

South Carolina Department of Agriculture

Final Report

Specialty Crop Block Grant Program #12-25-B-1093

The Honorable Hugh E. Weathers, Commissioner

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Growing New Farmers Incubator Program

Lowcountry Local First

Project Summary:

Lowcountry Local First continues in working to address a number of issues facing the farming community including the aging farmer population, the ability for small farmers to meet institutional standards, concerns regarding food safety, the continuation of farmer education, and the increase of public understanding of seasonal specialty crops available in their area.

To address these issues, Lowcountry Local First created the Growing New Farmers Incubator Program in 2010 to partner farming apprentices with mentor farmers and to offer classes, farm tours and networking opportunities. Through this program, apprentices have been matched with mentor farmers, participated in the Lowcountry Grower's Group, worked with our online market, *farmfreshmarketsc.org*, and attend the FastTracSC Food and Farming Entrepreneurship Course. Through the GNFIP we are increasing the viability of specialty crop production. We do this by increasing demand as well as the number of growers to escalate the amount of local food in market outlets such as Community Supported Agriculture (CSA) programs, farmer's markets, restaurants, grocery stores and institutions.

To ensure graduates of the GNFIP program have the proper training to succeed, two courses provided through GNFIP are offered to our apprentices and the community at large and provide both business and agricultural science technical training necessary for success. By attending the Carolina Farm Stewardship Conference, the Director of Sustainable Agriculture and the Teaching Assistants can learn the most recent developments in the Southeast while networking with their peers.

LLF simultaneously operates a *Buy Local Initiative*, a grassroots campaign designed to educate Lowcountry residents to Think Local when they are considering where to make purchases, to Buy Local whenever possible and to Be Local by supporting farms and businesses that keep our community unique. All of these components are integral for increasing local production, growing an economically viable food system and increasing awareness of the importance of local food to our community, economy, and health.

The Specialty Crops Grant program funding supported key components of the GNFIP including the apprenticeships, the Farm Fresh Online Market pilot, the Lowcountry Growers Group, the FastTracSC Entrepreneurship Course and the Buy Local initiative.

The Online Market grew out of LLF's initial collaboration with the SCDA to sign up 120 area chefs for "Fresh on the Menu." The next step was to publish the *Farm Fresh Food Guide* to help connect chefs interested in local food with the farmers in our region. The purpose of the Online Market was to develop a more efficient, yet cost effective, process for these interactions to occur.

The courses provided through GNFIP ensured background and knowledge of both farm and business planning. The Lowcountry Growers Group was created with the purpose of sharing best

practices on issues ranging from post harvest handling to organic techniques. FastTracSC, a collaboration between LLF and Clemson, is teaching new and emerging farmers and food system leaders the importance of solid business planning. Increasing this knowledge will help to keep chefs and other clients buying our region's products, and develop future food system leaders with skills to not just do a successful crop plan but a business plan as well.

The main objectives of LLF's Growing New Farmers Incubator and Farm Fresh Food projects are to enhance specialty crops by strengthening the local food economy, developing the human resources that will be tomorrow's farmers, and educating consumers.

Project Approach:

The majority of the farmers targeted in trainings and outreach are already specialty crop producers, with the exception of any ranchers or fishermen associated with the organization, which would be excluded from programs funded through SCBGP. Only specialty crop growers, apprentices interested in entering the specialty crop market, chefs utilizing specialty crops, and/or consumers seeking information on specialty crops will benefit from the funds provided through the SCBGP.

Growing New Farmers Incubator Program/Online Market Pilot:

Apprentice Participant Selection:

Apprentice positions were advertised through the LLF website, farm networking websites, and hardcopy posters. Positions became available at the beginning of the Spring and Fall seasons, with the largest number recruited in the Spring. Interested individuals were required to submit an application, resume, and references. Applications were reviewed upon receipt and organized into potential full-time and/or part-time. Applicants' interests and experience were taken into consideration and a potential farm mentor was selected. Chosen individuals were then interviewed by both LLF staff and their potential mentor farmer and then a final selection was made.

In 2010 there were 3 full-time and 12 part-time apprentices in the spring and fall seasons, bringing the total to 15 for that year. In 2011, 7 full-time and 12 part-time apprentices participated in the spring season, while during the fall season 7 worked as full-time and only 9 were part-time (5 of which were new from spring) for a total of 24. To date, more than 70 apprentices through this program, and have launched the incubator farm, Dirt Works, which now hosts 5 farmers who graduated from the apprentice program.

Apprentices were exposed to working in the fields on specialty crop production, packing and managing CSAs, setting up and selling at area farmer's markets and selling directly to restaurants via the *Farm Fresh Market* website. The variety of farmers that were participating as mentors allowed LLF to match apprentices to their area of interest.

Apprentices worked with 3 mentor farmers to take pictures of specialty crops, upload them onto the website and price them to sell to 7 area restaurants as a pilot program. This modern form of selling online was new to many of the farm mentors and the apprentices were able to add additional value to the farmer mentoring them by handling the technical aspects of selling to an online market which these specialty crop producers otherwise would not have had the ability to do so.

Once a week 7 area restaurants ordered produce through the Farm Fresh Market website, apprentices packaged and delivered to the restaurants.

In order to ensure that the farmers are learning diverse market opportunities we ensured that they all had experience with farmers' market sales, restaurant sales and CSA sales.

During the pilot year with 3 farmers and 7 restaurants receiving deliveries once a week we increased the overall sales of the 3 farms by \$21,000. In addition, several of the restaurants that were part of the pilot were not sourcing local food and are not continuing to either buy directly from the farmer or work through wholesalers to source specialty crops. Others chefs who were sourcing local were introduced to new farmers through the online market.

All apprentices surveyed said the program met their expectations.

All apprentices surveyed had an increased understanding of local farms, basic farm operations, and types of agricultural products in the low country.

All apprentices surveyed expressed an increased understanding of the challenges facing farmers as well as an overall knowledge of the technical, economic and logistical aspects of farming. 100% of those surveyed cited an increased understanding of farm businesses and market opportunities in the low country.

Six apprentices attended the Food and Farming Entrepreneurship Course through FastTracSC and a Horticulture Course with Clemson Extension. The food and farming entrepreneurship course included guest speakers, business plan assistance, and networking. The horticulture course included program binders, farm tours, and hands-on trainings. Both courses received positive reviews from attendees and all six apprentices completed both courses.

