. In 2022, the program received 264 applications from 50 (of 58) California counties requesting over $58 million,[8] more than two times the amount of funding available (Figure 3). This demand demonstrates the high potential for expanding the program to more communities across the state.

Equity goals are on their way to being met.

Ensuring access to farm to school programs for low-income and historically underserved communities, as well as supporting small and socially disadvantaged producers, is a critical priority for advancing equity. The F2S Grant Program was successful in prioritizing grants to communities and organizations aligned with the Roadmap's priorities on equity, which outlines benchmarks for the state's long-term farm to school equity goals (Figure 5). Applications from BIPOC producers were proportionally greater than their representation in California, with 30 of 70 producer applicants identifying as BIPOC,[9] and the grantee scoring rubric was largely successful in awarding grants to producers from priority backgrounds (Figure 6).

[8] Applicants included two tribes, which collectively submitted three applications.

[9] BIPOC producers refer to at least 50% of an operation being owned by people identifying as Black, Indigenous, and People of Color (BIPOC).

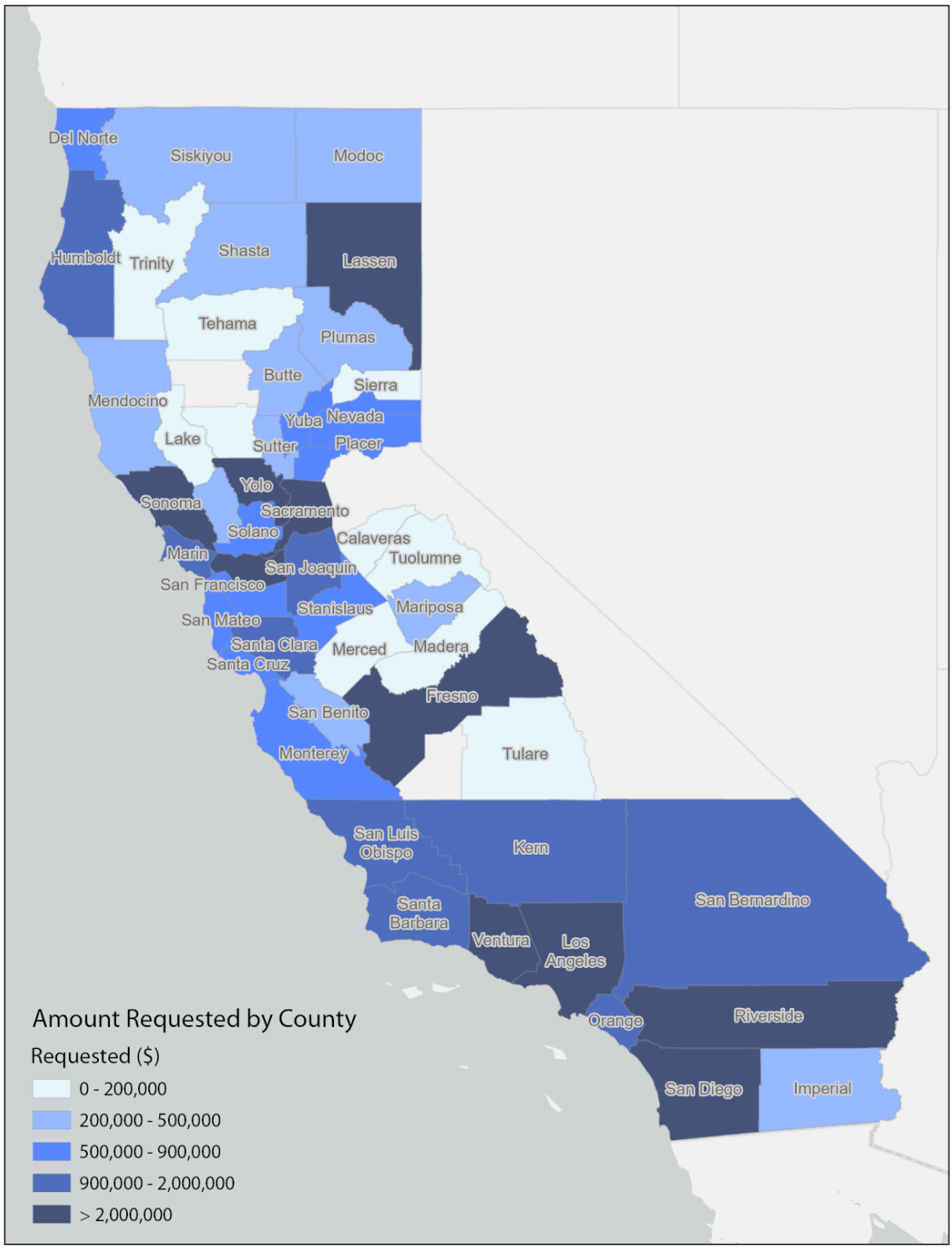


Figure 3: Snapshot of funds requested for 2022 applicants and awardees (click to navigate to the interactive map, https://ucanr.maps.arcgis.com/apps/dashboards/6e5a8e603a724531941b16243713a2ae#mode=view)

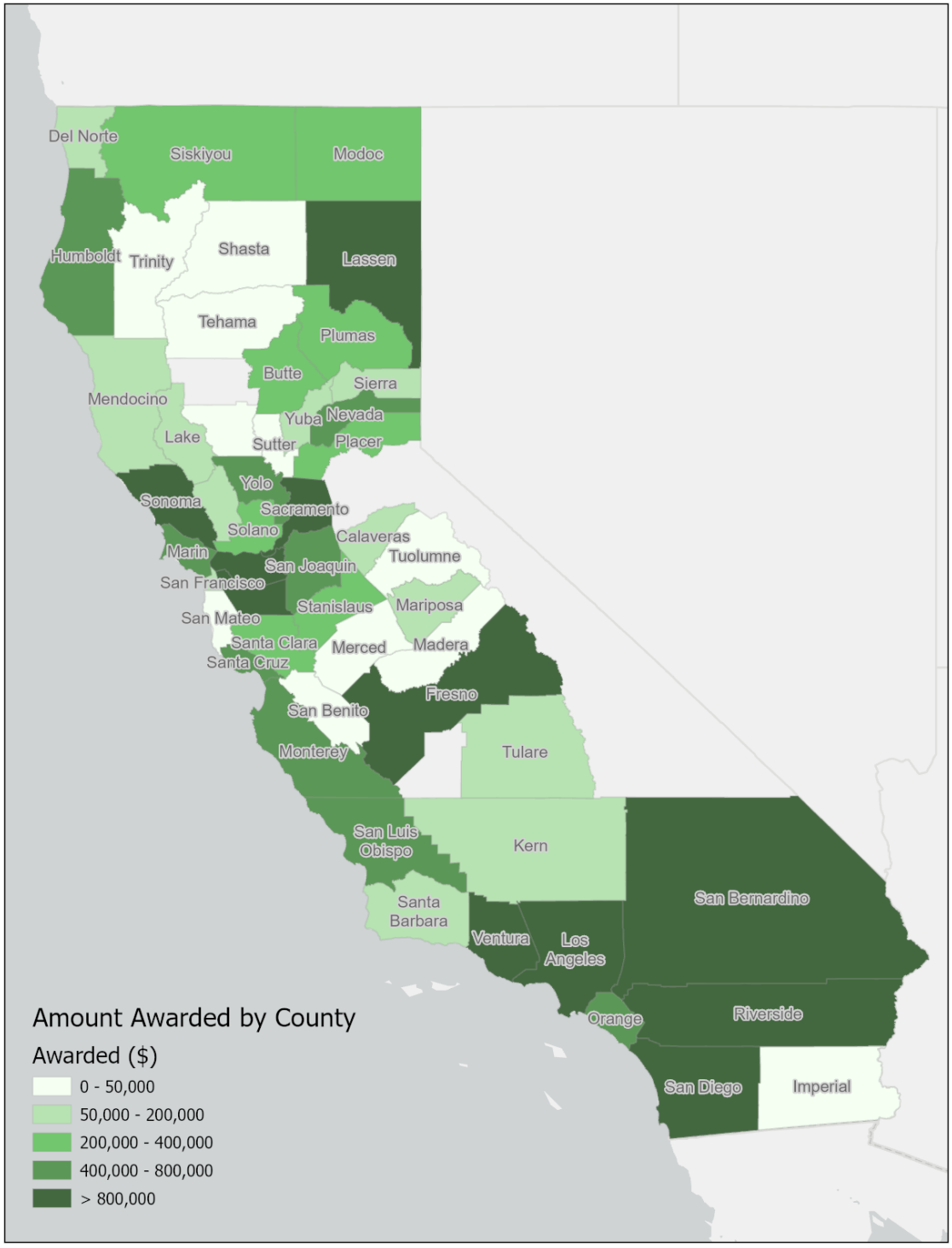


Figure 4: Snapshot of funds awarded for 2022 applicants and awardees (click to navigate to the interactive map, https://ucanr.maps.arcgis.com/apps/dashboards/6e5a8e603a724531941b16243713a2ae#mode=view)

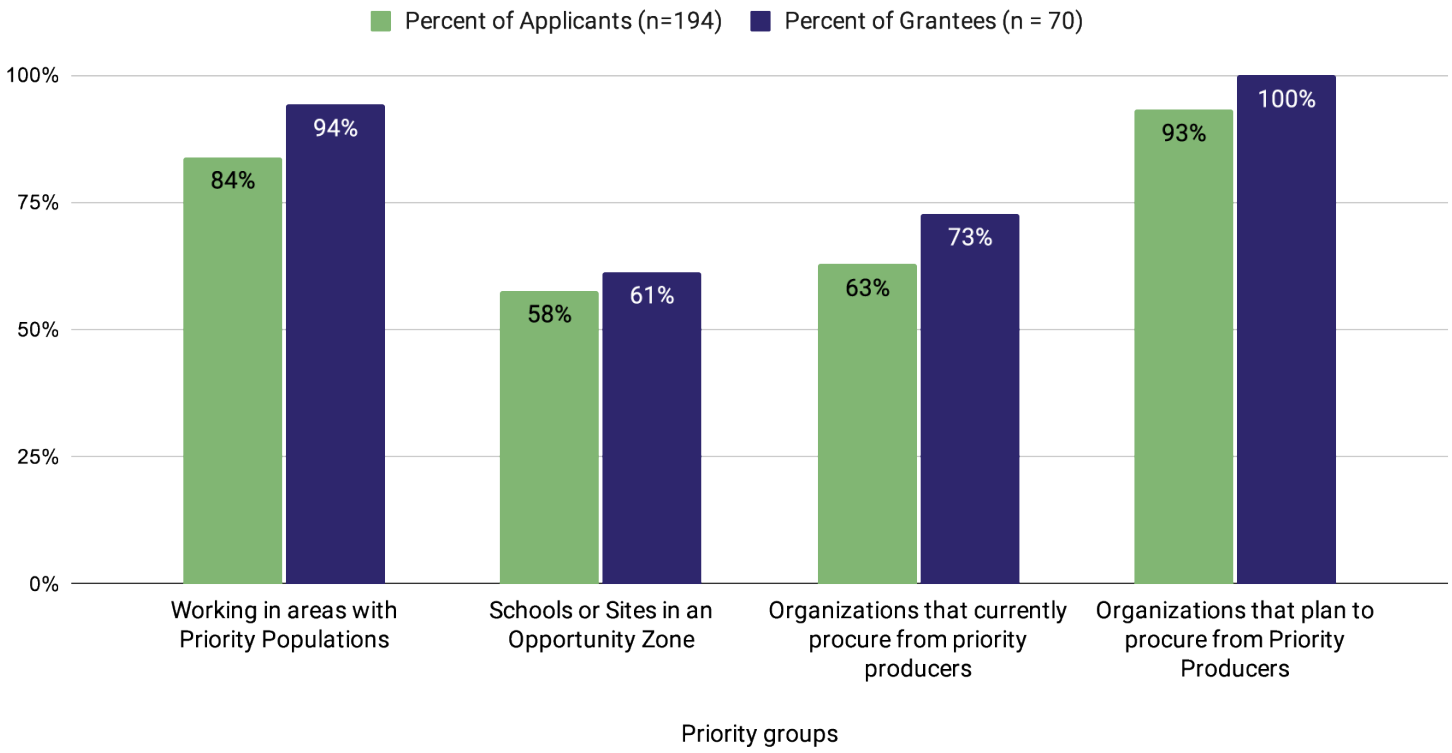


Figure 5: Tracks 1, 2, & 3 applicants and grantees working with priority groups[10]

[10] Statewide data are from the USDA Census of Agriculture (2017) (https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_1_State_Level/California/); applicant and awarded grantee data are from 2022 Farm to School Incubator Grant applications.

