

Closing the Loop: Regenerative Agriculture on Minority-owned and Operated Small Farms in Monterey, Santa Cruz and San Benito Counties, California

Simplified Standard Grant Proposal to USDA-NIFA Beginning Farmer & Rancher Development Program

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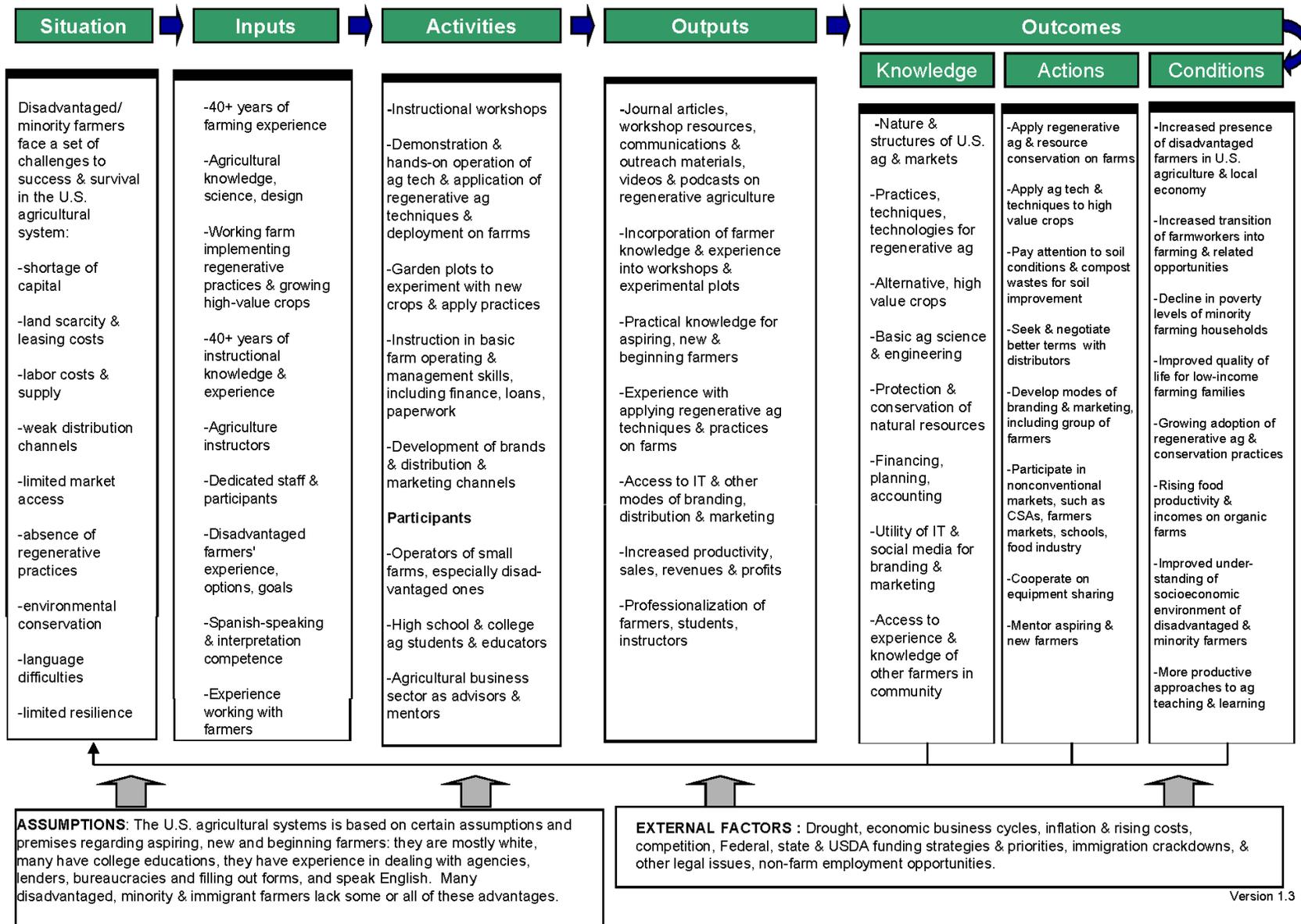
Project summary