Lowcountry Local First through a partnership with Clemson offered Biz Builder SC a nine-week NxLevel "Tilling the Soil" course for new and existing specialty crop business for the past three years. The course covered everything from developing and marketing a business plan to navigating the legal and financial aspects of owning a farm business. Guest speakers provided guidance and professional assistance to participants. Guest speakers included successful specialty crop business owners, local accountant, attorneys, marketing specialists, government agencies, and financial groups (banks, lenders, etc.). Participants in the program have gone on to participate in our local food system in several different ways including, managing specialty crop farms, starting a food business using specialty crops and working in school garden programs to name a few. Five of the apprentices have gone on to become farmers on the incubator farm each presenting their business plan as part of their application.

Group Binders

30 new and experienced farmers received printed material and binders from which they learned about the following topics. This information was taken from the Table of Contents of the binders that were distributed:

1. Plant Anatomy and Physiology
2. Basics of Entomology

3. Soils and Soil Physical Properties
 - a. Overview,
 - b. Chemistry,
 - c. Fertility,
 - d. Biology, and
 - e. Ecology.
4. The Development of U.S. Agriculture
 - a. History,
 - b. Social Issues,
 - c. Environmental Issues,
 - d. Sustainable Agriculture and Food Systems.
5. Resources for Local Farmers
 - a. Agency Lists
 - b. Contacts
 - c. Grants
 - d. Conferences, Workshops, Trainings

Six Growers Groups were held and featured courses focused on providing business training for apprentices interested in becoming specialty crop farm entrepreneurs. Matching funds from Clemson were in the form of instruction of the class as well as LLF promotion of the farm entrepreneurship course and LLF coordinating experts to work with specialty crop producers in the areas of marketing, accounting, legal services, etc.

Additional matching funds were used to provide instruction, materials and location space for the farm entrepreneurship course that promotes production of fruits and vegetables. Matching time was provided by area experts that LLF coordinated to speak with specialty crop producers about marketing, accounting, legal structures and value added opportunities.

Fliers to promote the food and Farming Entrepreneurship course and Horticulture Course were printed and distributed. Remaining funds were used to print a Farm Fresh Good Guide to help connect restaurants, farmers, and the public. An electronic version was created for the website.

Farmer Mentor Selection:

Applicants for the Farmer Mentor position were required to complete an evaluation and application process. The farmer mentor for the Incubator farm was selected based on willingness to dedicate 8 or more hours of mentorship time, experience level, and ability to provide a well rounded work experience.

The stipend to add an additional farm mentor in Beaufort to work with an apprentice and provide training was divided to provide mentorship funds for two farms that each hosted an apprentice. Both farms were provided with mentorship materials, apprentices were included in all apprentice meetings, and a farm tour of the farms was completed.

Apprenticeship Evaluation:

Apprentices and Mentors will be given pre, mid, and post competency check lists to complete together throughout the season to gauge their level of understanding before and after the program. Weekly check-ins with Teaching Assistant will allow for feedback and adjustment. Monthly check-ins with farmers and apprentices will allow for additional feedback and adjustment. Participation, competency check-lists, and attendance on farm and in classes will be used as a measurement in the success of the program. End of program evaluations will provide the opportunity to get program feedback at the end of the year.

Course Evaluation:

Full-time apprentices are required to take the Sustainable Agriculture and Farm Business Courses offered through LLF at no cost. Both the courses are evaluated based on attendance and participation, with the addition of a completed farm business plan for the Farm Business class. In 2012, surveys were added to increase the amount of feedback and evaluation of the program (see attached survey and results).

Training: Lowcountry Growers Group and FastTracSC

Four Growers Groups meetings were hosted at number of farms in 2011. To increase the number of farms reached, an updated and expanded farmer database was created as well as directional signage that was used at all meetings.

The first spring meeting was hosted at Burden Creek Farm and included a voting process for selecting future topics. Thackeray Farm hosted a meeting for integrated pest management and included a meet and greet for all apprentices. The summer meeting was hosted at Rosebank Farm and concentrated on the introduction of Good Agricultural Practices. The fall meeting was hosted at the Coastal Conservation League Growfood Carolina Warehouse to discuss food distribution. Each meeting had 25 attendees. An informational table was used by LLF staff to distribute resources for farmers. There was allotted time for networking opportunities for the participants. The network of farmers was expanded to include invitations to 80 additional farmers throughout the Lowcountry.

Both courses were coordinated and opened up to the public with much success. Six apprentices attended the Food and Farming Entrepreneurship Course and a Horticulture Course. The food and farming entrepreneurship course included guest speakers, business plan assistance, and networking. The horticulture course included program binders, farm tours, and hands-on trainings. Both courses received positive reviews from attendees and all six apprentices completed both courses. Survey results taken at the conclusion of the courses indicated the following:

- 75% found the information on specialty crop production important and relevant
- 75% of the participants were interested in pursuing a professional certification that focused on the production of specialty crops
- 87.5% agreed that the field trips helped support the course work
- 75% rated overall experiences as excellent; 25% rated experiences as good

Community Outreach

All of the listed efforts listed below were conducted. Utilizing information collected from the Farm Fresh Market, farmer interviews, and SCDA website, a resource list was created. Posters were developed with an artist to demonstrate the four seasons and printed for distribution. In addition a foldout seasonal ripe chart was developed to reflect the produce ripeness by the month and was printed for distribution. Both of these seasonal materials were distributed at farmers markets, events, and workshops. A final seasonal poster was designed specifically for Charleston County Schools.

- Weekly social media blasts highlighting local farm and food news.
 - LLF has a newsletter titled Food and Farming which is distributed to over 4000 subscribers monthly. The newsletter highlights CSA opportunities, restaurants sourcing locally, openings of farmers markets and farm to school news.
- Weekly radio alerts – buy local, 10% shift campaign.
 - Through a partnership with the local radio station LLF has been able to significantly increase the awareness of buying local fruits and vegetables and encourage area residents to increase their purchasing of specialty crops by at least 10%. According to a local food assessment compiled by the Town of Mt. Pleasant, with ASAP Charleston County, local spending potential for fruits and vegetables of \$29,779,600 is calculated as total consumption multiplied by the average retail price per pound for each of 39 types of fruits and vegetables multiplied by the 30% seasonality multiplier. The total, \$29,779,600, is the potential retail spending by Charleston County residents for the 39 fruits and vegetables grown in the region. (70,444,600 lbs of produce x \$/lb for each type of produce x 30% = \$29,779,600 spending). If the residents would shift just 10% more of their spending to local food the economic impact for farmers and the food economy would be tremendous.
- Monthly CSA cooking Class series (April – Nov 2010) with farmers and Maverick Southern Kitchens.
 - Through a partnership with Charleston Cooks! LLF was able to coordinate 6 CSA cooking classes engaging area farmers to come in, speak on what a CSA is, why it is important to them as a farmer and how the participants can get engaged. We then did a hands on cooking class using ingredients from that week's CSA box. The average class accommodated 20 people and rarely were there repeat participants as it is meant to be a one time class with basic info for cooking with fresh, local ingredients. Because these sessions were developed around the products available that week from the CSA, only specialty crops were used at these meetings.
- Three documentary shorts produced with Organic Process Media April – Nov 2010 on GNFIP.
 - These are available online at <http://vimeo.com/11399258>
 - <http://vimeo.com/17892912>
 - <http://vimeo.com/20453415>
- Ongoing – LLF website, and community events: (Chef's Potluck, Buy Local Week, Eat Local Night, City of Charleston Green Fair, BIG and Local Expo etc.)
 - These outreach events reached between 300 and 3,000 per event based on attendance. Our organization utilizes tools such as google and facebook analytics,