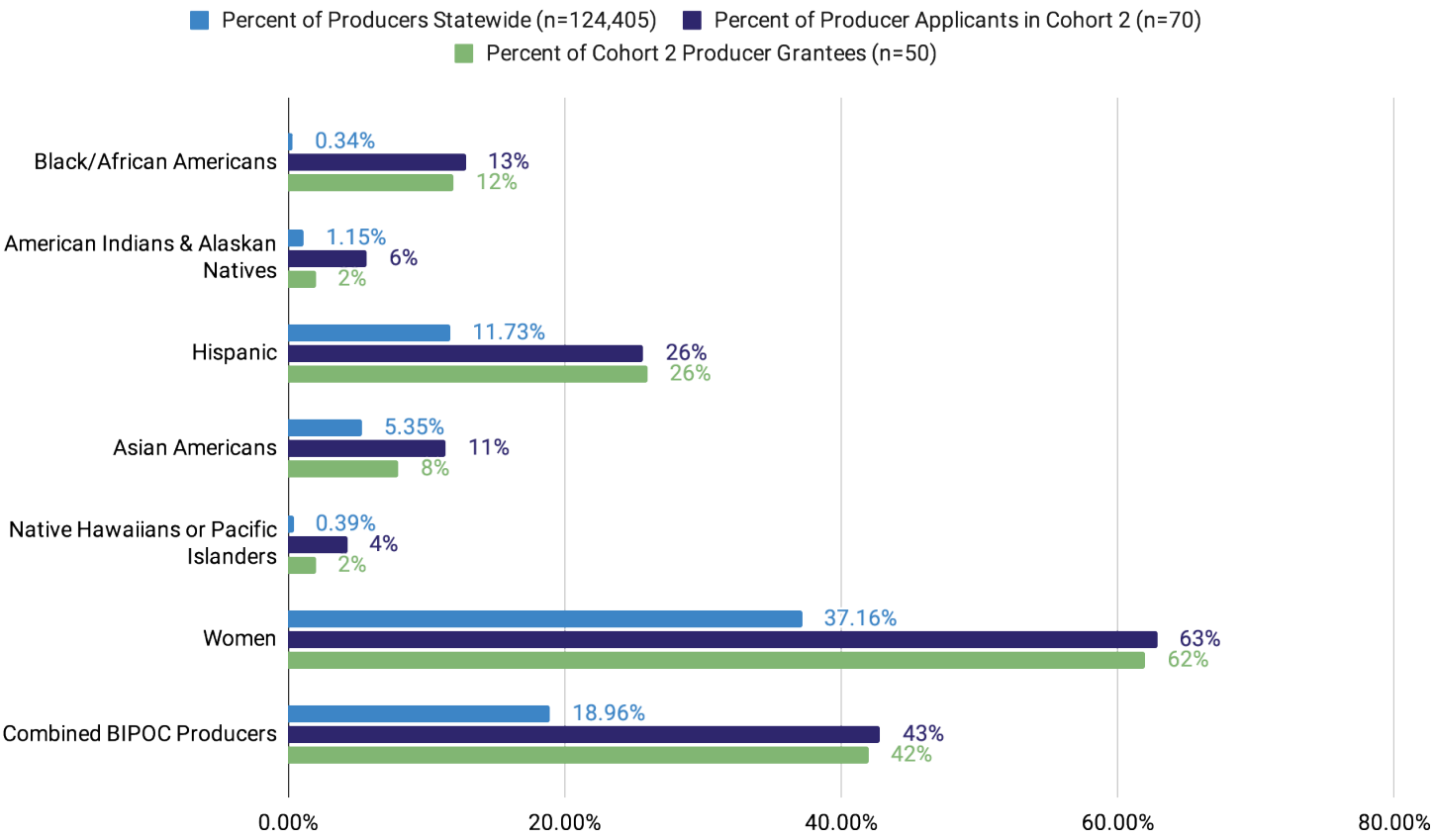


Figure 6: Demographics of producer applicants and grantees compared with demographics of producers statewide[10]

[10] Statewide data are from the USDA Census of Agriculture (2017) (https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_1_State_Level/California/); applicant and awarded grantee data are from 2022 Farm to School Incubator Grant applications.

F2S Grant Program Administration: CDFA

CDFA's effective outreach and increased staff capacity have led to improved experiences for grantees, despite challenges.

Three key implementation strategies related to 2022 Grant Program administration have contributed to its success:

Strategy 01

Direct Communication and Outreach

68% of respondents to an application survey, which was conducted by the Evaluation Team to understand 2022 applicants' experience, mentioned that they heard about the grant directly from CDFA, indicating the effectiveness of direct communication and outreach efforts.

Strategy 02

Regional Leads

In 2023-2024, CDFA hired 13 staff, including Regional Farm to School Network Leads and Regional Farm to School Producer Engagement Specialists, to serve as farm to school technical assistance providers across eight regions in California. Regional staff serve as independent field analysts who collect, analyze, and evaluate data from school districts (such as which schools have the ability to wash and chop fresh produce), community-based organizations, local governments, Tribal communities, historically excluded communities, and other entities engaged in school food transformation in order to create solutions that serve the California school food community and advance the Roadmap. Regional staff also provide technical assistance to grantees within the grant program. Based on grantee feedback, the regional staff appear to be playing a strong positive outreach role, providing tailored support to grantees and facilitating in-person connections with local communities. From this feedback, it could be inferred that CDFA's engaged team is functioning as scaffolding for the grant program, helping to maximize its potential for success by investing in not only the projects themselves, but also in regionally specific knowledge and supportive relationships. Grantees praised the regional staff for their availability, responsiveness, and assistance in navigating the grant process and building partnerships.

F2S Grant Program Administration: CDFA

Strategy 03
Grantee Support

Grantees' requests for CDFA assistance decreased over time, as did their reports of difficulties with CDFA reporting structures, suggesting that the program's support structures and resources have been effective in building grantee capacity.

Photo courtesy of Apple Creek Vineyard Farm

F2S Grant Program Administration: CDFA

Despite the program's successes, several aspects of grant administration caused challenges:

Challenge 01
Grant Timeline

The timeline of the application and delivery of grant funds (with grant applications due in July 2022 and funds released incrementally from April to July 2023), proved difficult for both producers and schools. The applications were due during a particularly difficult time of year for producers and schools, and 49 grantees out of 120 total grantees mentioned that the delayed release of funding negatively affected their project planning, partnerships, and planting season. Facilitating a tighter window between the grant due date and funding release and aligning the grant timeline with the academic year and agricultural seasons could help farmers and schools with planning and would mitigate these challenges. One grantee mentioned:

> *"Because the grant contract was delayed, estimates for projects changed and/or increased, causing us to have to revise our budget plan and Scope of Work. Additionally, we were not able to get started on the physical progress of our farm project during this quarter as we were waiting for the Advance Payment."*
>
> – Producer Grantee

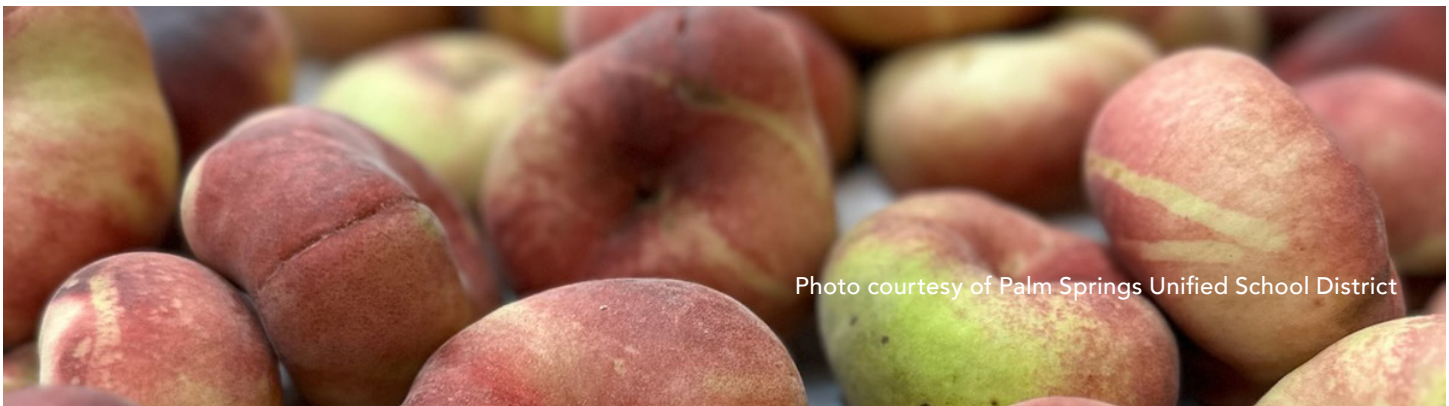


Photo courtesy of Palm Springs Unified School District

F2S Grant Program Administration: CDFA

Challenge 02
Application Process

Some applicants found the application process challenging and time-consuming. Streamlining the application process and providing additional support, such as application workshops, could help reduce barriers to participation. Some applicants noted:

> *"As the Director of a small district I am the ONLY one doing the application. I cannot hire a grant writer nor do I have access to fancy data for my application. It's time consuming and creates a barrier to access to these amazing funding opportunities."*
>
> – K-12 School Grantee

> *"The RFA is over-complicated as a farmer. Webinars are not super helpful because they can't answer specific questions."*
>
> – Producer Grantee

Applicants raised additional factors, such as language barriers, that might have prevented other eligible businesses and organizations from submitting applications altogether:

> *"It's been a little bit of a learning curve for us. How do we fill out applications and things like that? Those have been some of the challenges. I know there are other small farmers that are experiencing some of the same challenges, and they also don't speak English. All those little things play into account when looking for resources."*
>
> – Producer Grantee

F2S Grant Program Administration: CDFA

Challenge 03

Internal Agency Capacity

CDFA staff identified difficulty with recruiting sufficient external volunteer reviewer capacity in relation to the volume of applications received, lack of an efficient grant portal, time constraints affecting the ability to support applicants, and internal agency challenges related to formalizing grant funding agreements as major barriers. Addressing these challenges by increasing internal capacity could help improve the efficiency and effectiveness of the grant administration process. We note that this is a new program and anticipate that these challenges will be addressed over time.

Photo courtesy of Palm Springs Unified School District

Comparative Case Study Analysis: Farm to School Grant Program Supply Chain Impacts: Early Findings

Comparative Case Study Analysis

This section outlines early findings from a comparative case study analysis that assesses the impacts of California's investment in farm to school programs using the supply chain as our unit of analysis. Here, we refer to the farm to school supply chain as the actors, processes, and relationships involved in procuring and distributing food, from the farm to the classroom or cafeteria. Supply chain actors include decision makers from school districts, supporting organizations, aggregators, and producers, and their involvement includes food production, processing, aggregation, distribution, preparation, consumption, waste disposal and composting.

For the comparative case study analysis, the Evaluation Team conducted 12 in-depth interviews with a representative range of actors associated with three farm to school supply chain cases (Figure 7). Each case focuses on one 2022 grantee and the regional food supply chain that they participate in. This approach allowed us to delve deeply into the enabling conditions and barriers that both facilitate farm to school activities and stall their implementation.