According to the RFA for the NIFA American Rescue Plan Technical Assistance Investment Program, “Underserved communities of agricultural producers have not received the amount of specialized technical support [from the U.S. agricultural system] that would benefit the launch, growth, resilience and success of their agricultural enterprises.” Underserved beginning farmers, especially those who do not speak English, often lack the resources, expertise, and financial and logistical capacity to manage operations efficiently and take advantage of the latest advances in agricultural best practices and technology. This proposal requests \$49,999 to continue, revise and expand a successful 2021-22 set of workshops, targeted to Latinx new and beginning farmers and their small farms in Santa Cruz, Monterey and San Benito Counties in California. In six one-day workshops—with simultaneous translation between Spanish and English—Latinx farmers learn from and work with experts, practitioners and each other, acquiring the applied knowledge, skills and practices that can help them navigate and survive in the U.S. agricultural system. They learn about new, higher-value crops, adopt and adapt closed loop regenerative technologies, techniques and practices to their specific conditions, and the managerial and operational requirements for successful farming. They learn about opportunities for state and federal support. And they work on experimental plots in greenhouses to apply what they have learned. They will begin to save on input costs, such as for fertilizer, apply new growing practices and crops, and attract new customers through access to new market opportunities.

Other collaborating organizations

Jakki Castorena-Davila, Environmental Innovations, Santa Cruz, CA

Logic Model for Closing the Loop: Regenerative Agriculture on Minority-owned and Operated Small Farms in Monterey, Santa Cruz and San Benito Counties, California



I. Introduction, needs & project description

A. Background: From November 2021 through May 2022, the Sustainable Systems Research Foundation collaborated with Whiskey Hill Farms, the Community Alliance for Family Farmers, and local agricultural educators and extension agents to provide a series of training and hands-on workshops to a group of Latinx farmers from San Benito, Monterey and Santa Cruz Counties in California. These workshops were focused on providing beginning Latinx small farmers with the knowledge and skills to incorporate closed-loop, regenerative agriculture into their operations, as well as the technologies, techniques, skills and best practices required to survive and thrive in the U.S. agricultural system. The applicants request \$49,999 to continue these workshops for a second year.

The project meets the following NIFA priorities: (i) Works with beginning farmers in Categories 1, 2 and 3; (ii) Helps them succeed through education, mentoring, and technical assistance; (iii) Gives them the knowledge, skills, and tools needed to make informed decisions and enhance their sustainability and efficiency; (iv) Instructs on natural resource management and planning; (v) Works on diversification and marketing strategies; and (vi) Facilitates mentoring, apprenticeships, and internships.

B. Short- and long-term goals: The short-term goal of this project is continuation and expansion of the workshops for small farmers, conducted during 2021-22 with funding from USDA's Western Sustainable Agriculture, Research and Education program (FW21-379). The workshops for 2022-23 are being revised and designed to utilize Latinx farmers' instructional and learning techniques and strategies, to explore the utility of hands-on and experiential learning in increasing productivity and revenues and to enlist their help in developing technical assistance resources for their farming colleagues in the tri-county area. The longer-term goal is a TA program that will complement existing agricultural education in regional high schools, community colleges and agricultural field schools and extension and non-profit outreach. This program will help socialize farmers into the U.S. agricultural system so they can take advantage of the many resources and forms of support available to American farmers.

Latinx farmers are recruited through networking by participants, outreach via social media, newspaper announcements and PSAs on Spanish-language radio, and public presentations in Spanish and English in strategic locations. Approximately 35% of the budget is allocated directly to participating farmers, in the form of stipends, equipment and contracted technical assistance. The project site is Whiskey Hill Farms in Watsonville, California, at which the first year of workshops was offered. Whiskey Hill is a small operating farm that has become so efficient at closed-loop agriculture and resource recycling that it is a net consumer of organic waste. Additional activities take place on the farmers' lands.

C. Needs statement: Disadvantaged and minority beginning farmers in the Western United States often lack the resources, expertise, financial and logistical knowledge to take advantage of "specialized technical support [from the U.S. agricultural system] that would benefit the launch, growth, resilience and success of their agricultural enterprises" (NIFA, 2022:6; Calo, 2018). They may not speak or read English and face informational and logistical challenges in accessing state and federal agricultural programs, especially in terms of paperwork and bureaucratic requirements.

Small, capital poor beginning producers also face depletion of the natural resource base on which food production depends. Sustaining and restoring depleted soils and water sources requires broad, practical adoption of best practices of the circular economy, closed loop agriculture strategies and techniques. While the concepts and practices of closed loop farming are relatively well-known, they are not being taught and applied systematically to most working farms.