head counts, and visitors to our table to track the numbers. The most up to date analysis from Facebook are:

- Visits: 3,155
- Unique Visitors: 2,241
- Pageviews: 10,088
- Pages/Visit: 3.20
- Avg. Visit Duration: 00:03:18
- Bounce Rate: 56.32%
- % New Visits: 60.76%

The Chef's Potluck increased the competitiveness of specialty crops by partnering chefs in the area with specialty crop growers and highlighting their produce to the community that comes to the event. Funds used for this event are specifically focused on connecting specialty crop farmers, chefs, and consumers with one another. Farmers are also available to answer questions, talk about their CSAs and other opportunities for chefs and consumers to directly purchase their products. Matching funds were used to provide entertainment, staff the event, coordinate the event, decor and photography. The event brought in 300 people who have now made a closer connection to their farmer. In parallel to the Chefs Potluck event, an auction is hosted at the site in which funds are raised to further support LLF efforts to assist specialty crop growers. No specialty crops funds are used for this auction.

LLF and Farm Fresh Market websites - The Farm Fresh Market website exclusively provided education about and access to specialty crop products for local chefs. FFM was designed as an in-kind donation worth over \$10k, LLF paid to develop a new website at \$6,000 which promotes CSAs, farmers markets and opportunities for growers.

Farmer posters, buttons, t-shirts, bumper stickers - These products focused on the marketing of specialty crop producers and encourages the public to Buy Local. LLF paid for the printing of all the t-shirts and the bumper stickers as well as design work.

The Farm Tours were specifically designed around connecting consumers with specialty crop producers by providing participants behind the scenes tours, maps, hand-outs, access to local food, and assistance from volunteers. The farm tours raised \$2000. These funds were invested into the Growing New Farmers Apprentice Program to support the development of future specialty crop farms.

Goals and Outcomes Achieved:

Growing New Farmers Incubator Program:

The Growing New Farmers Incubator Program continues to be an incredible success. In 2011, Lowcountry Local First also began partnering with Clemson's USDA New and Beginning Farmer Program as a sub-contractor to provide apprenticeship opportunities on established farms.

The Growing New Farmers program has expanded to hire a full-time staff person to manage the apprentice program. There are currently 12 mentor farmers in the program as well as 3 additional farmers on the waiting list. The total number of apprentices graduating the program is over 70

(some still currently participating). The program will continue to offer courses in Sustainable Agriculture and Farm Business as long as funding permits.

During the pilot year with 3 farmers and 7 restaurants receiving deliveries once a week we increased the overall sales of the 3 farmers by \$21,000. In addition several of the restaurants that were part of the pilot were not sourcing local food and even though we are no longer doing the online market the restaurants are continuing to either buy directly from the farmer or work through wholesalers to source specialty crops.

As a natural second phase of this program, the organization has successfully launched the first Incubator Farm in the state, DirtWorks, and currently has 5 farmers working on the property. This project is providing graduates of the GNFIP apprentice program as well as other new farmers the opportunity to access low-cost land and shared farm resources including equipment, irrigation, packing facilities, and restrooms.

Online Market Pilot:

After the completion of the pilot year, it was determined that the online market was not going to be continued into the second year. This decision was based on the development of several private sector businesses (including a number of farms) that had begun adopting the farm to restaurant sales model and the Coastal Conservation League's Growfood Carolina Distribution center. Based on this change, the program instead shifted energy to supporting and connecting these programs, chefs, and farmers through networking, events, and the second printing of the Farm Fresh Food Guide.

Lowcountry Growers Group and FastTrac SC:

Growers Groups continue to be held once a month and cover farmer selected topics with guest speakers and agency staff from NRCS, USDA, Clemson, etc. Average attendees range from 15-35 farmers.

Both the FastTrac (now NxtLevel) course and the Horticulture (now Intro to Sustainable Agriculture) courses are offered to apprentices and the public.

In regard to the Grower's Groups the attendance fluctuated from month to month depending on the topic, location and time of year. The farmers select the topics that they would like to see covered each year and we have always tried to integrate a new marketing opportunity and funding opportunities into the program. On average, there were 30 farmers attending the Grower's Groups. LLF will continue to reach out to them through personal phone calls as well as post card reminders to increase attendance.

The participants in these classes and Growers Groups were only partially made up of apprentices. As stated above, the numbers for the apprentices are listed below. In addition to these numbers, each meeting exceeded the expected attendance, with an average of 10-15 non-apprentice attendees, for a total of 25-35 individuals per meeting. The courses each had an average of 10-12 students, of which between 1/2- 2/3 were comprised of apprentices. The total number of students taught through the program as apprentices is currently 70. The total number of non-apprentice students taught through the Sustainable Agriculture and Farm Business class is 13. The total

number of non-apprentice attendees at the Growers Group is between 20-35 individuals (not counting repeated attendance).

Community Outreach:

The Lowcountry Local First “Eat Local Initiative” formerly referred to as the Farm Fresh Food program has seen increased success in the last three years. The organization has noted an increase in the number of farmers in the area, the number of restaurants participating in farm to table, and the demand from consumers for fresh local food.