At this early stage of the evaluation, an analysis of three supply chain cases was conducted by the Evaluation Team to address two key questions:

1. *What supply chain factors impede farm to school activities in the three cases?*
2. *What supply chain factors support farm to school activities in the three cases?*

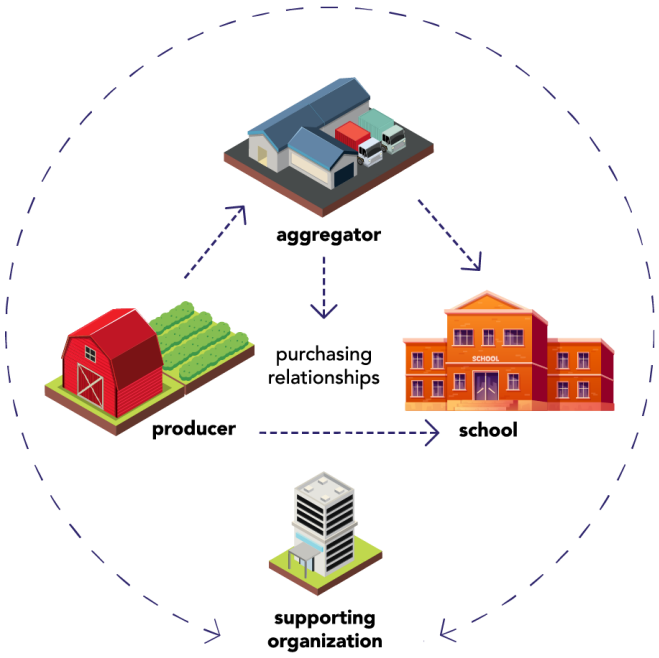
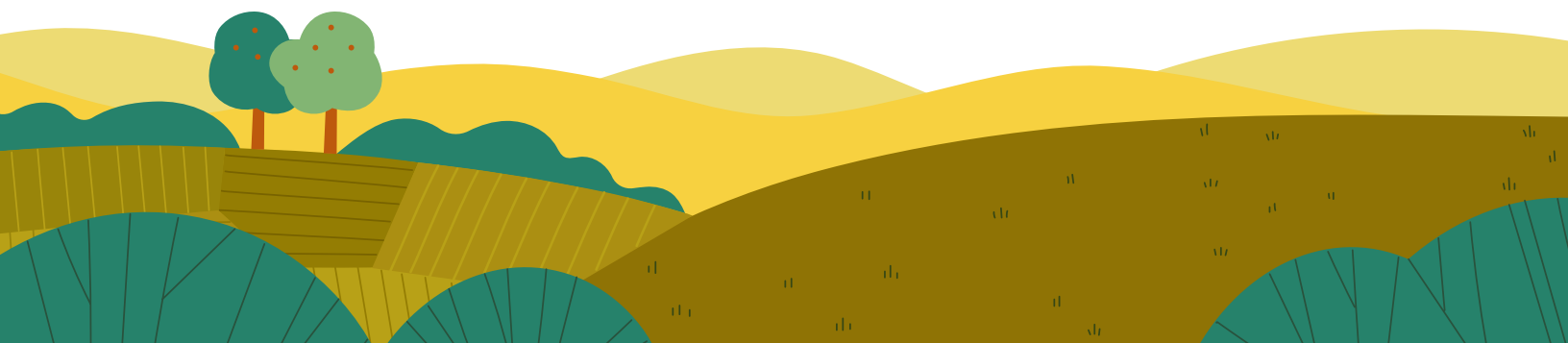


Figure 7. Visualization of a case study supply chain: four linked actors involved in farm to school procurement -- a school district, a producer, an aggregator, and a supporting organization -- where one or more of these actors is a 2022 grantee.

Comparative Case Study Analysis: Farm to School Grant Program Supply Chain Impacts: Early Findings

Tables 1 and 2 below show summarized data from the interviews, highlighting common supply chain factors that have impeded (Table 1) and supported (Table 2) farm to school activities across three cases in California, before and during the grant program period. All interviewees experienced one or more challenges in implementing their farm to school activities, with insufficient infrastructure being the most common impeding factor for producers and aggregators in the sample, and insufficient labor/capacity and staff turnover as the most common impeding factors for school districts and supporting organizations in the sample. The most common supporting factors across all actor types were strong social networks and predictable funding. For the two supply chains with a food hub, all actors in the supply chain benefitted from the aggregation resources. While ECE supply chain actors were not interviewed for these three case studies, the report discusses the role of ECEs as a farm to school supply chain actor in the 'Farm to school supply chain actor: Early care and education' section.

The case spotlights presented below provide descriptive accounts of three regionally based supply chains engaged in farm to school activities and supported by F2S Grant Program funding.



Impeding Factors

	School districts (n=3)	Supporting organizations (n=3)	Producers (n=3)	Aggregators (n=3)
Insufficient infrastructure	●●		●●●	●●●
Insufficient labor/capacity	●●●	●●	●	
Staff turnover	●●	●●●	●	
Unpredictable orders		●	●●	
Language inaccessibility	●		●	

Table 1: The most common impeding factors across the three case supply chains, whereby each dot represents one supply chain actor.

Supporting Factors

	School districts (n=3)	Supporting organizations (n=3)	Producers (n=3)	Aggregators (n=3)
Strong social networks	●●	●●●	●●	●●●
Predictable funding	●●●	●●	●	●●
Presence of a food hub	●●	●●	●●	●●
Presence of a farm to school champion		●●		

Table 2: The most common supporting factors across the three case supply chains, whereby each dot represents one supply chain actor.

Comparative Case Study Analysis: Farm to School Grant Program Supply Chain Impacts: Early Findings

Supply chain factors that have impeded farm to school activities:

Insufficient infrastructure:
A lack of sufficient distribution, storage, processing and/or kitchen infrastructure has constrained the (1) number of small producers that school districts procure from, as well as the (2) variety and (3) volume of local foods procured in these cases.

Insufficient labor:
Constraints on staff time and kitchen infrastructure are dual challenges to incorporating certain crops into school food menus in these cases. For example, washing and chopping lettuce is labor-intensive and difficult to accomplish in small kitchens. This phenomenon is exacerbated when School Food Authorities (SFAs) are unable to fill kitchen vacancies.

Unpredictable orders:
Misalignment between the volume of crops planted by the farms and those purchased by the schools has led to tensions between actors in all three cases. In one case, a producer suffered a significant loss of sale and wanted to exit the project.

Staff turnover:
Staff turnover is a challenge all three cases have faced. One actor described how they made progress with farm to school, only to have a key staff member or project partner leave the network, and progress was reversed.

Language inaccessibility:
The lack of a shared language between partners was described as a challenge to onboarding producers as vendors for SFAs, sustaining relationships after the initial introduction is made, and navigating the organic certification process.

Comparative Case Study Analysis: Farm to School Grant Program Supply Chain Impacts: Early Findings

Supply chain factors that have supported farm to school activities:

Strong social networks:
In each case, grantees created relationships with new partners and received the financial support needed to strengthen and build trust within their pre-existing relationships. In one case, a grant funded project led to increased visibility of the grantee's farm in his community, and he was contacted by a school district to initiate a new procurement relationship.

Predictable funding:
Entities from all three cases pinpoint grant funding – from both state and federal channels – as a critical element in initiating new farm to school activities and supporting ongoing work. SFA-affiliated interviewees specifically spoke about the length of time required to elicit engagement on the part of the teachers and food service workers and enact change at school sites.

Presence of a food hub:
Building a relationship with an established food hub allowed two of the supply chains to gain distribution efficiencies while adhering to local procurement values. This was particularly useful in one case, where none of the partnering SFAs had a central kitchen site for deliveries, and in another, where producers were unable to run delivery routes between dozens of small, rural school sites.

Presence of farm to school champion(s):
The presence of one or more passionate individuals, or champions, was highlighted as a driver for initiating and sustaining much of the farm to school activities in all three cases.

Farm to school supply chain actor: Producers

The 2022 California Farm to School Incubator Grant Program has supported a diverse group of farmers and ranchers already using climate smart agricultural practices[11] by facilitating network building and economic viability (through new markets and funds for labor and infrastructure), allowing producers to continue, expand, and even adopt new climate smart practices. However, challenges and disparities persist, highlighting the need for targeted support and continued investment in priority producers.[12]

Producers used, expanded, and adopted environmentally beneficial farming and ranching practices.

The grant is effective in supporting the continuation and expansion of climate smart practices among producers already using those practices. Prior to the beginning of the grant term, producer grantees used climate smart agricultural practices at higher rates than state averages, in part due to an application scoring system that rewarded operations already using these practices. For example, cover crop use was reported by 66% of producer grantees who could conceivably use the practice (e.g., livestock-only operations are excluded), compared to 14% statewide (Table 3).

[11] Climate smart agricultural practices are defined in CDFA's 2022 Farm to School Request for Applications (2022 F2S Grant Program RFA; https://www.cdfa.ca.gov/caf2sgrant/docs/2022_request_for_applications.pdf) as: "those defined by the USDA Natural Resources Conservation Service (NRCS) Conservation Practice Standards (CPS) and those identified by the CDFA Office of Environmental Farming and Innovation via the Healthy Soils Program (HSP), Alternative Manure Management Program (AMMP), Dairy Digester Research and Development Program (DDRDP), and State Water Enhancement and Efficiency Program (SWEEP), including but not limited to cover cropping, no or reduced till, hedgerow plantings, compost application, and prescribed grazing. Climate smart agriculture production systems include certified organic or transitioning to certified organic. Other regenerative strategies include those that also increase resilience to climate change, improve the health of communities and soil, protect water and air quality, increase biodiversity, and help store carbon in the soil."[2] The California Budget Act of 2020 appropriated $10 million from the General Fund to the California Department of Food and Agriculture for the California Farm to School Incubator Grant Program and to establish a Farm to School Working Group to advance farm to school implementation and explore how to create a more resilient and climate smart food supply in California.

[12] "Priority Producers" is used throughout this report to refer to food producers identified as funding priorities in the 2022 F2S Grant Program RFA, p. 5.

Practice	Number of producer grantees using practice*	Number of producer grantees that could be using practice†	Percent possible producer grantees using practice‡	Statewide adoption (% of farms)
Cover crop	25	38	66%	14%
Conservation crop rotation	21	34	62%	61%
No till	18	38	47%	11%
Reduced tillage	16	38	42%	8%
Certified organic	12	41	29%	7%
Transitioning to organic	4	41	10%	<1%

Table 3: Six common soil health practices and their implementation rates among grantees vs statewide adoption.

*Grantee practice use is self-reported from grantee surveys.

†The number of possible producer grantees is calculated based on which grantees' operations have relevant production areas (e.g., cropland, orchard, grazing land) for each practice.

‡Statewide adoption rates come from the 2022 USDA Census of Agriculture.

Farm to school supply chain actor: Producers

NEW PRACTICE ADOPTION AND PRACTICE EXPANSION.

Of 49 producers awarded grants, eight (16%) reported adopting new climate smart agricultural practices in the first six months of the grant and 12 (24%) reported expanding climate smart practices (that were already used on their operations) on land that was in production for farm to school. New or expanded agricultural practices can largely be separated into two categories: infrastructure (e.g., high tunnels, irrigation, solar) and vegetation or soil management (e.g., hedgerows or cover crops). New practice adoption tended to be in the infrastructure category, while practice expansion tended to consist of vegetation and soil management.

ACREAGE EXPANSION.

Eleven farms reported adding acreage as a direct result of the grant within the first six months of the program, totaling 55 acres. These acres tended to be added on operations that are pesticide-free, use reduced tillage, and apply compost.

Photo courtesy of PSCF

Farm to school supply chain actor: Producers

Early data suggest that producers are making more sales to schools and stabilizing their businesses.

Over half of producer grantees (57%) made sales to schools between April 1, 2023 and September 30, 2023 based on their quarter two reporting, representing an average of 33% of their total revenues. Three producer grantees reported that the F2S Grant Program funding likely prevented them from going out of business. While these early indicators provide some evidence of the grant's potential to positively impact growers' economic viability, further analysis and time is needed to understand the factors influencing sales and the grant's long-term effects on financial stability.

BIPOC and socially disadvantaged producers continue to need more support and resources to overcome systemic disadvantages.[13]

BIPOC and socially disadvantaged producers[14] face unique challenges in implementing grant activities and accessing school markets. Networking was a notable challenge, with trends in the data showing BIPOC and socially disadvantaged producers reporting forming fewer new connections through the grant compared to other grantees. Though BIPOC grantees formed fewer new connections in general, they were significantly more likely ($p < 0.03$) than other grantees to report making non-food system connections (e.g., architects or waste management services) as a result of the grant. These new non-food system relationships may indicate a lack of connections prior to the grant that BIPOC grantees then had to forge during project implementation.

Of the 16 producers who adopted new or expanded existing climate smart practices, 12 (75%) were BIPOC and socially disadvantaged, while 85% of producer grantees are BIPOC or socially disadvantaged. Since rates of new adoption and expansion of climate smart practices are very low in these early stages, this difference in proportion will continue to be monitored to determine if and how more targeted outreach and support is needed to ensure grant resources and benefits reach these producers to overcome barriers they may face in adopting or expanding climate smart practices.

[13] Where "data trends" are reported in this section, we note that the reported data are descriptive and we have not performed any statistical tests. We are reporting trends at this point given low sample sizes.

[14] A "socially disadvantaged producer" is used throughout this report to refer to a food producer who is a member of a "socially disadvantaged group." 2022 F2S Grant Program RFA (https://www.cdfa.ca.gov/caf2sgrant/docs/2022_request_for_applications.pdf), p. 7.

Farm to school supply chain actor: Producers

Producers are overcoming key challenges but still face barriers around land access and other costs.