The sociocultural environment of new and beginning Latinx farmers differs from that of their Anglo counterparts. Latinx farmers operate in a trust-based milieu rather than a purely competitive one. Many have experienced trauma during migration to and while living in the United States. They must navigate both the local social networks of extended families and neighbors and the remote bureaucratic market system of the U.S. agricultural system (Garcia-Pabón & Ostrom, 2015). Few own their land, lack capital needed to purchase equipment and technology that could improve productivity. Many are ineligible for crop loans from most commercial lenders and rely heavily on family and friends for monetary assistance and labor. They are often poorly informed about seasonal market conditions and distribution options and may lack the management and accounting skills required to keep a business afloat. Much of these farmers’ practical knowledge comes from historical praxis in specific environments, passed from peer to peer and generation to generation (Mayo, 2020).

None of these obstacles are new; many were enumerated in a 2007 report by the University of Florida’s Hispanic-Latino Farmers and Ranchers Project (Swisher, Brennan & Shah, 2007) and another report in 2011 by the Center for Rural Affairs in Nebraska (Starkweather, et al, 2011) and research from University of Washington Extension (Garcia-Pabón & Ostrom, 2015).

In California, the number of new and beginning Latinx farmers is growing, driven by farmworkers in transition from laborer to producer (see Table 1). Table 2 presents data about farms sizes and incomes for the three Monterey Bay counties and some information about Latinx farmers. According to the USDA (2017), there are 756 Latinx farmers in the three counties (18.6% of the 4,067 total). If we optimistically assume those 756 Latinx-operated farms average sales of \$50,000 annually (probably too high an estimate), total revenues are \$38 million per year, compared to the three-county total of \$4.9 billion.

Table 1: Demographics of Socially Disadvantaged Producers in California

Group	Number	% of total	Acreage farmed	% of total
Latinx	14,597	10.6	2,952,168	10.6
Asian	6,651	4.8	705,858	2.5
Native American	1,428	1	390,304	1.4
Black	429	0.3	75,103	0.3
Native Hawai’ian	485	0.4	186,038	0.7
White	113,717	82.8	23,612,502	84.6
Total	137,307*		27,924,973	

* Some farmers reported more than one race. The actual total is 124,405 Source: CDFA, 2020; USDA, 2017: Tables 52 & 61.

Table 2: Farms sizes, demographics & incomes for Tri-County area (2017)

Farm characteristics	Monterey	Santa Cruz	San Benito
Number of farms & producers	1,104/1,944	625/1,061	610/1,062
Total acres	1,340,142	63,900	520,127
Average farm size (acres)	1,214	102	853
Average market value of products sold	\$3,726,396	\$970,464	\$267,059
Total agricultural product sales	\$4,116,149,000	\$606,540,000	\$162,906,000
# of Farms less than 50 acres	503/47%	279/45%	366/50%
Farms with sales less than \$10000/yr.	436/39%	261/41%	319/52%
# of Hispanic, Latino, Spanish origin farmers	410	158	188
# of new & beginning farmers	502	405	307

Source: USDA Census of Agriculture County Profiles for Santa Cruz, Monterey and San Benito Counties; USDA Agricultural Census, California County Data, 2017, Tables 56 & 57.

Through interviews, conversations, discussions with workshop participants during 2021-22, post-workshop surveys, we find that Latinx farmers need:

- **Viable business models**, including operational financing, local supply chain structures and emerging opportunities, storage and sharing of planning, costs and equipment, and revenue resilience.
- **New urban market opportunities** via wholesale, retail and direct access to consumers, farmers’ markets, restaurants and CSAs, branding of farms and productions, and leveraging language and culture as fundamental assets in networking and marketing.
- **Methods for assessing** relationships among labor, technology, land, and infrastructure in terms of cost management, crop selection, farming methods, storage and processing, local distribution, and customer demand.
- **Knowledge, skills, tools and techniques** for resilience in response to changes in land availability, access costs, product demand, and disruptive challenges (such as climate change), environmental sustainability, management critical resources, such as soil, carbon and water, and risks and challenges of new regulations and food safety issues.
- **Information about** costs and benefits of specific technologies, techniques and practices for improved management of land and production, increased efficiency and yield, and communication and information exchange.