The incredible amount of community support of and demand for additional buy local and eat local materials have resulted in the designation of both Buy Local Month and Eat Local Month. Funding from Specialty Crop 2012 has enabled the success of Eat Local Month. Eat Local Month is a month long annual event that provides targeted marketing and outreach to educate the public on the importance of eating local while also connecting the community with local food, farm, chefs, and artisans. Through this event, Lowcountry Local First is able to advance its goals by educating the public on the importance of buying and eating locally, increasing the market opportunities for farmers and directly connecting consumers with these farmers. The events throughout the month in return raise funds to allow the organization to maintain the Growing New Farmers programs to increase the number of farmers in the Lowcountry and educate existing farmers. Events for this year include the Eat Local Challenge, Press Conference for the DirtWorks Incubator Farm on Walnut Hill Rd. Johns Island, Outreach at the Bridge Run, Farmers Market Opening Event, Lowcountry Farm Tours hosted on Johns Island, Wadamalaw, and McClellanville, and the Chefs Potluck. Last year the events directly reached 670 individuals in person and countless numbers of residents through 38 web and print articles, 7 TV and radio appearances, and a variety of followers on social media platforms.

With the increase in consumer awareness regarding food safety and organic practices it is also important to educate the public on the seasonality and source of their produce. Through the Chef’s Potluck, Lowcountry Farm Tour, Ripe Posters, and Eat Local Cards, Lowcountry Local First will ensure that the community is engaged with their local, specialty crop producers. They will not only be aware of when produce is available but also realize the positive impact of buying locally.

Since LLF launched in 2007, the organization has played a significant role in increasing the awareness of over 600,000 residents in the tri-county area to the economic, health and community benefits of supporting local specialty crop farmers. This is accomplished through the Facebook page which now has over 5,000 followers, Twitter with nearly 5,000 followers, our Food and Farming newsletter with over 4,000 subscribers and our *Farm Fresh Food Guide* which lists area CSAs and farmers markets and is a resource for consumers and chefs alike. WE promote not only our events like the Chef’s Potluck, Eat Local Month and Farm Tours but also others who are hosting events that increase awareness on the value of supporting our local fruits and vegetable producers.

Part of the awareness campaign is to encourage residents to shift at least 10% of their purchasing of food to local. This has been accomplished through LLF’s 10% Shift events, stickers and media outreach to over 600,000 people.

Beneficiaries:

Lowcountry Local First projects have connect us with 500 businesses, over 120 restaurants, 44 farms, 2,500 CSA members, 43,000 elementary students, 30 food system leaders, and a total of 600,000 people. Although the approach with each group differed, the projects, events, and marketing helped to educate consumers on the seasonality, availability, and importance of specialty crops in South Carolina while simultaneously providing them opportunities to access specialty crops. At the Chefs Potluck, chefs were able to have access to specialty crops, many of which were new or unique for them, and in turn they cooked the items for 350 guests that also were able to experience the plethora of specialty crops in our area. The producers that provided product for the event were able to connect with a new market of both chefs and producers, helping increase the amount of specialty product purchased and utilized by these groups.

The mentor farmers were able to provide specialty crop specific education and outreach for 15 apprentices to ensure the successful growing of specialty crops in the Lowcountry. Education and outreach included training on disease, pest, and fungal issues associated with specialty crops; harvest and packing of specialty crops; and the sales and marketing of specialty crops for a variety of markets.

The ability for staff and teaching assistants to attend CFSA allows for all four to connect with other specialty crop producers and receive hands-on training and class-room instruction to address issues in production, marketing, and sales of specialty crops. These lessons were then communicated to the 25 apprentices in the program not able to attend the conference.

Six apprentices benefited from the Sustainable Agriculture and Farm Businesses courses as well as eight additional participants. These courses enable the apprentices to have a more in-depth training on the growing of specialty crops and the sales of specialty to ensure long-term success of these future specialty crop farmers.

The community outreach focused on connecting consumers directly with specialty crop producer while educating them on the seasonality, availability, location, and value of local specialty crop producers. All of the attendees, volunteers, apprentices, staff, and interns were able to gain a more in-depth understanding of local specialty crop producers, their products, the challenges facing these farmers, and the opportunities to connect consumers with specialty crop products. Farmers were directly connected with consumers to sell their specialty crops. The printed materials were connected to CSA members, farmers market attendees and expanded to include the students in the tri-county area. These materials were created to educated students on the seasonality, availability, location, and importance of specialty crops.

Lessons Learned

As a small non-profit we look toward those projects in our field that have achieved success and model ourselves after them when possible. Being an affiliate of the Business Alliance for Local

Living Economies, we are able to reference projects from across the United States and share their program documents. Before our programs, projects, and events are implemented, we refer to our network of experienced colleagues for resources, advice and feedback. Due to this approach, we generally are able to have high success rates that thankfully reduced the amount of lessons learned.

That being said, every project is unique when implemented on a local level and the following are some areas where we have experienced valuable lessons. The overall lessons learned on these projects were to engage volunteers, interns and committees as far in advance as possible to ensure adequate time is available to implement all components of the program.

Lessons Learned from the GNFIP were as follows:

- Proper screening of apprentices and mentor farmers is essential in matching the two groups appropriately.
- Expectations for both mentors and apprentices must be clearly outlined and re-iterated throughout the program.
- The on-farm apprenticeship and course work is a heavy load for first year participants, making it incredibly hard for apprentices to learn and run an online market.
- Many apprentices must have alternative employment, so program must be designed with this in mind.
- Due to the diversity in production, management, and marketing styles on specialty crop farms, it is important to provide a main site where apprentices can access baseline and structured information on a variety of production techniques.
- A dedicated full-time staff person is essential for the program.
- A diverse approach to marketing is essential in connecting with rural and diverse populations. Methods include partnerships with ag based supply stores, faith based groups, rural agencies, and schools/universities.

Lessons from the Chefs Potluck included having a rain contingency plan as including the rental of tents, as severe weather occurred during the event and tents had to be rented on short notice. Lessons from the Farm Mentor include providing a more detailed and scheduled plan for courses and training to ensure the maximum number of attendees are available at each training. Lessons learned from courses included that partnering with a local school and local horticultural group to host the classes for free lowers the cost of the course and allows for additional participants.

Thank you for reviewing our final report. The funding from SCDA Specialty Crops has played an integral role in the development and facilitation of our efforts to increase the number and success of specialty crop producers in our area.

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MEDIA ALERT

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PLANTING THE SEEDS OF THE FUTURE: LOWCOUNTRY LOCAL FIRST HOSTS GROUNDBREAKING CEREMONY FOR FIRST "INCUBATOR FARM" IN SOUTH CAROLINA

Who: Lowcountry Local First (LLF), a 501(c)(3) founded in 2007 that advocates for the benefits of a local living economy by strengthening community support of our local-independent businesses and farmers, is launching the first Incubator Farm in the state—**DirtWorks**—to provide low-risk business incubation for small and emerging farmers interested in entering the farming industry. DirtWorks will provide new farmers the opportunity to share equipment and resources as well as the mentorship of a farmer during a three-year incubation period. The objectives of this project are to provide the opportunity for new and beginning farmers to enter the market with the tools and resources necessary to develop farm businesses that are economically viable, socially responsible, and environmentally sensitive.