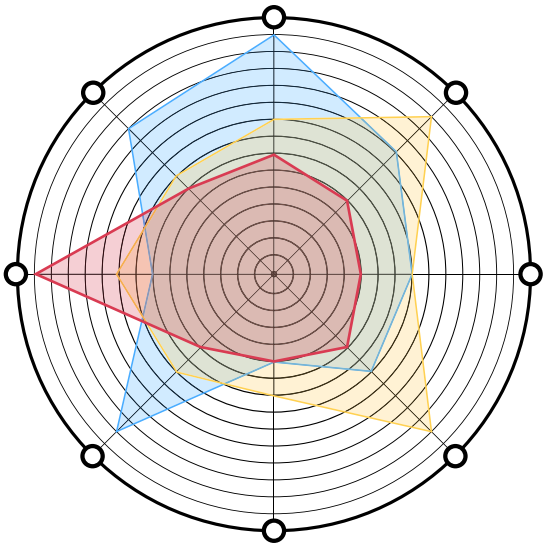
The F2S Grant Program is designed to help prioritized farmers and ranchers[15] address challenges like market access, infrastructure, labor, and social networks that support farm-to-school work. For example, the grant has enabled producers to invest in infrastructure improvements, hire additional staff, and access new school markets (Table 4). However, some barriers, such as land access, full labor coverage, and input costs, remain only partially addressed, indicating areas for future program refinement [insert citation to issue brief when available].

The grant has positively impacted grantees' network connections, leading to improved market access, knowledge sharing, and farm to school participation. On average, producer grantees formed 8.6 new connections each in the first six months of the grant program. Anecdotal evidence collected from grantees suggested that these connections have resulted in increased farm to school sales and participation in educational activities.

[15] Prioritized categories of farmers and ranchers are defined in the 2022 F2S Grant Program RFA

Table 4. The ten grant impacts most commonly reported in the 46 producer interviews.

Grant Impact	Number of producers reporting impact (n = 46)	In the words of the producer grantees
Network connections	35	"We were able to get most of everything that they wanted and deliver it to them, and that was super awesome to be able to have, not just as a check mark for a grant deliverable but as a foot in the door."
Infrastructure	32	"We had our parking lot asphalted to be able to run pallet jacks and move things around more easily."
Markets and marketing	29	"Then particularly with this grant, we've noticed this year there's quite an acceleration of interest."
Increased flexibility	23	"This grant just in general, it's enabled us, has and will enable us to do things on the farm that would probably take us a decade to do but we'll be able to do that in one or two seasons. So really moves us forward a lot.
Production	21	"It's just been great to be able to really provide such a diverse amount of produce in a very small area. That is just fascinating for us. We needed an expert. That's not what we went to school to do."
Labor	21	"When we saw this opportunity, we were like, that's a way to at least pay for somebody's time, be able to actually implement more, and not work a full-time other job on top of all of the volunteer work that we're doing."
Changes in practices	18	"Now given that we have this new farm site, we were able to do it on a larger scale and be able to play with it more ...like intercropping of beneficial flowers with the main crop."
Education	18	"The grant did also help us get our mobile mill out to a school. We have a traveling mobile mill house. That's a super cool piece of [equipment]. It's a great pedagogical tool."
School capacity	15	"I'm pretty sure that they have a grant, and that has given her the ability to flex more with us, because other people, if they don't have that built into their job description, basically, then they were like, 'I don't have time for this.'"
Facilitating faster timeline	14	"Having a fully funded project, we can move forward with the planning process, whereas before we would still be fundraising. That's huge, knowing that we have funding to move forward."



Case Study Spotlight:

Community-based intermediaries provide culturally responsive assistance and expand social networks

In the wake of the COVID-19 pandemic, a group of small-scale, organic, Latinx farmers in Santa Cruz County formed a cooperative. The co-op founding member was spurred by his realization that many farmers such as himself did not understand how the school procurement system worked nor how to access buyers and respond to bids, with language a significant barrier. He suspected that while individual farmers could not make this work alone, if they banded together, they would be able to supply a lot more produce to nearby schools.

The farmer's instincts were correct: the new co-op enabled individual members to pool their organic produce and fill larger orders desired by schools and other clients while simultaneously creating a peer support network to help navigate the marketing and distribution challenges typical of direct sales relationships.

In 2022, shortly after the co-op was established, one member was awarded a F2S Grant Program producer grant. Grant funds were used to purchase produce from other co-op members, which was then donated to a nearby school site, and to finance on-farm and classroom nutrition education for students. As a result of this marketing strategy, the production capacity of seven co-op members increased during the first six months of the project, three of whom established new procurement relationships with nearby school districts. The social connections built during the producer grantee's project were essential to their formation.

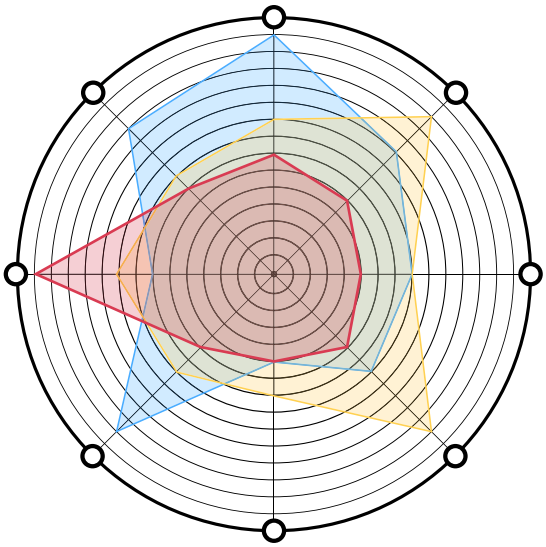
> *"A lot of the really hard invisible work is what creates the change sometimes…Every time I think of it, I get teary when I think that [co-op member] hosted two food nutrition directors at his farm, gave them a tour, and then they left convinced that they need to sign a contract for this next school year to purchase cherry tomatoes and snap peas. That is exactly the purpose of what this funding is for."*
>
> – Supporting Organization

That said, a key challenge for the farmers and purchasers in this supply chain is how to sustain these local procurement relationships going forward. These small-scale Latinx farmers need ongoing support to navigate the complexities of school procurement requirements, much of which is not available in Spanish. To remedy this challenge, the producer grantee has partnered with a regional supporting organization for technical assistance and social networking support.

Photo courtesy of ALD&Y

> *"I call it cultural interpretation…through our technical assistance for the co-op, and through our relationship building with the schools and other buyers - we are the connector. We, literally, invite [the farmer grantee] and the co-op to sit down with [a Director of School Food Nutrition]. We introduce them and we help them navigate the initial contact and begin to pave the way so that we can step out of the way and they can stay connected."*
>
> – Supporting Organization

> *"It's really hard, is what I've heard. In order to do business with any school district, you have to have a W9, and all that paperwork is in English. It's not available in Spanish… The support seems to be lacking."*
>
> – School District



Case Study Spotlight:

Local sourcing in remote rural California communities

Farm to school programs can be especially challenging to administer in rural areas of California. In this case study, we highlight how a group of leaders in Humboldt County collaborated to launch a new food hub in their rural community after a decade of struggling to scale up farm to school programming. The positive impact on key actors along this supply chain, including staff at small school districts, local producers and community organizations, was immediately apparent.

Key actors in this farm to school supply chain are thinly spread across their rural region, with up to two hours of drive time across mountainous terrain between entities. Despite the desire to conduct farm to school direct sales, such opportunities in the region were limited prior to the support of the F2S Grant Program. There are three main reasons for this: (1) small school districts purchase smaller volumes, (2) the significant distance between producers and rural school sites, and (3) the lack of efficient local food distribution and storage infrastructure.

Photo courtesy of Santa Cruz City Schools

> *"We did some deliveries to [a local, rural school], but it just tapered off. They were small orders and the timing was always a little bit hard to manage with everything else we had going on."*
>
> – Producer

During the first grant cycle of the F2S Grant Program in 2021, a local county office of education (COE) received an award to pilot a local food procurement model where it would serve as an intermediary between local farmers and schools. During the grant period, the COE managed most operational aspects related to purchasing, including obtaining weekly inventory lists from local producers, collecting orders from school districts, and coordinating weekly deliveries. Having a third-party play this essential role eased the burden for both seller and buyer and enabled the program to succeed.

While this model established new critical social networks and increased local food sourcing by school districts in the region, procurement eventually reached a plateau where demand exceeded what the COE could organize. This demand pressure prompted community discussions regarding how to scale up the model to sustainably serve more schools while at the same time improving food storage and distribution infrastructure.

In 2022, a farmers' market operator in the region was awarded a federal Local Food Promotion Program (LFPP) grant administered by the U.S. Department of Agriculture. This allowed the group to launch a food hub for locally grown produce for wholesale clients, particularly school districts. This new food hub created a new purchasing pathway for schools and small-scale local farmers. By aggregating and storing supply from various producers, the food hub created a profitable and functional system for all parties. In the food hub's first six months of operation, 95% of sales were to regional schools.

> *"It was all about how do you get the volume up to make it worth the farmer's time… It just came down to being the middle person that was the most successful. We'll just buy it for you, and deliver it, and take all the burden off your shoulders."*
>
> – Supporting Organization

> *"[The food hub] is really a huge game changer to be able to make that one drop in town, even though it's an hour away, rather than going to [several school sites] and just making all these little drops. That's been one of the ways that it's very . . .appealing to us as a farm to participate.*
>
> – Producer

The F2S Grant Program funding to the COE laid the foundation for success in this rural region by investing in the development of lasting relationships between small farms and local schools. These trust-based relationships enabled the allied farmers' market organization to leverage federal resources available through the LFPP, construct new food hub infrastructure, and ultimately sell greater volumes of local food to additional school districts immediately following the hub's launch in 2023.

> *"We just launched…if [supporting organization grantee] hadn't had that funding to be able to do all of this work initially, we would have a fraction of the amount of schools onboarded probably at this point… without this funding, my job would be way harder, and we would be probably providing way less food to way fewer schools"*
>
> – Food Hub

As the food hub succeeded in its operational and marketing efforts, the local COE's nutrition education and networking activities continued with funding support from the second Farm to School program grant cohort in 2022. The COE launched a regional collaborative for school gardeners and one for school food service directors in the area. In both communities of practice, participants gather to share ideas, discuss challenges, build new relationships, reduce feelings of isolation, and offer support–particularly when a single motivated individual, or "champion," leaves a network.

Photo courtesy of Honore Farm and Mill

Farm to school supply chain actor: Schools and districts

As evidenced in their applications to the 2022 F2S Grant Program, the 53 Track 1 K-12 school district, charter school, and county office of education grantees aim to reach more than one in five of California's 5.9 million public school students through their grant-funded activities (23%; 1.3 million students). The other three grant program tracks engage additional students through early care and education programming, producer partnerships (including farm field trips), and partnership grants (including collaborations between school districts and farm to school non-profit organizations). Grantee data submitted to CDFA via quarterly check-in surveys within the first six months of the grant indicate that the 2022 F2S Grant Program has supported K-12 school grantees in procuring California grown foods and providing farm to school education:

88% of grantees (45 of 51) readily engaged in a wide variety of farm to school education, procurement, and meal preparation activities during the initial months of their grant. Grant-funded purchases in this early phase of the 2022 F2S Grant Program indicate that schools and districts are forming new relationships with California food producers and vendors, even while – by the flexible design of the grant program – local purchasing using grant funds represents a small portion of total K-12 food budgets. As these activities got underway, grantees offered insight into their challenges, including local procurement and tracking (e.g., identifying farm source and farm practices), kitchen infrastructure, and staff capacity, highlighting the need for continued investment and support.

Through their grant-funded activities, 53 Track 1 K-12 school district, charter school, and county office of education grantees aim to reach

1.3 Million students

88% of grantees

readily engaged in a wide variety of activities during the initial months of their grant.

Farm to school supply chain actor: Schools and districts

Priority student populations are being served.

K-12 Procurement and Education grant projects plan to reach a diverse audience, serving disproportionately more Hispanic/Latino students (65% project-wide compared to 56% statewide population) and non-white students (89% project-wide compared to 80% statewide population). Additionally, 71% of students served by the grant program are eligible for free or reduced price meals compared to 60% of students statewide. Of the grantees who indicated that their grant activities are targeting specific schools, 84% are Title I schools.

Grantees expand California grown food purchasing for school meals with new local food items.

Within the first nine months of the grant program, between April 1, 2023 and December 31, 2023, a total of nearly $700,000 in California grown or produced, whole or minimally processed foods was purchased by schools and school districts as part of their grant-funded procurement activities. Of this amount, $524,000 (75%) was spent on produce, with another $162,000 (23%) on meat and poultry. Purchases were made primarily for school meals (91%), with additional purchases for nutrition education programs (8%) like Harvest of the Month educational activities, cooking demonstrations, farmer's markets, and taste tests.

K-12 school grantees expanded their purchases of California grown foods, with 32% (16 of 50) of responding grantees serving one or more new local food items within the first six months of the grant program.