D. Outcomes & impacts. Closed-loop regenerative practices can lead to:

- **Improved land stewardship and resource conservation** by reducing synthetic inputs to maintain soil fertility, regenerating soil, sequestering carbon and reducing greenhouse gas emissions through composting of organic wastes, and husbanding water resources through direct delivery to plant roots.
- **Better quality of life** by avoiding costs of synthetic fertilizer and pesticides, producing high-value crops, and increasing farm income.
- **Greater health & safety protections** by reducing exposure to toxic substances, avoiding contamination of water sources by chemicals and limiting crop contamination by external sources.

- **Diversification of products** through cultivation of high-value, exotic, and culturally preferred foods, hoop houses that allow multiple crops per year at higher prices during off-seasons, and extended growing seasons, employment and more stable incomes throughout the year.
- **Major regional implications and impacts** by increasing the supply of nutritious organic food and competing better in markets to increase farm sales and incomes.

E. Comparable programs: Table 3 lists similar, currently operating, nearby agricultural education and training programs. The most extensive one is **ALBA**, which trains migrant farmworkers in farming skills and practices, rents land to graduates for five years at annually escalating rents and handles produce distribution. ALBA does provide its hundreds of farming graduates with some assistance in terms of regenerative agriculture technologies, techniques and practices and about management. **Kitchen Table Advisors** offers bilingual business advising and social networking connections to small, organic farms. The **Center for Land Based Learning** focuses on farm management skills rather than basic training or technical assistance support. **MESA** trains participants in agroecology and microenterprise, prioritizing disadvantaged residents. Our workshop program is complementary to these programs and reaches farmers who have not accessed or worked with them.

Table 3: Comparable training programs in Central and Northern California

Name	Program	Goals
Agriculture & Land Based Training Association (ALBA) Salinas, CA, https://albfarmers.org	Farmer Education and Enterprise Development (FEED)	Develop the organic farming skills of immigrant farmworkers to support a more equitable and environmentally sustainable agriculture sector on a 100-acre organic farm training facility in the Salinas Valley.
Kitchen Table Advisors , San Francisco, https://www.kitchentableadvisors.org/	Business advising & ecosystem building	Fuel the economic viability of small sustainable farms and ranches through practical business advising and relationship building
Center for Land Based Learning , Sacramento area, https://landbasedlearning.org/	Beginning Farm and Ranch Management Apprenticeship Program	Train individuals for farm management jobs by providing practical experience, valuable skills, connections to farmer mentors, and an industry-recognized credential.
Multinational Exchange for Sustainable Agriculture (MESA) , Berkeley, CA, https://mesaprogram.org/	Agroecology, Farming and Food Pathways (AFFP) – for California residents	Train and certify in Urban & Rural Agroecological Food Systems and Microenterprise (prioritizing socially disadvantaged US residents)

Sources: Organizational web sites. This listing does not include agricultural ed programs at regional community colleges.

II. Project goals, objectives, outcomes

A. Prior work: The original workshop program proposed research and education in collaboration with small farmers on the integration of certain agricultural technologies into their operations, such as drones and sensors. In the event, the majority of participants were Latinx—which we did not anticipate—and workshop formats and content were modified to address a range of issues and problems that were not part of the original project design. The participants judged the workshops to have been extremely valuable in terms of social networking, learning about tools and techniques of regenerative agriculture and providing access to practices that have already been adopted by several of the farmers. The second offering of these workshops, during 2022-23, will draw on lessons learned and feedback from farmer participants in 2021-22 workshops, and be revised, expanded and adapted to the specific needs and learning styles of beginning Latinx farmers. They will also include more time on participants' farms (see Table 4).

B. Goals & objectives

Goal #1: Workshop revision & development

- **Objective 1.1:** Revise the content, delivery & activities of the 2021-22 workshops for 2022-23, to better meet the needs of Latinx and other participants.
- **Objective 1.2:** Conduct outreach campaign via media, networking, poster, extension agencies, and public service announcements on Spanish-language radio stations.
- **Objective 1.3:** Increase the number of Latinx small farmers participating in the workshops and incorporate their knowledge, experience and learning styles into curriculum and fieldwork, and apply lessons and practices taught and learned to participants' farms.

Goal #2. Conduct the workshops (see Table 4).