LLF is teaming up with several local sponsors to bring the project to fruition, including Andrea and Jack Limehouse of Limehouse Produce, USDA Rural Development, Steen Enterprises, BB&T Charleston Wine & Food Festival, David Thompson Architect, Oakwood Construction, Clemson Extension and Alloneword Design. Six farmers are participating in the first incubator project.

What: LLF will host an official **Groundbreaking Ceremony** to introduce the project to the community. Guests will have the opportunity to meet the emerging farmers, hear about fundraising efforts, tour the farm plots, and learn more about the Packing Shed, which is being designed by architect David Thompson and will provide all the equipment and space to wash, dry, pack, store and refrigerate a variety of produce. The shed will be sustainable, affordable, and eco-friendly.

Where: DirtWorks at Rosebank Farms, 3907 Betsy Kerrison Parkway, Johns Island, S.C.

When: Monday, November 5th at 10 a.m.

Contact: For more information on Dirt Works or the Incubator project, contact Lowcountry Local First at 843.740.5444 or visit <http://lowcountrylocalfirst.org>.

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Project Summary:

Lowcountry Local First is launching the first Incubator Farm in South Carolina to provide low-risk business incubation for small and emerging farmers interested in entering the market. This project will provide a stepping-stone and outlet for the 30+ farming apprentices graduating from the Lowcountry Local First Growing New Farmers program each year as well as other new farmers in the region. The initial 10-acre parcel on Johns Island will be divided into 1-2 acre plots for up to 6 qualified new farmers, one farm manager, and the remaining acreage for a Teaching Plot for apprentices, students, and the public. During a three-year incubation period, the Incubator Farm will provide new farmers the opportunity to share equipment, participate in training, build their market, and receive mentorship. The Incubator Farm and Training Center will increase the number of new farmers in South Carolina, assist both new and existing farmers in managing the risks associated with owning a farm business, and educate a variety of groups on the importance of local agriculture.



Packing Shed:

Lowcountry Local First has partnered with David Thompson Architect, Limehouse Produce, and a USDA GAP auditor to ensure the design and layout of the packing shed will enable growers to meet the highest food safety and quality standards. The facility will provide equipment and space to wash, dry, pack, store, and refrigerate a variety of products. In addition there will be shared office space, a detached facility for restrooms and tool storage space, a tractor shed, and picnic area. Building design, material selection, and construction techniques will be informed by current green building standards to ensure a low-impact.

The design is inspired by practical vernacular buildings typical to the Lowcountry. A visual identity is achieved through a creative arrangement of painted cementitious panels to recall both the aerial view of agricultural plots but also the dappled light through the surrounding oak tree canopies. The program of the building was dictated by function and process to provide an efficient and pleasing space to work in.

The construction systems are very straightforward and budget minded; concrete slab on grade foundation, traditional wood framed load bearing walls and roof, a rainscreen exterior sheathing system and utilitarian interior finishes. Materials were specified with sustainability, affordability, durability and low maintenance as the driving factors.



Provide Marketing and Food Safety Workshops for Underprivileged and Minority Farmers
 SC Fruit, Vegetable and Specialty Crop Association in collaboration with the SCDA

Project Summary

The primary purpose of the project was to assist small, underprivileged and minority specialty crop farmers increase their knowledge of food safety measures and marketing strategies by providing educational workshops on these topics. The intention of the project was to increase the income for the small and disadvantaged farmers in the state by 1) reducing the risk of food borne illnesses and 2) bettering the marketing skills of the specialty crop growers within this demographic. The goals were set in an effort to help farmers better understand the modern risks that have become associated with fruit and vegetable production, as well as increase their marketing capabilities, particularly in the direct market place. Many of the specialty crop growers who are small, underprivileged and/or minority live in extremely rural, poverty ridden areas of the state and typically do not have formal educations or trainings in farming, or have access to a computer system and the WWW to get information. As a result, they have been “left out” of many of the places where knowledge is typically transferred. To help remedy this situation, the SC Fruit, Vegetable and Specialty Crop Association (SCFV&SCA) made it a goal to promote educational activities and outreach efforts in these rural areas, and have a positive effect on the farmers attending.

Additionally, the project provided training for community based farmers market managers to improve their marketing, management skills, promotion and education on relevant issues that helped to prepare them better understand the values of a vibrant farmers market. The training also granted the market managers the tools needed to develop a viable community based farmers market that satisfies the community’s social needs, the consumers’ expectations for locally grown fruits and vegetables and to assist the specialty crop producers to sell their products.

Project Approach

The educational workshops were advertised to all members of the SC Fruit, Vegetable and Specialty Crop Association in their quarterly newsletter, and was also posted on the SCDA website as well as the SCFV&SCA website.

Outreach activities were conducted in the following communities:

Location	Meeting Type	# Attending
Turbeville	Vegetable Growers Meeting	125
Cheraw	Chesterfield County Community Action	35
Varnville	Minority Farmers Field Day	40
Bowman	Minority Farmers Vegetable Growers	38
Kingstree	Minority Farmers Meeting	48
Sumter	Minority Farmers Marketing Meeting	24
Edisto REC	Vegetable Growers Field Day	50
Charleston	Food Safety Education	35
Kingstree	Food Safety Education	55

Food safety and marketing education workshops were also held at the SE Fruit and Vegetable EXPO in November, 2011 in Myrtle Beach, SC. These workshops were open to all 104 farmers in attendance at the EXPO. Additionally, the nine workshops listed above helped improve knowledge to all 450 attendees.

The food safety educational sessions covered field sanitation, water quality for irrigation and postharvest washing and handling which is required before the produce goes to market. In the session about field sanitation, the presenter covered diseases and insects that generally affect specialty crops in the southeast and how producers can best control them. Information about the benefits of GAP certification was shared.

There were four regional training sessions held for market managers. These workshops included information on the duties of a successful market manager, tips of recruiting fruit and vegetable growers, how to promote sales of fresh fruits and vegetables at the markets, and how the market can positively impact the economic community. The “Promotions that Sell” contest was another success, in helping small growers to understand the importance of the growers presenting their products in eye catching displays for the customers.

Goals and Outcomes Achieved

Many experts participated in these meetings as speakers. Those on the agenda were representing the Clemson University Department of Food Science, the SCDA Inspections and Laboratory Services Division, and the USDA. The messages were delivered by power point presentations and open dialog with the participants was encouraged. Those in the audience were given pre- and post- workshop surveys to determine if the presentations were effective.