Farm to school supply chain actor: Schools and districts

> *"For the first time, we were able to purchase locally grown watermelon, cantaloupe and corn, have the product processed and more easily offered in the meal program."*
>
> – K-12 School Grantee

> *"We purchased Robot-Coupes to help process CA grown and organic/locally grown produce."*
>
> – K-12 School Grantee

> *"We replaced bagged salad mix with locally grown lettuce and grape tomatoes with locally grown cherry tomatoes. We also made our own salsa, chili and spaghetti sauce with herbs, onions, garlic etc from local sources."*
>
> – K-12 School Grantee

Farm to school supply chain actor: Schools and districts

Grantees begin to shift their food procurement and preparation practices.

By design, the grant program allows applicants to spend funds across multiple categories, including food, educational supplies, staffing, and infrastructure, doing so in recognition that districts' farm to school support needs vary based on factors such as the stage of their program, existing resources, and geography. When it comes to funds spent on food procurement directly, at this early stage in the program F2S Grant Program-funded procurement represents a small fraction of the total school food budget used to purchase, prepare, and serve California's 5.9 million students. Based on a review of grant application budgets, the total funds requested by 2022 K-12 school district, charter school, and county office of education grantees for procurement represents approximately 1% of total food budgets. While 1% is a small share of grantees' total food procurement budgets, these funds are intended as a catalyst for furthering the grantees' farm to school efforts. There are two additional important contextual factors to consider: (1) the F2S Grant Program requires grantees to use funds for new or expanded farm to school activities, and (2) grant-funded procurement may be leveraged to initiate new or strengthen existing vendor relationships, thereby impacting farm to school networks and future procurement.

Food purchasing reimbursement claims submitted by grantees illustrate that a total of 85 producers through 65 vendors were involved in local procurement within the first six months of the 2022 F2S Grant Program. Some of the local agricultural purchases were directly from the producer, in which case the vendor and producer are the same. Other purchases were from entities like food hubs or local distributors who provided information on the producer from whom they obtained the agricultural goods.

Within the first six months, grantees also engaged in other activities to support expanded purchasing of California grown food for school meals, such as replacing non-California items with those that are locally grown and purchasing equipment to process California grown produce. (Table 5).

Food procurement, preparation, or serving activity

	# of K-12 school grantees	% of K-12 school grantees
Change the way you process or prepare food to incorporate more California grown or produced, whole or minimally processed products	13	26%
Swap out a non-California grown food item with the same California grown or produced, whole or minimally processed food item (e.g., replaced oranges from outside of CA with CA grown oranges)	12	24%
Develop a new recipe or menu item featuring California grown or produced, whole or minimally processed products	12	24%
Change the way you serve or display food in the cafeteria	10	20%
Engage students, parents, and/or the school community in developing, testing, or providing feedback on menu items	10	20%
Purchase equipment or supplies to process, prepare, or serve California grown or produced, whole or minimally processed ingredients in school/district kitchens/cafeterias	10	20%

Table 5: Farm to school procurement and preparation activities supported by the grant (n=50).

Farm to school supply chain actor: Schools and districts

> *"We purchased Harvest Bars and Harvest Stands for students to select from first in the cafeteria to increase selection and consumption of fresh fruits and vegetables."*
>
> – K-12 School Grantee

> *"With grant funds, we were able to purchase blenders for all of our high school cafeterias. They will now be serving smoothies at breakfast made from California grown strawberries."*
>
> – K-12 School Grantee

> *"Food service team members have been participating in scratch cooking training to adapt our recipes to include more fresh, local products. The training also helped identify some equipment needed in our sites to help expand the cooking (bought through [Kitchen Infrastructure Training] funds, but influenced by this grant)."*
>
> – K-12 School Grantee

Farm to school supply chain actor: Schools and districts

Climate smart production practices are widely valued by school districts.

While farm to school programs can encompass many activities with environmental impacts (e.g., school gardens, reducing food waste, composting), a key lever through which schools can have an environmental impact is through the procurement of foods produced using environmentally beneficial production practices.[16] At baseline, 45% of K-12 school grantees (23 of 51) considered food producers' farming, ranching, or land management practices when making procurement decisions, while 43% (22 of 51) did not. The remaining 12% of grantees (6 of 51) were unsure, likely due to the fact that the person reporting on the grant is different from the person who leads food procurement. For those grantees who are interested in purchasing food grown using specific food production and land management practices, organic practices (broadly) and farm labor standards were most common: 83% (19 of 23) of these grantees reported interest in purchasing organic food (with or without certification), and 65% (15 of 23) of these grantees reported a desire to prioritize farm labor standards.

"Climate smart" is not clearly defined or understood, so not consistently operationalized.

The F2S Grant Program aims to shift food purchases toward producers using certain agricultural practices that fall under the banner of climate smart. This term is increasingly used by government agencies, but it currently carries a broad definition that is difficult to operationalize for school food purchasing.[17] At the outset of the grant program, all K-12 school grantees were asked in the program's required pre-survey to report on their understanding of the term.

More than half of school district grantees described climate smart as including regenerative, sustainable, or organic agriculture practices broadly. Some grantees described more specific farm practices, including labels or certifications that they could look to for food purchasing decisions.

[16] EAT-Lancet Commission. 2019. EAT-Lancet Commission Brief for Food Service Professionals (https://eatforum.org/lancet-commission/food-service-professionals/)

[17] A recent example is the 2022 CDE CA School Food Best Practices (https://www.cde.ca.gov/ls/nu/rs/sfbpfunding.asp#_Sustainably_Grown_Foods_1) funding, where "sustainably grown" foods are an allowable use of grant funds. "Sustainably grown" foods are defined using the same definitions as the F2S Grant Program: "those that are grown or raised using Climate Smart Agriculture Practices, Climate Smart Agriculture Production Systems, or Other Regenerative Strategies." "Other Regenerative Strategies" further includes "those that also increase resilience to climate change, improve the health of communities and soil, protect water and air quality, increase biodiversity, and help store carbon in the soil."

Farm to school supply chain actor: Schools and districts

"We understand that organic certified produce and grass-fed meat raised with regenerative agriculture support climate smart farming and we are including more in our purchasing for 2023-24."

– K-12 School Grantee

About one third of grantees (16 of 51) were not familiar with the term or its definition. Many grantees expressed that they were still learning about this term, and saw a need for a more operational definition to support school food buyers in their purchasing practices.

"I think of organic, regenerative, or water conserving. In our district, we purchase organic when cost and availability allows and would like to support farms that conserve water when possible. Other "climate smart farming" practices – they just are not on our radar. I don't know that, in food services, we have the bandwidth to research/consider/prioritize beyond this – not without additional support."

– K-12 School Grantee

Farm to school supply chain actor: Schools and districts

Grantees intentionally purchase from priority producers.

K-12 school grantees have multiple reasons for developing relationships with priority producers. An analysis of their stated motivations underscores key themes: the importance of supporting their communities and regional economies; ensuring that the farms they purchase food from reflect the student body of their district; uplifting marginalized producers and working toward equity and justice; and considering the environmental and natural resources impacts of their purchases.

> *"My district is made up of a melting pot of ethnicities with Latino/Hispanic students making up a large portion of the population. It is [important] to us that we can show [them] we are supporting farmers that represent our community."*
>
> – K-12 School Grantee

> *"I am very intentional with my purchases for fresh produce. Because of this grant, I am able to buy almost 90% of our fresh produce from local BIPOC, veteran, and small farmers. It is a great way to give back to the community."*
>
> – K-12 School Grantee

> *"In communicating with my local farmer, I have come to understand the importance of the socially disadvantaged farmers. The way they manage their land and crops and the importance of those decisions not only for their land but for the region as well. The number of jobs that these farms create and sustain plays an important role in the dynamics of the community. The community's connection to the way food is grown locally has a huge impact on the region. These ideas have motivated me to look deeper at the food that I procure for the students of this district. Educating the students on the importance of knowing where your food comes from drives my passion."*
>
> – K-12 School Grantee

Farm to school supply chain actor: Schools and districts

Within the first six months of the grant period, more than half (56%) of the K-12 school grantees intentionally procured foods from the F2S Grant Program's priority producers: small-to-midsize producers, socially disadvantaged producers, veteran producers, limited-resource farm households, and producers that use climate smart agriculture practices and production systems (Table 6).

> *"We partnered with [one of the school district's BIPOC farm partners] and thoroughly communicated our food safety and insurance needs and the reasoning. They adhered and made changes. Through our partnership with them they have been able to earn enough funds to have electricity installed in their farm. Anecdotally [the owner] stated, "[farm to school] has changed their family's life." They are now selling to other large institutions and applying for CDFA grants."*
>
> – K-12 School Grantee

> *"We have been expanding our "plated up" programming which features scratch cooked, local, organic menu items. This is allowing us to incorporate more fresh organic CA grown food into our menus and present that food in new ways. We are working to train our staff and teams on how to use the new products, how to promote them at the school sites, and how to work with the farmers on successful delivery of the products to our programming."*
>
> – K-12 School Grantee

Food procurement activity

	# of K-12 school grantees	% of K-12 school grantees
Intentionally purchase food from small to midsize producers* in California	24	48%
Intentionally purchase food from producers in California that use climate smart agricultural practices or production systems	16	32%
Intentionally purchase food from socially disadvantaged producers in California	13	26%
Intentionally purchase food from veteran producers in California	4	8%
Intentionally purchase food from limited-resource farm households† in California	4	8%

Table 6. Farm to school procurement from priority producers, early in the grant period (n=50)

*"Small to midsize producers" is used throughout this report to refer to food producers as those for which the average annual gross cash farm income during the previous three-year period is no more than $750,000. 2022 F2S Grant Program RFA, p. 6

† "Limited-resource farm households" is used throughout this report to refer to households that for two years in a row, have low farm sales and low household income. 2022 F2S Grant Program RFA, p. 6

Farm to school supply chain actor: Schools and districts

Schools and districts identified their top three challenges: price, processing capacity, and staffing

While K-12 school grantees desire to – and do – procure from farmers and ranchers prioritized by the F2S Grant Program, they also shared barriers faced prior to the beginning of the grant term regarding scaling their purchases from these producers. Price, processing capacity, and staffing arose as the three most common barriers that grantees have faced or expect to face in purchasing/procuring and using/serving foods from priority producers for their school meal programs (Table 7).

> *"Our farm partners have been grateful for the collaboration, as they are learning a lot about distributing to a school district - everything from transportation of produce to billing to food safety certification so that hard-to-prep items like squash can be sold and processed by a 3rd party processor. This process is harder than they thought, so we are currently exploring a food hub, but the collaboration and learning that the grant has allowed has led to a lot of growth both at [our district] and for our farm partners."*
>
> – K-12 School Grantee

Barrier	# of K-12 school grantees	% of K-12 school grantees
It is not available at a price that works for us	26	51%
No time to process foods	26	51%
Lack of staff with appropriate skills/other staffing challenges	23	45%
It is not available in a quantity that works for us	22	43%
It is not available in a form that works for us (e.g., washed/chopped/bagged)	21	41%
We have experienced other supply chain issues (e.g., lack of delivery drivers/lack of product/weather issues)	20	39%
We have faced transportation and infrastructure challenges (e.g., farmers cannot get to our site)	20	39%
It is hard to incorporate these producers into our procurement process (e.g., purchasing thresholds/RFPs/contracts)	20	39%
It is hard to find producers to purchase from	18	35%
We do not have time to do the research to find producers	25	29%
No facilities to store items	14	27%
Unfamiliarity of items by students	13	25%
Other	5	10%

Table 7. Barriers to purchasing/procuring and using/serving food from priority producers (n=51)

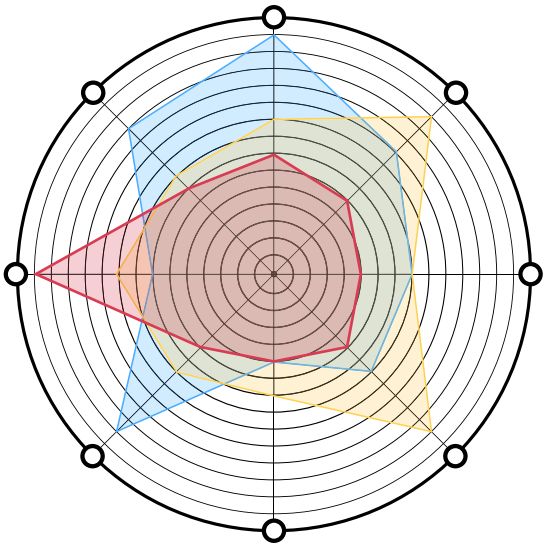
Farm to school supply chain actor: Schools and districts

School districts see opportunities for improved tracking and reporting.

From the 2022 Farm to School Grant program pre-survey, grantees shared insights into what would support improved food purchase tracking and reporting. The two most commonly requested supports include: (1) working with vendors to track food purchases and share this information with schools and (2) developing tracking systems and software solutions. Training and technical assistance for grantees or food service staff was a less frequently mentioned solution.