- **Objective 2.1:** Instruct workshop participants in the principles and implementation of closed loop sustainable and regenerative agriculture and carbon sequestration.
- **Objective 2.2:** Offer opportunities for hands-on application on small research plots at Whiskey Hill Farms and on their own farms, and soil and water testing.
- **Objective 2.3:** Help farmers to identify high-value products for local markets and experiment with growing them.
- **Objective 2.4:** Provide farmers with access to new distribution channels, especially for high-value and specialty markets.
- **Objective 2.5:** Instruct farmers about the bureaucratic structures of the U.S. and state agricultural systems, how to navigate them and skills and knowledge required to manage a farm's operations and finances.
- **Objective 2.6:** Work with farmers to learn about and apply the many regulatory requirements and submissions needed to safely operate their farms, especially food safety.
- **Objective 2.7:** Assist farmers in development of social media and branding to increase visibility and market presence.

Goal #3: Create a suite of multilingual printed and digital resources targeted to socially disadvantaged farmers and communities and made open access (partially funded by WSARE grant WPDP22-023).

- **Objective 1.1:** Develop a closed-loop, regenerative agriculture curriculum and associated learning materials targeted to new disadvantaged producers.
- **Objective 1.2:** Create short bilingual how-to guides for specific technologies and techniques for beginning farmers in print, on-line, for smart phones and in the field.
- **Objective 1.3:** Facilitate creation of a “community of practice” for Latinx beginning farmers in the Monterey Bay Region to develop and share knowledge and resources.

III. Approach

A. Workshop principles, practices, approach: We engage directly with the farmers in the cultural and social milieus in which they work and live. We treat their identified needs as central to the project and treat farmers’ situations, experiences and knowledge as critical to content and complementary to top-down research and instruction. Both instruction and materials are provided in Spanish and English, with live, bidirectional interpretation, in a more informal discussion setting rather than a conventional classroom approach, and easily accessible and cognizant of the learning styles and experience of disadvantaged beginning farmers. Workshop discussions are led by Spanish speakers and respond to farmers’ questions and concerns. Participants are offered numerous opportunities to engage in hands-on application of technologies and techniques on small research plots and on their farms. Each workshop includes a debriefing to identify changes that need to be made in subsequent workshops. Finally, participants are compensated for lost work time.

Table 4: Tentative workshop schedule for 2022-23

Date	Agenda/content (bilingual translation in all sessions)
Workshop #1: Oct. 2023 (Hartnell & Salinas Valley)	Wed. Evening: Introduction to workshop goals & content; discussion groups identify other topics and issues of concern Sat. Morning: Walk through and identify current practices and several farms, listen to Dave Blum talk about techniques to improve farms & crops
Workshop #2, Nov. 2023 (Hartnell & Whiskey Hill Farms)	Wed. Evening: Soil science basics; composting organic and ag wastes, water conservation, pest control, layered crops; overview of how Whiskey Hill Sat. Morning: Tour of Whiskey Hill Farms and its small-scale technologies and techniques; begin prep of experimental plots; identify plants farmers want to experiment with; plant seeds in propagation house.
Workshop #3, Dec. 2023 (Hartnell & Whiskey Hill Farm)	Wed. Evening: Presentation on ag technologies, information technology, online presence & branding Sat. Morning: Demonstration of small-scale ag technologies--sensors, hydroponics, drones, internet; farm equipment testing; transplant some seedlings to experimental plots
Workshop #4, Jan 2023 (Hartnell & Salinas Valley)	Wed. Evening: Crop planning and cropping options & strategies; marketing and distribution channels; branding; high value & culturally appropriate crops; CSAs & other customers Sat. Morning: Construction of simple hoop house, preparation for planting

Workshop #5, Feb. 2024 (Hartnell & Salinas Valley)	Wed. Evening: Farm business management & tools; dealing with bureaucracy; options for loans, land and capital; financing small-scale technologies & techniques Sat. Morning: Building a compost pile; operating field sensors
Workshop #6, March 2024 (Salinas Valley & Hartnell)	Sat. Morning: Tour & assessment of participants' & other farms; potential actions & practices Sat. Afternoon: Celebrate completion of course