A two-hour presentation titled “Food Safety – It is Your Business” was presented as part of the SCDA training program during 2012. To evaluate change in awareness about the importance of food safety, a pre- and posttest survey were administered to program participants. There was a positive change of 0.5% (50% of the 176 participants surveyed) increase from the pre- and post-workshop survey that said they plan on adopting their cultural practices on the farm. In this case, cultural practices reflect the indexes or questions that represented changes in the methods of picking and packing the produce that will improve food safety.

A five-point Likert-type scale was used to assess agreement with a series of ten statements where 1 = strongly agree; 2 = agree; 3 = neither agree nor disagree; 4 = disagree; and 5 strongly disagree. The same ten statements (listed below) were used as both pre and post surveys. Participants at the three sites completed 176 pretests (54 in Columbia, 52 in Walterboro, and 70 in Conway) and 174 post-tests (46 in Columbia, 59 in Walterboro, and 69 in Conway). Of these, there were 126 pairs of pre- and posttest surveys--53 in Conway, 47 in Walterboro, and 26 in Columbia—which were subsequently used to assess change in awareness about food safety.

Demographic Characteristics of the Sample. Males represented approximately 66% of the sample, 78% of all respondents were married, 64% were over 55 years old, and 22% had a bachelor's degree or higher.

Change in Awareness about Food Safety. Across the three sites, respondents reported significantly lower scores for Q3, Q6, and Q9 after the two-hour presentation. The average response for Q3 decreased from 4.34 to 4.01, from 3.09 to 2.80 for Q6, and from 2.09 to 1.74 for Q9. These numbers illustrate an increase in knowledge gained from the subject matter in the questions. As 1 = strongly agree and 4= disagree, the movement of the responses being closer to 1 reveals the audience has further understanding of the subject matter in the presentation.

No other responses were significantly different before and after the training.

Responses also varied by location. In Conway, responses for Q3 and Q9 significantly decreased after training, but the responses for Q6 were not significantly different. In Walterboro, respondents reported higher values for Q3 and Q9 after training, but reported a significantly lower value for Q1. In Walterboro, the average response for Q1 increased from 1.47 to 1.98. In Columbia, Q6 and Q9 were significantly lower after training. There was not a significant difference in responses for Q3 before and after training.

QUESTION NUMBER	ITEM
1.	Food poisoning is nearly 100% preventable if food is handled safely from farm to fork
2.	Food poisoning is usually caused by food that was eaten at a restaurant.
3.	Only people who are not healthy can get food poisoning.
4.	Food poisoning can cause death.
5.	Food poisoning can send a person to the hospital.
6.	If you get sick with food poisoning, you usually get better in 1-2 days.
7.	Food poisoning is a serious public health issue.
8.	Locally grown produce is less likely to cause food poisoning than is produce grown on an industrial farm.
9.	Being GAPs certified is a good way to make my products safer to eat.
10.	I am already following Good Agricultural Practices.

After review of data, it may be concluded that the training/workshops helped participants understand that healthy people get sick, and that the symptoms of foodborne disease/illness can last longer than 1-2 days. The survey also indicated that the participants did not associate GAP certification with food safety, or that following GAP guidelines would aid in the prevention of food borne illnesses. The presentations made them aware that there is a direct relationship between the two.

Beneficiaries

The small, minority and/or socially disadvantaged farmers (175+) that attended the workshops and learned from the sessions were the beneficiaries.

Lessons Learned

There are a limited number of people who have the training and experience to conduct Food Safety Education workshops. Finding appropriate persons with the needed background took some time, and delayed the project slightly. Once the right contacts were found, it all came into place.

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Partnership Programming with ETV “Making It Grow” Television Series

South Carolina Department of Agriculture

Project Summary

‘Making It Grow’ is a locally produced television show that was initially started by Clemson Extension, and airs each week on the South Carolina Educational Television Station (SCETV). Over the production years, ‘Making it Grow’ or MIG, has grown into a weekly staple for the citizens of SC who crave more information and knowledge about agriculture, but specifically ornamental horticulture, and growing your own fruits and vegetables.

The show began as an information portal for those seeking answers about how to better make their garden grow. A panel of three persons, including the host, film the show in a live broadcast where calls from the public are taken about problems they are experiencing in their gardens. This simple format has evolved into a diverse social media network. Over the past few years, the production crew and Clemson Extension has made a concerted effort into not only being available for general gardening questions, but also for exposing the viewing audience to all sides of horticulture, and fruit and vegetable production in the state.

Over time, MIG has grown into a nationally syndicated television series on RFD TV. The show was awarded the Southeast Regional Emmy Award for Public Broadcasting in 2010.

Through funds from this project, the SCDA was able to become a sponsor of this locally grown television show.

This link, http://www.sctv.org/index.php/making_it_grow/show/making_it_grow_3-22-2011/ features the episode from March 22, 2011, and is typical of all ‘Making It Grow’ episodes. Other episodes may be viewed from the archived section found on the home page www.sctv.org/making_it_grow.

The partnership proved to be very successful. ‘Making It Grow’ provided both pre- and post-show mentions of the ‘Certified SC Grown’ branding campaign, thereby promoting fresh fruits and vegetables that are grown in SC. In addition, leads to the Certified SC Grown website are included on their host page. Growers have been highlighted throughout the year and positive results have been shown as a direct result of participation on the show. Also, many topics were discussed regarding ornamentals and fruits and vegetables in general, encouraging consumers to look for Certified SC Grown in a variety of different marketplaces. To ensure that specialty crop funds only enhanced the competitiveness of specialty crops, staff arranged for all grower interviews to be specialty crop producers. In addition, on air signage and mentions only featured the ‘Certified SC Grown’ message used for fruit and vegetable producers in state. Every effort was made to ensure that features and mentions served the intended purpose and were successful in protecting the intended purpose of the sponsorship of the show and the protection of the Certified SC Grown Brand.

Project Approach

The shows’ popularity is largely based on the fact that it focuses on current consumer interest stories on all types of agriculture in our State. Hence, both the mission of the show and that of the SCDA are aligned in the goals of promoting local producers, increasing consumer knowledge and encouraging relationships between local producers and consumers through the increase of sales.

The SCDA created a more formal partnership with MIG by becoming a sponsor of the show. This assured that once a month, a feature segment based specifically on SC grown specialty crops would appear. Also, the project allowed the SCDA to work with the established television programming to feature the ‘Certified SC Grown’ logo each week to the viewing audience.