> *"We need our vendors — especially larger distributors like [broadline distributor] — to provide this information consistently and with volume reports. Often it is very difficult for us to get this information from [broadline distributor]. Most of our produce is California grown, we can confirm it as it comes from [smaller produce distributor] or [food hub]. They provide farm information, etc. consistently, and often on the invoice itself. Why do larger distributors omit this information? Please help with this!"*
>
> – K-12 School Grantee

Upcoming data collection efforts will include conducting in-depth interviews with school grantees to do deeper qualitative analysis on topics including procurement, student engagement, and culturally relevant meals.



Case Study Spotlight:

Long-term networks and food hubs lead to lasting success

Farm to school activities in Ventura County are long-standing, dating back to at least 2012 when a group of school nutrition directors began collaborating to bring local produce into their schools. Starting in 2013, the group was successful in securing a succession of grants, which ultimately allowed for the creation of a non-profit organization to support school garden programs and connect farms to area schools. F2S Grant Program funding in this region contributed to an amplification of work that was already in place.

The 2022 F2S Grant Program awarded eight grants, totaling $1.5 million, to applicants in this region (among the highest concentrations of funding in the state). A motivated individual, or "champion," played a supportive role in several of the successfully funded proposals, and is credited with sustaining much of the farm to school activities for this region.

This region's farm to school supply chain is an example of one with a high degree of integration: many of the interviewees mentioned each other and named other actors in common.

For one farmer in the community, this interconnectedness allowed him access to leased land on which to start his own farm. For another, farm to school activities led to increased sales.

Several interviewees reflected on how farm to school projects uplift the importance and value of farming–an outcome they saw as particularly meaningful for Latinx youth whose parents worked in the fields.

> *"I think sometimes there's a little bit of a stigma because their parents were maybe field workers or they worked in agriculture – and they might not see it as something that they want to do in the future. Coming out here, they have so much fun, they're learning a lot, and they're connecting it back to the food they eat. I think we are really encouraging them to get into the ag field as a possible career."*
>
> – School Food Authority

One school district-affiliated interviewee said that in addition to the funding itself, receiving the award gave them increased recognition and leverage in advocating for their work and additional resources at the district-level. The grant also offered their program increased spending flexibility: while the school district only covered salaries, grant funds could be used towards materials and procurement. However, many interviewees spoke about the need for ongoing funding from non-district grants in order for their work to continue.

> *"There is an opportunity with all of this momentum in these projects to advocate for some permanence and if that trickled down to our county office of education then that could trickle into our school administrators. I think that would be powerful, impactful."*
>
> – Supporting Organization

Grant funding also provided farm to school actors in the region with an opportunity to address a common distribution bottleneck–that it was impractical and time consuming for farmers to deliver their products to dozens of individual school sites. A non-profit organization built a relationship with an established food hub. The food hub coordinated orders from multiple farmers, ran delivery routes to the schools, and created other distribution efficiencies while still adhering to local procurement values. It also enabled schools to purchase from organic farms because the food hub prioritized climate smart agriculture practices in its own supply chain.

Photo courtesy of Pasture Raised Kids

Farm to school supply chain actor: Early care and education

The CDFA has considered the Early Care & Education (ECE) grant track akin to a small pilot within the F2S Grant Program, seeking to understand the unique role of farm to ECE in the broader California farm to school and farm to institution context, and the unique role that the agency may play in supporting this subset of "farm to" programming. The six ECE grantees in the 2022 F2S Grant Program include one single-site child care center, three non-profit organizations, one higher education institution, and one county agency. All grantees had either previously participated in farm to ECE or similar programs, or were expanding their farm to school programs into the ECE realm through this grant. The five grantees that are not child care centers or child care providers themselves intend to partner with between two and 25 ECE providers per grantee, totaling at least 51 providers. Thirty-nine percent (20 of 51) of grantees' partner childcare centers and providers participate in the Child and Adult Care Food Program (CACFP). The organizations served by grantees include but are not limited to: home-based childcare providers, single-site and multi-site child care centers, and Head Start programs. Collectively, the grant program's ECE projects intend to serve 984 children ages birth through age five, plus an additional 200 school-age children.

Between April 1, 2023 and December 31, 2023, ECE grantees spent a total of $18,000 in grant funds on California grown or produced, whole or minimally processed foods. The largest expenditure was on produce ($12,000), followed by meat and poultry ($4,000), and eggs ($2,000). These purchases were from 16 different producers through 14 vendors.

Early evaluation data underscores that grantees are building relationships with food hubs, prioritizing culturally relevant foods and education, and engaging families and communities. Like school district grantees, farm to ECE programs face limited information on priority producers and food production practices. And in the early stages of their programming, they elevate a need for concerted time and support building staff buy-in and adapting their programming to each site's unique logistics. Addressing these challenges and supporting ECE programs in purchasing practices that support priority producers will be essential for realizing the full potential of farm to ECE programs in promoting healthy, sustainable, and culturally responsive food environments for young children and their families.

Farm to school supply chain actor: Early care and education

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Farm to school supply chain actor: Early care and education

Grantees are building relationships with food hubs and food producers.

ECE grantees have demonstrated success in building relationships with food hubs to facilitate successful local food procurement. Half of the ECE grantees (3 of 6) initiated partnerships with food hubs within the first nine months of the grant program (in addition to the one ECE grantee that operates its own food hub). All grantees connected ECE providers in their networks to new food producers, and they mention purchasing a wide variety of produce, as well as meat. These partnerships have enabled ECE providers to source a wider variety of local foods and incorporate them into meals and use them for tastings and educational activities. Grantees have worked with food hubs and producers to provide food boxes to childcare food service staff for meals and student tastings and educational activities. In some cases, grant funds are also being used to provide local food boxes, bags, or recipe kits to families, paired with educational events and materials.

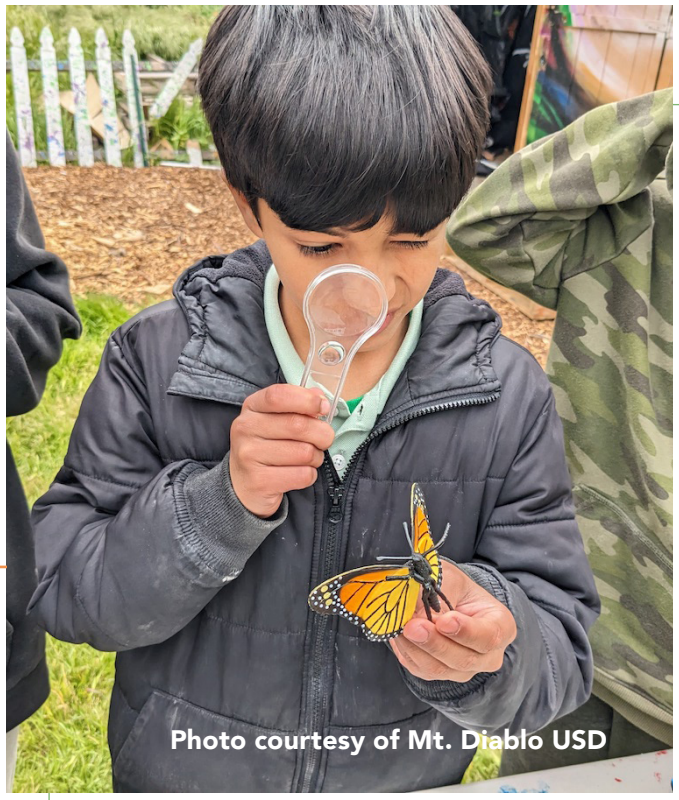


Photo courtesy of Mt. Diablo USD

Farm to school supply chain actor: Early care and education

Grantee reports indicate that there is more for CDFA, food hubs, and farm to school practitioners to explore about how to facilitate food hub purchases that match the size and feeding models of childcare centers. For example, one grantee described that they faced the challenge of not having enough volume to submit an order to the food hub in a neighboring county. However, through partnership with another community group with similar goals, they were able to submit a larger buy that made their partnership feasible for this food hub.

> *"We also were able to start implementation of the Local Food Box to the kitchens of each site. This was a big [win] for us as we are quite rural and do not currently have a local food hub. Our local community food council was able to step in and connect with the food hub to our south. One of our local tribes wanted to offer a CSA style box to their members, and the combination of us and them is giving the community food council a large enough order to be able to offer this CSA style box. This is also kick starting their project to become a food hub so this is extra exciting for our community."*
>
> – Early Care and Education Grantee

Photo courtesy of San Diego COE

Farm to school supply chain actor: Early care and education

ECE grantees have prioritized cultural relevance in their food procurement.

ECE grantees and their partner providers have prioritized procuring and promoting culturally relevant foods and education that celebrate the diverse backgrounds of the children and families they serve. Examples include collaborating with Indigenous communities to align curriculum and procurement efforts, working with a local tribe on bulk purchasing from a food hub, offering culturally relevant educational activities for children, cooking workshops and CSA bags for families, and developing relationships with producers who grow culturally specific foods.

> *"To date, we've worked exclusively with a local Asian farmer that supplies culturally relevant produce for the free CSA bags provided to the families. With each distribution, we provide a culturally relevant recipe for one of the produce items provided that month for families to try. We've received positive feedback on the recipes. We hosted a virtual cooking workshop for parents where we made a riff on a traditional Chinese cabbage roll recipe as a kid-friendly finger food to try, emphasizing the flexibility of the recipe to use seasonal ingredients to mix things up which the parents appreciated. This was also used as a kickoff for discussion among the parents to encourage them to share out their favorite culturally relevant family recipes."*
>
> – Early Care and Education Grantee

Farm to school supply chain actor: Early care and education

ECE grantees are engaging with families and communities.

Early input from grantees highlights the potential for farm to ECE initiatives to be a pathway to engaging families and communities. ECE grantees frequently mentioned their direct educational engagement of children through hands-on gardening and tasting activities, as well as school and family/caregiver engagement through farm field trips, tours, or family cooking events, and community supported agriculture (CSA) programs that foster connections between children, families, and local food systems.

> *"One of our project partnering sites has shared many times how excited they are about this project starting. They have been wanting to implement a garden at their preschool site for a long time but have never had the resources to do so. This partnering site has included the [grounds staff] at their college to come redirect irrigation before the garden boxes get built so that the longevity and success of this project will continue."*
>
> – Early Care and Education Grantee

Farm to school supply chain actor: Early care and education

Farm to ECE programs identify access to information about producers, and childcare collaboration logistics as areas for improvement.

Several challenges and areas for improvement in implementing farm to ECE programs have been identified:

Challenge 01

Limited Information on Priority Producers

Like purchasers at K-12 schools, ECE grantees expressed interest in procuring foods from priority producers but noted that information on these producers is not consistently available. Improving access to information and resources on priority producers could help ECE providers better align their procurement efforts with equity goals.

Challenge 02

ECE Logistics and Staff Relationships

ECE grantees faced logistical and administrative challenges in implementing farm to ECE programs, including navigating different ECE settings, staff turnover, and changing meal preparation arrangements. Fostering childcare staff buy-in and tailoring the program to the unique arrangement of each childcare center or site emerged as an important and significant time investment for ECE grantees, particularly in the early stages of program implementation. Childcare models can operate very differently site by site, which means that relationship building, staff training, and communication strategies require tailored approaches. Grantees see this prioritization of relationship development as a vital step in overcoming logistical challenges and supporting sustainability of program activities.