B. Project activities & timeline

Goals & Tasks	Pre-grant period				Grant period										
	7/22	8/22	9/22	10/22	11/22	12/22	1/23	2/23	3/23	4/23	5/23	6/23	7/23	8/23	9/23
Goal #1: Workshop content revision															
Survey & debriefing of instructors & participants															
Meetings with extension agents & educators															
Media outreach campaign & public presentations															
Website & social media															
Contact potential participants & enroll															
Preparation of current & new materials															
Finalize scheduling & logistics															
Goal #2: Workshops															
Conduct workshops															
Participant farm field trips															
Debriefing of participants & instructors															
Goal #3: Create regenerative ag & other resources															
Review of workshops, curriculum, content															
Prepare curriculum modules															
Prepare videos & podcasts															
Prepare how-to guides															
Organize & conduct events for beginning Latinx farmers															

C. Project outcomes & deliverables

Table 5: Project deliverables

Products	Description	Metrics	Impacts & Benefits
Project web site (on-line & ongoing)	Open-access communication platform for information sharing, crop planning & marketing	Numbers of users, visitors, communications & contacts	Farmers, teachers, professionals can post materials, review resources, reports, curriculum, media products

Social media postings (on-line & on-going)	Regular announcements; updates, events, blogs, newsletter	Number of posts, followers, comments	Professionals & public can follow project activities & events
Workshop materials (online & print on demand at end of year)	Instructional, curricular and experiential materials prepared for workshops; hands-on research plan	Number of visitors, downloads, print & reuse requests, new projects & programs	Open access for farmers and instructors to use in the field and classes; extension agents to use to train farmers
Short films & podcasts (online as produced)	A set of 3-5 minute videos & podcasts on relevant ag., technology, marketing, distributions, problems	Number of videos & podcasts produced; number of views & downloads	These are in-the-field media that farmers can watch on their phones to address specific problems & needs
Journal, popular communications, media (as published)	Articles in ag education journals and a number of popular articles in general interest ag journals and websites	Number prepared & published; interviews & articles in newspapers & on social media	Communicate findings to academic & popular audiences; spread awareness of program & farmers' activities
Participant evaluations (at end of year)	Participant interviews, focus groups, surveys	Number submitted & recorded results	Provide input for further review & revision of workshops
Project evaluation reports, including final report (end of year)	Evaluations of project progress, outcomes, successes & failure, required changes and revisions.	Academic articles submitted to books, journals, websites	Results are available to others who may wish to develop their own agricultural curriculum, workshops, outreach

D. Novel ideas: Whiskey Hill Farms operates at the same site and in conjunction with Blume Industries, which produces ethanol from organic wastes. Whiskey Hill is a 14-acre organic farm pioneer in developing a systems approach to agricultural technology by recycling and reusing various inputs and outputs in farming and demonstrating the technology and best practices of a circular, closed-loop food economy. The organic by-products of the biorefinery are recycled into the farm's greenhouses to collect bio-based commercial CO₂ and CH₄ products, enhance crop growth, and grow in-house feed for aquaculture operations. Solid and liquid organic wastes are captured in a large methane digester. Liquid outputs are piped into ponds to grow cattails that are turned into feed pellets and other products while eliminating nutrient runoff. Digester solid residues are turned into rich compost which is then worked into the soil, increasing soil productivity and carbon sequestration capacity. Crops are grown with vertical polyculture techniques, with tall plants providing shade for low ones. Hot water from the distillation system is piped through drip irrigation lines to warm the soil and encourage growth. Carbon dioxide from the distillation process is also piped into greenhouses, via the same drip irrigation lines, to maintain high CO₂ levels that feed plants and increase growth.

E. Pitfalls & responses: Farmers may not have time available to participate—we are scheduling 3-hour sessions; water scarcity may drive some out of business—this is not an obstacle to participation; farmers may lack the resources to deploy technologies and techniques—we will

seek additional source of funding to support them; farmers lose interest or land—we will maintain contact in order to sustain interest and pair them with other farmers.

F. Evaluation: We are working with an experienced agricultural education evaluator who will help us to research various methods, offer pros and conc of different ideas and brainstorm method adaptations. She will help to create a data collection or evaluation strategy, provide feedback on data collection instruments/protocols, and offer feedback on a report draft. She will review instruments and provide feedback on interpretation of results. For internal evaluation, we will (i) utilize participant evaluations, surveys and interviews; (ii) maintain a record of tasks completed on time or not and their success or failure; (iii) keep track of deliverable completion, materials published on-line, web views, downloads, inquiries and comments; (iv) record progress toward project goals and objectives, stage of achievement, success and failures, and pivots and corrections; (v) participation in and attendance at workshops and public events; (vi) achievements and impacts at participants’ farms.