Outcomes and Goals Achieved

In Public Television, ratings are not tracked as they are in traditional televised formats. Thus, Nielson Numbers are not available to substantiate the number of viewers the show attracts. However, the popularity of the show is demonstrated through the syndication of the series through it being aired nationally on RFD TV.

During the timeframe of the sponsorship, 17 specialty crop producers were featured as guests on the live show. The breakdown of these story segments came to 9 fruit and/or vegetable growers, 7 ornamental horticulture growers and one turfgrass grower. A confidential survey was taken of these producers and all reported an increase in website traffic, ranging from 40% to over 300% after the show airings. Sales increases of over 100% were reported for the period immediately after the feature story in comparison to a normal weeks’ volume. In addition, repeat business was reported after initial “new” sales to customers. The direct impact was found to be significant to each of the seventeen participants, and 100% of those on the show were pleased with the opportunity to showcase their operations.

Additionally, two ‘on the road’ shows were filmed at the SC State Farmers Market in Columbia. These segments encouraged shoppers to visit the Market to purchase fruits, vegetables, ornamental plants and turfgrass grown in SC. The segments also featured the Annual Plant and Flower Show (week of April 11, 2011) that is hosted by the SCDA at the Market in the Fall and Spring of each year to highlight opportunities to purchase locally grown ornamentals. The second airing of MIG was October 10, 2011, and highlighted Halloween and the locally grown pumpkins, mums and other fall flowers that are grown in the state and for sale at the market. Mentions of major fruit and vegetable and ornamental events were on-air prior to all events throughout the year. The tomato, peach, and watermelon consumer days were mentioned in May, June and July 2011 segments, respectfully. This exposure helped increase attendance for the events as well as higher anticipated sales for the locally grown specialty crops.

Beneficiaries

The beneficiaries of this project are the viewers of ‘Making It Grow’, the producers which were featured on the program, and the South Carolina Department of Agriculture. Through the collaborative approach and sponsorship of one another, the increasingly important message of supporting local producers was successfully conveyed.

Lessons Learned

All experiences with this project have been positive. In the future, the SCDA will continue to explore the opportunities to support not only ‘Making It Grow’ but other venues that so clearly share the same mission.

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Promotional Video of Fruit and Vegetable Food Safety Protocols in Place in SC Production and Packaging Facilities to be used as a Marketing Tool for the SCDA and Industry Associations

South Carolina Department of Agriculture

Project Summary

This project proved to be an interesting study and also pointed out some of the unknown variables that could change current food safety standards with the implementation of the Food Safety and Modernization Act. Initial response to the video was good, but we may have been ahead of the curve in production due to the uncertainty in what the Act may change in current standards. However, the final product showed what is being done in terms of Good Agricultural Practices (GAP's) and Good Handling Practices (GHP's), along with traceability and Third Party Audits in the SC fresh produce industry. This in itself showed the determined efforts of SC producers to develop protocols that meet or exceed current standards and shows our commitment to meet the guidelines of the new Act when published.

Video footage was produced and edited showcasing Food Safety protocols as outlined. The storyline was developed to inform retail buyers of protocols in place in SC to ensure a safe and reliable product from Farm to Fork. The video was run during the open show hours in the SC pavilion at the Produce Marketing Association 2012 Fresh Summit event in Anaheim. We also used the video at several Food Service events and during the Eastern Produce Council meeting the SCDA hosted in May and the Southeastern Produce Expo (Tampa) and Produce Business Expo (New York) events this year. The video was also used during producer meetings as team members assisted producers with GAP certification. This was very valuable to many of our smaller producers and helped to open doors to new marketing channels for those beginning to grow specialty crops. Management also decided to show the video throughout the South Carolina State Fair to highlight the Food Safety efforts made by SC growers directly to consumers. While this was not in our original plan, we felt it was important to showcase SC efforts to consumers in light of many recalls we have seen throughout the past year. Currently, the video is not available online, as it is a tool that has been used exclusively by SCDA staff or distributed by SCDA staff to educate specialty crop growers, produce buyers, and consumers.

Overall, we felt that the program was successful in educating buyers and in creating new marketing opportunities for producers. The approach and outcomes are outlined later in this report.

Project Approach

SCDA contracted with SC Farm Bureau to film and edit a video featuring the SC Fruit and Vegetable industries commitment to Food Safety and the protocols that are in place. SCDA staff, in collaboration with industry, developed the goals for the video and established filming locations. The message emphasized our commitment to quality, service, and food safety from planting through harvest and featured elements from all facets of Good Agricultural and Handling practices. We also highlighted efforts in auditing from independent resources to ensure that fields and facilities meet current industry standards. Traceability is becoming more important and producer efforts in implementing these systems and how they are managed were shown. The final message was that South Carolina packers and shippers are on the leading edge of food safety and

that buyers can and should ask about protocols that are in place when sourcing products from our state.

Once the video was complete it was distributed in several key areas.

- 1) Direct mailings and delivery of the video were made to 14 food retailers that serve our immediate region. It was discussed during one on one marketing strategy meetings as a tool for buyers.
- 2) Video was shown by SCDA staff in one on one meeting's with buyers representing 4 major Food Service Purveyors that serve our state and at 10 Food Service expositions held throughout the state.
- 3) Video was shown continuously at PMA in Anaheim, CA., Show numbers were in excess of 20,000 attendee's and our count was over 5500 stopping by our exhibit. 104 copies of the cd were provided to show attendee's upon request.
- 4) Video was shown continuously at the SE Produce Council Expo in Tampa, Fl., and 47 copies provided to attendees who requested them during the show.
- 5) Video was shown continuously at the Produce Business Expo in New York and 61 copies provided to attendees who requested a copy during the show.
- 6) Video was shown during our marketing presentation to Eastern Produce Council members and was delivered to 120 attending members in their meeting marketing packet for future reference.
- 7) Video was mailed to 50 key retailers and wholesalers for their reference.
- 8) Video is in use by GAP training staff at grower development meetings.
- 9) Remaining videos were distributed directly to Producer Associations and delivered to their members for use in their independent marketing efforts.

Outcomes and Goals Achieved

SCDA Staff surveyed retailers/wholesalers known to have seen or received the video with the following questions. We received response from 68 companies;

- 1) Did you find the content useful in making purchasing decisions from SC Shippers?
- 2) Did the video encourage you to identify protocols in place from prospective SC Shippers prior to purchase?
- 3) Do you feel that the video had any long lasting impression regarding established food safety efforts by SC Shippers?
- 4) Did the video open new purchasing opportunities from new SC vendors?