> *"Working with two distinct types of early childcare settings has proven challenging, as they each have different staff structures and time expectations. Our team is prioritizing relationship building to improve communication channels to better navigate the staffing channels at the [childcare sites]."*
>
> – Early Care and Education Grantee

Photo courtesy of Jurupa Unified School District

Key Takeaways and Alignment

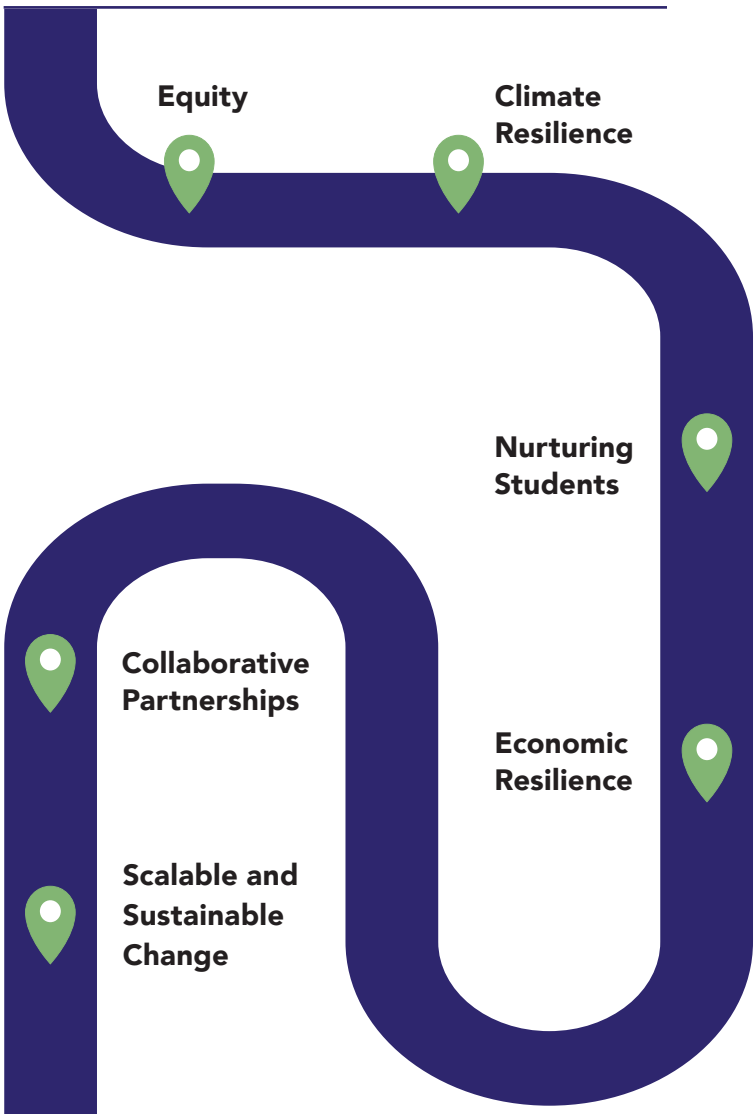
Key Takeaways and Alignment with the Farm to School Roadmap

The preliminary evaluation of the California Farm to School Incubator Grant Program's (F2S Grant Program) second grantee cohort (2022 Grantees) reveals significant progress in advancing the goals and principles set forth in the "Planting the Seed: Farm to School Roadmap for Success" (Roadmap). The key takeaways from the report demonstrate alignment with the Roadmap's priorities of cultivating equity, nurturing students, building climate resilience, and creating scalable and sustainable change.

Specifically, the program has supported:

- **grantees' procurement of California grown or produced, whole or minimally processed foods;**
- **continued use, expansion, and adoption of climate smart agricultural practices;**
- **expansion of social networks that support farm to school work;**
- **improved economic opportunities for a range of California producers; and**
- **expansion of farm to school education and nutrition activities, especially in prioritized communities.[18]**

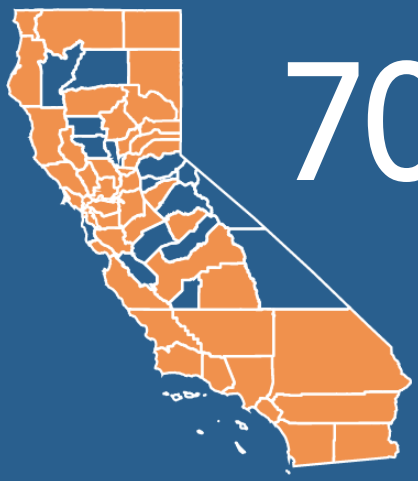
Primary challenges tend to reflect systemic barriers, which the grant program (including farm to school regional staff) addresses in part, and where policy interventions beyond the scope of the grant program are needed to fully achieve the Roadmap's vision of scalable and sustainable change.



[18] 2022 F2S Grant Program RFA (https://www.cdfa.ca.gov/caf2sgrant/docs/2022_request_for_applications.pdf), p. 5.

By the Numbers

2022 Grant Program Investments and Reach



70%

of California's counties received grant funds.

84%

of schools served by the program are Title I schools.

94% of California food producer grantees are small to midsize

42%

of California food producer grantees are BIPOC

62%

of California food producer grantees are women

71%

of students served by the grant program are eligible for free or reduced price meals

100%

of food producer grantees use or plan to use climate smart agricultural practices.

01

Equity:

- The grant program has reached priority populations, including by awarding proportionally more grants to BIPOC communities and organizations: while just 19% of California food producers are BIPOC, they were 60% of applicants and 50% of grantees.
- Challenges persist in identifying and engaging priority food producers: small-to-midsize producers, socially disadvantaged producers, veteran producers, limited-resource farm households, and producers that use climate smart agriculture practices and production systems.[19]
- Continuing to address equity-related gaps by building California Department of Food and Agriculture (CDFA) staff capacity, including its capacity for multilingual outreach to diverse audiences, will move the program closer to achieving its equity-related goals.

[19] 2022 F2S Grant Program RFA (https://www.cdfa.ca.gov/caf2sgrant/docs/2022_request_for_applications.pdf), p. 5-7

o courtesy of Marylin Elementary

02

Climate Resilience:

Producer grantees' use of climate smart farming practices, and the grant's role in sustaining and expanding these practices, demonstrate the program's potential for fostering environmental benefits.

- Of 49 producers awarded grants, eight (16%) reported adopting new climate smart agricultural practices in the first six months of the grant and 12 (24%) reported expanding climate smart practices on land in production for farm to school.
- Eleven farms reported adding acreage as a direct result of the grant within the first six months of the program, totaling 55 acres. These acres tended to be added on operations that are pesticide-free, use reduced tillage, and apply compost.
- Continued flexible support and targeted outreach to the grant program's priority producers can help ensure a diverse applicant pool and recruit farms using climate smart farming practices and systems.[20]
- Continued explicit support for food hubs and cooperatives may assist with providing busy food service professionals with accessible information about producer's farming practices, while providing a peer support network for climate smart producers to help navigate the marketing and distribution challenges typical of direct sales relationships.[21]
- Areas for improvement include guidance for schools on best practices for procurement from priority producers, including a clear and operational definition for "climate smart" growing practices; development of transparent and reliable tracking and reporting systems that identify farm source and agricultural practices for school food buyers; and increasing the level of food procurement incentives to allow schools to meet production costs for targeted producers.
- More data is also needed to understand whether the grant, alongside access to school food markets, is a strong enough motivator to incentivize new producers to change production practices and systems in order to participate.

[20] "Climate Smart Agriculture Practices, Climate Smart Agriculture Production Systems, or Other Regenerative Strategies" are defined in 2022 F2S Grant Program RFA (https://www.cdfa.ca.gov/caf2sgrant/docs/2022_request_for_applications.pdf), p. 6.

[21] F2S Grant Program's 2023-24 Request for Applications explicitly calls out public serving aggregation and distribution enterprises in the Producer Track, acknowledging the importance of this supply chain actor. 2023-24 F2S Grant Program RFA (https://www.cdfa.ca.gov/caf2sgrant/docs/2023-24_RFA_CA_Farm_to_School_IGP.pdf).

03

Nurturing Students:

The 2022 F2S Grant Program projects are reaching students across the state through increased fresh and locally sourced food in school meals and tastings, as well as hands-on gardening and agricultural education.

- Collectively, grantees planned to reach more than one in five (23%) of California's 5.9 million public school students.
- The program is reaching a diverse K-12 student body, serving proportionally more Hispanic/Latino students (65% project-wide compared to 56% statewide population) and BIPOC students (89% project-wide compared to 80% statewide population).
- 71% of students served by the grant program are eligible for free or reduced price meals, compared to 60% of students statewide.
- Early care and education (ECE) grantees aimed to serve nearly 1,000 children ages birth through age 5, plus an additional 200 school-age children.
- Within the first six months of the grant period, more than half (56%) of the K-12 school grantees intentionally procured foods from the F2S Grant Program's priority producers: small-to-midsize producers, socially disadvantaged producers, veteran producers, limited-resource farm households, and producers that use climate smart agriculture practices and production systems.

Through their programming, ECE grantees and their partner providers have prioritized procuring and promoting culturally relevant foods and education that celebrate the diverse backgrounds of the children and families they serve, through activities like culturally specific procurement partnerships, family cooking workshops, and CSA bags for families.

Photo courtesy of Santa Cruz City Schools

04

Economic Resilience:

The resilience of the farm to school supply chain, and the economic benefits to growers in the long-run, will depend on the ability of schools, school districts, and ECEs to continue purchasing locally and the ability of growers to consistently meet that demand once the grant cycle is complete. The procurement analysis summarizes the California grown or produced, whole or minimally processed grant-funded food purchases by schools, school districts, and ECE organizations between April 1, 2023 and December 31, 2023.

- A total of nearly $700,000 was purchased by school district, charter school, and county office of education grantees, primarily for school meals, with ECE organizations spending $18,000 in grant-funded food procurement.
- The grant program has positively impacted growers' economic opportunities, with over half of producer grantees making school sales within the first six months of the grant.
- The grant program has also positively impacted grantees' network connections (farmers, distributors, schools), leading to improved market access, knowledge sharing, and farm to school participation.

We note that this is early in the grant cycle and anticipate that sales and purchases will expand in the next progress report, given the challenges with timely release of grant funds. Further data collection and analyses are needed to understand the factors influencing sales and the grant's long-term effects on growers' financial stability. To transition toward a school food market that better supports California's goals around priority producers and climate smart agriculture, school food buyers need more systematic and widespread access to information about which farms they are purchasing from and their associated characteristics.

Photo courtesy of Lodi Unified School District

05

Collaborative Partnerships:

- Aggregators and distributors, including food hubs, farmer cooperatives and values-aligned distributors with transparent supply chains, play a crucial role in facilitating farm to school procurement and supporting priority producers in accessing school markets.
- Community organizations and partnerships are also essential for demystifying processes, ensuring cultural relevance, community buy-in, and youth engagement in farm to school programs.
- Continued investment in these collaborative partnerships is vital to strengthening existing programs, bolstering relationships between schools and producers the program seeks to support and fostering best practices.

Photo courtesy of Keith Martin

06

Scalable and Sustainable Change:

The grant program has supported school districts seeking out California grown foods, farmers who use climate smart agricultural practices and production systems, and overall expansion of farm to school activities, including in regions with relatively minimal farm to school activity prior to the grant program. CDFA Regional Farm to School Staff have emerged as a vital resource for providing tailored support to grantees and facilitating connections with local communities. However, grantees report significant barriers to scaling and sustaining these areas of progress.

- On farms, inadequate labor and a lack of markets, infrastructure, and financing are the most salient challenges.
- Within school districts, insufficient farm to school supply chain knowledge and infrastructure, lack of scratch cooking capacity (including associated staffing difficulties), and bureaucracy at all levels of the system prevent sustained progress.

Photo courtesy of Elk Grove Unified School District

At this point, both in our evaluation process and in the broader trajectory toward sustainable change in the farm to school supply chain, we recognize that the F2S Grant Program is an intermediate step aimed at testing farm to school assumptions, approaches, and activities by individual actors and entities who face complex challenges. We are in the phase of learning how we might shift the broader farm to school system, such that existing supply chains facilitate progress toward the goals outlined in the Roadmap. To further accelerate change, challenges related to grant program implementation should continue to be addressed.

Entities and individuals throughout the supply chain reiterate that ongoing dedicated funding for this program will allow for longer-term planning and dependable markets so that

1. farmers prioritized in the grant program can learn about and access grant funds and school markets, confidently plan their growing around the needs of school buyers with consistent demand for their products, and have the time, training, and access to resources to plan for and implement environmentally beneficial farming practices,

2. school buyers can access information about the source and production methods of the food they purchase, plan menus around local crops and seasons and recruit, build, and sustain a trained labor force, and

3. community partners have the capacity to provide essential support to actors across the supply chain. Focused statewide investments in food hubs and distribution infrastructure, technology that facilitates transparency, kitchen infrastructure, as well as student nutrition and garden education can also help scale and sustain farm to school impacts.

Appendix

Detailed Methods

INTRODUCTION

The F2S Grant Program Evaluation Team includes more than 20 researchers and experts across multiple disciplines. While our work remains interdisciplinary and requires extensive collaboration across the full team, we have organized into "small teams" to address specific research questions. Our small teams are broadly focused on: (1) case studies, (2) economics: climate smart practice adoption and social networks, (3) economics: sales and procurement, (4) K-12 schools, (5) early care and education, (6) environmental impacts, and (7) grant program administration. Each small team contributed to this report based on data collection and analysis that occurred between fall 2023 and spring 2024. The specific research questions addressed, data sources, and methods used in the development of this progress report are detailed by each small team below.