G. Sources of support for project continuation beyond 2022-23

Source	Description
Business sponsorships	support from local agricultural businesses, agricultural organizations, individual farms, restaurants and markets, farmers markets.
Registration fees	for instructional modules and personnel costs (including scholarships as needed). Future participants will be charged registration fees for programs, based on ability to pay
Memberships & subscriptions	for access to online portal and platform. As online elements are developed and regional networks created, users will be asked to pay for access.
Honoraria	for external presentation, workshops, etc. presented by program personnel.
Grants & donors	Seek continuing support for a portion of the program through submitting proposals to funding agencies, soliciting public funds and seeking private donors.

IV. Personnel and Organizational Resources

Name	Current position	Qualifications	Responsibilities
Dr. Ronnie Lipschutz	President & senior analyst, SSRF	40 years of experience in resources field; PhD in Energy & Resources	Project PI; curriculum developer; finance manager
Josefina Lara Chavez	Sr. Manager, Latinx Farmer Program, CAFF	Farming experience; completed ALBA program; works with Latinx farmers through CAFF	Workshop manager, curriculum & content development; direct communications with participants
Laura Murphy	Soil Scientist, Monterey County RCD	UC Cooperative extension working on irrigation, nutrient management and food safety research, 2010-18; at Monterey RCD since 2018	technical assistance to small-scale, new and Spanish speaking farmers
David Blume	CEO, Whiskey Hill Farms	40 yrs. ag experience; professional farmer & inventor	Farm operation; workshop & field

			instruction
Kevin Bell	Vice-president & senior analyst, SSRF	40 years experience in resources field; MA in Public Admin.	Technology manager; curriculum developer;
Dr. Molly Fyfe	Executive Director, SSRF	15 years of experience in culturally-sensitive education; PhD in Education; MPH in Public Health	Project manager; curriculum developer; logistics oversight; evaluation
Dr. Emily Rustad	Hartnell College Alisal Campus	Agriculture Business Technology Faculty	Food safety, ag. instructor
Jakki Castorena-Davila	Bilingual consultant, Environmental Innovations	Design and outreach in low income communities.	Outreach, communication with Latinx farm community
Producers	See below	Combined farming experience of 50 years	Advisers, mentors, instructors

The Sustainable Systems Research Foundation (SSRF; <https://sustainable-systems-foundation.org/>) is a 501(c)3 non-profit green think tank and project incubator in Santa Cruz, directed by two experienced educators who have designed science and technology curricula and taught Sustainability Studies, including food and agriculture, at the University of California, Santa Cruz. SSRF employs student and community volunteers and paid interns on its projects, with the goal of developing their capabilities and competence for post-graduate employment and complex problem solving.

Whiskey Hill Farms (WHF; <http://whiskeyhillfarms.com/>) is the primary workshop site. Farming takes place in 6 large greenhouses and on outside sites. The farm includes space for classes, owns a broad range of agricultural tools and space for experimental plots. Its cultivation techniques are steeped in regenerative agricultural practices and it employs polycropping techniques with multiple levels of crops.

Community Alliance with Family Farmers (CAFF) builds sustainable food and farming systems through policy advocacy and on-the-ground programs that create more resilient family farms, communities and ecosystems. CAFF works with farmers to implement practices that build soil health, conserve natural resources, reduce pest damage, and increase on-farm resilience and productivity. It offers a broad range of support and assistance to small farmers connect farms with businesses, providing growers with a suite of practical services—from food safety assistance to coordinating institutional purchasing.

Hartnell Community College Alisal Campus offers three agricultural programs for new and aspiring farmers: Agricultural Business, Agricultural Business Technology and the Farmworker Education and Advancement Program. The last offers the opportunity to acquire technical agricultural education in Spanish with integrated English terminology and applied math. It operates the Innovation Farm at Hartnell Ranch in Salinas and is adjacent to UC Davis Cooperative Extension and an USDA-ARS Laboratory.

Monterey County Resource Conversation District works extensively with growers, ranchers, and landowners throughout the Central Coast and provides many professional services to help conserve and improve natural resources.

Producer partners: Experienced and new Latinx producers who participated in the 2021-22 workshops & have their own farms: Filimon Regelado, World’s Finest Farms; Maria & Gris Catalan, Catalan Family Farm; Celsa Ortega, Induchucuiti Organic Farm