DATA SOURCES

The Evaluation Team is combining data collected from grantees by CDFA as a requirement of participation in the grant program with primary data collection (e.g., surveys, interviews) conducted by our team. CDFA-collected data includes information provided during the grant application process (application data), a pre-survey administered to all grantees to collect additional baseline data, and quarterly check-in surveys, which provide project snapshots throughout the grant cycle. The quarterly check-in surveys are tailored to each grantee track:

Track 1:
K-12 Procurement and Education Grant

Track 2:
Partnership Grant

Track 3:
Farm to Early Care and Education (ECE) Grant, and

Track 4:
Producer Grant

Photo courtesy of Karuk Tribe

Case Studies

KEY QUESTIONS ADDRESSED

In the case studies team's overarching contribution to the California Farm to School Incubator Grant Program Evaluation, we aim to answer the following questions:

1. *What conditions affect whether, and to what extent, farm to school programs improve environmental, economic, and social/equity outcomes?*
2. *How and why do farm to school program outcomes vary across different social, env ronmental, and political-economic contexts?*

At this stage in the evaluation process, we have constructed data and analysis for 3 of the total 20 supply chains included in our analysis. As such, in this report we can respond to this subset of our overarching questions:

1. *What supply chain attributes support farm to school activities in the three cases?*
2. *What supply chain attributes impede farm to school activities in the three cases?*

METHODS

Between Fall 2023 and Spring 2024, the case studies team conducted 65 1-hour interviews with entities connected to 20 of the grants awarded during Cohort 2 of the Farm to School Incubator Grant Program. The sample of 20 grants includes a subset of award recipients from across all grantee types, including school districts (n = 4), technical assistance providers (n = 11), early care and education providers (n = 1) and producers (n = 4), as well as a selection of funded and non-funded partners named in their project proposals. For the school district and early care and education provider grant recipients, we selected funded projects that demonstrated a strong procurement focus, based on a review of project budgets. For the producer grant recipients, we selected funded projects where the grantee played a strong networking/partnership role, based on their application. The interview protocol invited research participants to reflect on their farm to school experiences generally and in relation to the grant program. Specifically, we asked questions related to challenges faced, opportunities created, and social networks.

In this report, we highlight emerging themes from 3 of the 20 total cases considered in our ongoing evaluation. Each case represents a regionally based supply chain. Case actors are de-identified to protect the confidentiality of the research participants. Combined, the population evaluated includes 12 entities who play an active role in 3 supply chains supported by Cohort 2 of the Farm to School Incubator Grant Program. Iteratively between interviews, our team collaboratively coded each interview transcript using qualitative data analysis software. The coding process helped us identify common themes and patterns within and across cases. We have synthesized and described these emerging themes in the key findings and case spotlight sections above.

Economics: climate smart practice adoption and social networks

KEY QUESTIONS ADDRESSED

Social Networks

1. *How does the grant affect the network connections of grantee producers?*
2. *How do these network connections affect the economic and environmental outcomes related to the grant?*

Climate smart practice adoption

1. *Which climate smart agriculture farm practices are being adopted by farmers participating in the F2S Grant Program?*
2. *Is there an expansion of the implementation of current climate smart farm practices by farmers participating in the F2S Grant Program?*
3. *What are the socio-economic characteristics of farmers adopting new, or expanding existing climate smart agricultural practices on their farms?*
4. *What are the farm characteristics that are correlated to the adoption and/or expansion of smart agriculture farm practices?*

METHODS

There are two main steps to the methodological component of this section. The first is related to data collection. For the purposes of this section the Evaluation Team examined three documents: a) The extended quarterly check-in surveys, b) the application questions and review criteria and, c) the pre-survey questions, Track 4. We concentrated on surveys and reports completed by Track 4 project participants but consulted responses from project participants from other tracks when needed. Selected data was then compiled and organized either in Excel documents and/or using the statistical software Stata. Data was organized into several categories following the sections of the documents just mentioned. Most of the data used for this report originated in the extended quarterly check-in surveys document.

The second step relates to data analysis/ interpretation. For the interpretation of the data, we rely on simple statistical concepts such as frequency analysis. Our sample size at this point is small (44) and not all track 4 project participants completed all questions of the reports and surveys. As the project advances and more data is gathered, we hope to be able to carry out a more complete econometric analysis of the data.

As indicated earlier, we compiled the data following the sections of the quarterly check-in surveys. In addition, we combined data from several sections as needed. Unless indicated otherwise, all reported data comes from the two sources indicated above. If data from other sources is used we will specify the data source.

Economics: sales and procurement

KEY QUESTIONS ADDRESSED

Procurement

One key activity in the Farm to School Incubator Grant program is to procure "California grown or produced, whole or minimally processed foods for incorporation into school meals, especially foods that are culturally relevant, climate smart, and from small to mid-size food producers, veteran food producers, socially disadvantaged food producers, and/or limited-resource farm households in California." The main question is "How have grant funds been used to purchase local agricultural products, and what aspects of these purchases are important to understand in order to develop effective strategies to facilitate farm to school sales?"

More specific questions include:

1. *What types of commodities are being purchased with grant funds?*
2. *How are schools using these commodities?*
3. *Where are the commodities coming from?*

Sales

Increasing sales from producers to schools, school districts and ECE Centers is a key activity for this grant. Specifically, Track 4 "will fund California food producers to increase production, processing, and/or distribution of whole or minimally processed foods for the school food market."

METHODS

Procurement

The procurement data used for the analysis is from the invoices submitted by Track 1 and Track 3 grantees for local agricultural products procured as part of the Farm to School Incubator Grant program. When a grantee submits an invoice to CDFA for reimbursement they complete a worksheet that asks questions about the purchase such as the vendor, grower, what was purchased, quantity and price, and how the purchase was used. STATA was used to clean the data and complete the data analysis. Cleaning consists of items such as making sure all vendor and producer names are entered identically (including case, farm versus farms, etc.), all item names are entered identically, regions are coded into the database, etc.

Sales

Data on whether Track 4 grantees sold agricultural goods to schools, and the share of revenues those sales represent was taken from the quarter 2 extended quarterly check-in surveys. STATA was used to analyze the data and estimate summary statistics such as mean and standard deviation.

Unless indicated otherwise, all reported data comes from the two sources indicated above. If data from other sources is used we will specify the data source.

K-12 Schools

KEY QUESTIONS ADDRESSED

In this report, we describe the baseline and initial farm to school food procurement and preparation practices of the K-12 Procurement and Education (Track 1) grantees funded in the grant program's second cohort (Cohort 2). We also describe the related grant-facilitated activities along with challenges faced by grantees in aligning their work with the goals of CDFA's "Planting the Seed: Farm to School Roadmap for Success."

The following questions addressed in this report lay the groundwork for answering the priority questions described in the multiyear evaluation plan.[22]

1. *At the outset of the grant, to what extent are school district grantees procuring and preparing California grown and/or produced foods from priority producer groups and/or producers using priority production practices?*
2. *What are the opportunities and barriers faced by school district grantees in purchasing and preparing foods aligned with the grant program's goals?*

Subsequent reports will expand on farm to school purchasing and food preparation, looking behind-the-scenes at school district grantees' purchasing practices, systems, and the enabling conditions driving farm to school procurement changes. They will also explore the connections between student leadership, culturally relevant foods, and school meal improvement.

METHODS

This report summarizes data reported to the California Department of Food and Agriculture (CDFA) by K-12 Procurement and Education grantees in the grant's second funding cycle (Cohort 2). Grantees submitted a Pre-Survey (baseline report) at the outset of their grant period, followed by quarterly check-in surveys. CDFA provided these data to the Farm to School Incubator Grant Program's Evaluation Team. The data that shown in the K-12 school grantees section represents grantee responses from the Pre-Survey and the first two quarters. Response rates ranged from 94%-98%. Grantee data were combined with school enrollment and demographic data from the California Department of Education where relevant, and analyzed using descriptive statistics and thematic analysis.

[22] Evaluation Overview slidedeck (https://californiafarmtoschooleval.org/evaluation-plan/), slides 13-14.

Early Care and Education

KEY QUESTIONS ADDRESSED

This report describes initial learning about how the Early Care and Education (Track 3) grants funded in the grant program's second cohort (Cohort 2) have begun implementing the program in alignment with the CDFA's "Planting the Seed: Farm to School Roadmap for Success." The Early Care and Education (ECE) grant track is in its first round of funding. The CDFA has considered this grant track akin to a pilot program, seeking to understand the unique role of farm to ECE in the broader farm to school and farm to institution context, and the unique role that the agency may play in supporting this subset of "farm to" programming.

The following questions addressed in this report lay the groundwork for answering the priority questions described in the multiyear evaluation plan.[23]

1. *How are ECE support organizations, providers, and their grant activities engaging in local food supply chains, including procuring and preparing California grown and/or produced foods from priority producer groups and/or producers using priority production practices?*
2. *What are the early opportunities and barriers faced by ECE grantees?*

METHODS

This report summarizes data reported to the California Department of Food and Agriculture (CDFA) by Early Care and Education grantees in the grant's second funding cycle. Grantees submitted a Pre-Survey (baseline report) at the outset of their grant period, followed by quarterly check-in surveys. CDFA provided these data to the Farm to School Incubator Grant Program's Evaluation Team. The data shown in the ECE section represents grantee responses from the Pre-Survey and the first three quarters. Response rates ranged from 83%-100%. Grantee data were analyzed using descriptive statistics and thematic analysis.

[23] Evaluation Overview slidedeck (https://californiafarmtoschooleval.org/evaluation-plan/), slides 13-15.

Environmental Impacts

INTERVIEWS

Semi-structured interviews were conducted with 46 of the 49 Cohort 2, Track 4 grantees (all who responded after four contact attempts). Because Track 4 funds were delayed in their distribution, interviews were conducted before grantees had gotten very far in their projects. These interviews therefore focused on farm background (previous involvement with farm to school, typical practices, and main challenges), and current and future plans for grant funds. Interviews lasted 30-40 minutes, and participants were compensated for their participation.

EXPANDED ACREAGE

Because we did not explicitly ask farmers about the practices used on newly expanded acres, summaries of practices on expanded acres come from data collected from farm-reported practices on their full farms. We assumed that practices were used on new acres at the same rate that they are used on the full farm; for example, if a farm is 20 acres total and they report cover cropping on 10 acres, we assumed that 50% of their added acreage would be cover cropped, after confirming that those added acres were a crop type that the farmer mentioned using cover crops with. We also assume that all added acres on certified organic farms entered into the farm as non-certified acres with organic practices.

CODING

Interviews were analyzed through an interactive process of open, axial, and selective coding (Corbin & Strauss, 1990).[22] Data were grouped into the overarching categories of "Challenges," "Grant Impacts," and "Farm to School Impacts," and specific challenges/impacts were identified within each category. Challenges/impacts were identical across the three categories to allow us to match challenges to impacts and vice versa. Each impact/challenge was mentioned in at least 5 individual interviews (10% of producer grantees); all impacts or challenges mentioned less than 5 times were noted in an "Other" category. We also coded for farm and ranch characteristics (e.g., size, land tenure) and attitudes (e.g., education-focused, commitment to land stewardship), as well as environmental outcomes that were called out in the interviews. To determine whether there were significant differences in the challenges faced by different demographic groups, we used a statistical test of the presence/absence of challenges reported in each interview (SIMPER analysis; 999 permutations, Jaccard Index for dissimilarities).

SURVEY CURATION

Data were collected from CDFA-administered surveys of Track 4 grantees. We use data from the first extended quarterly check-in surveys given to grantees; three more will be given over the course of the grant, allowing for time-series data in future reports. Here we report baseline data from the 40 operations that had begun using grant funds at the time the first survey was collected (October 2023).

[22] Corbin, J. M., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. Qualitative Sociology, 13(1), 3–21. https://doi.org/10.1007/BF00988593

Process Evaluation

BACKGROUND DATA:

Interviews were conducted with local non profit agencies familiar with farm to school work, the National Farm to School Network, The Strategic Growth Council, and CDFA staff not involved with this program. These interviews, along with an analysis of Cohort 1 exit interviews, were reviewed to understand benchmarks for success and potential areas for program growth.

CDFA TEAM ANALYSIS:

Monthly meetings were held with CDFA Office of Farm to Fork staff to understand their work towards the program's goals and priorities, and for an overall understanding of what's going on in the program. This included an end of year reflection on program growth and success. In addition, bi-weekly status updates were observed from a program policy perspective.

GRANTEE REVIEW:

In March 2023, a voluntary survey of all 2022 applicants (grantees and non-grantees) was conducted to assess motivations and opinions about the application process. Application data were analyzed and compared with statewide demographic data available through the USDA 2017 Census. Finally, an in-depth analysis of grantee quarterly reports was conducted to better understand grantees' ongoing experience with CDFA and the grant process.

Photos courtesy of (top) Sierra Harvest; (middle) ALD&Y; (bottom) Food Insight Group

Photo courtesy of Palm Springs Unified School District