Retail Results: yes-no-somewhat responses

- 1) Yes-42, no-20, somewhat 6
- 2) Yes-68
- 3) Yes-51, no-7. Somewhat 10
- 4) Yes-29, no-39

SCDA Staff surveyed commercial Fruit and Vegetable producers to determine the overall value of the project. 46 producers responded;

- 1) Did you find the video useful in helping your customers better understand your individual efforts in Food Safety Protocols?

- 2) Can you determine that the video helped you retain business?
- 3) Can you determine if you were able to generate new business?
- 4) Do you feel there was any long lasting effects or impressions on buyers?
- 5) If new business was generated will you share the percentage increase in sales you can attribute to the video protocols you have developed?

Producer Response: yes-No-Somewhat-% increase in sales

- 1) Yes-31, No-9, Somewhat-15
- 2) Yes-5, No-27, Somewhat-14
- 3) Yes-23, No-27
- 4) Yes-5, No- 20, Somewhat-21
- 5) 23 responses- ranged from 5 to 25% increase in new retail/wholesale business for the season.
 - a) 0-4.9%- 0
 - b) 5.0- 9.9%-11
 - c) 10- 14.99%- 7
 - d) 15-19.99%- 3
 - e) 20- 24.99%- 0
 - f) 25-29.%-2

It is clear that retail/wholesale buyers did receive a favorable impression of the Food Safety Protocols that SC producers have in place. Food Safety has been a major priority for retail and wholesale buyers in recent months/years. While they answered that the video did encourage them to identify protocols that vendors have in place, it is hard to determine if this would have been asked anyway as a requirement to do business? In conversations with buyers, the favorable views on established protocols indicated that retailers recognize that SC producers are putting forth efforts in the area of Food Safety. The longer term impressions may indicate that they trust SC producers to continue to execute accepted standards in an ever changing environment. The Food Modernization Act is still unknown in its details, but retail response appears to indicate that they trust (and expect) SC producers to meet the new standards when the final draft is approved and published by the Federal Government. Growers might not have recognized that having protocols in place helped retain business, but buyers made it clear that food safety is important. New business was generated as indicated by buyers and producers. While the survey results represent about a 17% return on videos distributed, we feel that this is a representative sample and was of overall value. Conversations during the shipping season indicated that many retailers did recognize that more SC producers have protocols in place and that they actively sought new producers as local suppliers to expand their local purchases. This was more prevalent in the regional marketplace as retailers featured more locally grown products in store. The “local” theme was not prevalent in the Northeast as buyers there were sourcing products from reliable shippers during our market windows. Conversations with those buyers indicated that quality and reliable supply were first and foremost but that those attributes must be reinforced with GAP’s, GHP’s, certification, and traceability to do business consistently and that they are recognizing more opportunities in SC. Of those who responded to the increase in sales, the majority reported an increase between 5 and 14.99%. However, several growers reported increases as high as 25% overall this season and attributed that increase to having state of the art Food Safety protocols in

place. It is also of note, that while not specifically asked, many smaller and medium sized producers reported 100% increases in sales through the local school food systems. As this is an emerging market in SC, they noted that GAP/GHP certification is mandatory for those sales, and that opportunities were made available in 2012 for local producers directly due to efforts by SCDA's marketing team that highlighted the food safety efforts in place in state.

Beneficiaries

Retail/wholesale/food service produce buyers benefitted from having a better understanding of capital inputs that SC producers have made in the area of food safety. This provided incentive to purchase more products from our state. Producers benefitted directly from the message in the video and in terms of increased sales and in retained business. South Carolina as a state benefitted by being proactive in terms of Food Safety in helping buying entities better understand the strides our produce industry makes annually in ensuring that food safety protocols are a priority. Consumers benefitted by having more local products on the retail shelf, in restaurants, and in local school systems.

Lessons Learned

As retailers have become more demanding of vendors in terms of food safety the video did highlight that SC producers in general do everything possible to meet those standards. However, each vendor still had to show their individual efforts to qualify for sales. There is no way around having individual firms demonstrate protocols they have in place, nor should there be. Also, protocols do differ between commodities and we found it difficult to develop a message that showcased everything in place. If we develop future videos, we would do so with individual commodities to better demonstrate what each does in terms of food safety. This would dial down specific protocols for a commodity and would be more effective for buyers of those specific items. With impending changes of the Food Modernization Act, we would wait to produce any further videos until the new rules are defined and we could showcase that individual commodities have implemented any needed changes to meet the regulations. We believe this process was valuable in educating buyers and served as a tool to promote SC produce for its quality, reliable supply, and diversity. This kept our efforts from Farm to Fork in front of the buying community in a very competitive marketplace.

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Local Fruit and Vegetable Merchandising Project

South Carolina Department of Agriculture

Project Summary

Today's consumer is more educated, more discerning about food, more health conscious, and desires to know-where did my fruit or vegetable come from? Because "local is perceived to be fresher" today's consumer has a right to know the answer. The SCDA appreciates the opportunity to help answer the important question that consumers pose in regards to "local" by utilizing an approach to identify fruits and vegetables with a Certified South Carolina logo placed near enough to the product that eliminates any doubt as to its origin or the farm where it was grown.

Our approach is to place point of purchase material throughout the produce area to help our consumer connect with the local grown product with an air of confidence. We use a merchandising company that is comprised of local employees to place the POP material during peak growing seasons. Timing is important so the merchandising team begins placing materials in grocery stores (approximately 550 in South Carolina) beginning in May through mid June each year so as to capture the greatest percentage of product offerings. This allows support to the grocery retailer when they run ads weekly for their customers that often identify the farm where it is purchased. It is a win-win for all connected when a repeat sale is made indicating satisfaction for what the farmer offers and what the retailer purchases on a constant basis. Grow it, purchase for sale, identify/merchandise it, sell to consumer, add to the economic impact weekly. Our job is to keep the cycle moving.

Project Approach

Selection of the merchandising company is done by mid January along with ordering the appropriate POP materials that include banners, aisle interrupters, channel strips, standees, product cards, as well as outside merchandiser signs. All of these items carry the SC Grown logo. All retail operations in South Carolina participate by allowing the pop material to be placed in its proper area in the produce section. Planning sessions are conducted to distribute the material to merchandisers that will work their target stores on a route basis, follow the merchandising plan for the retail chain and provide an activity report that informs what stores have been completed successfully or identifies any area that needs additional attention with the Chain's produce department. Resupply is conducted on a case by case basis either with the team or supplied out of the SCDA office. Weekly electronic or phone contact is conducted to keep abreast of all issues for successful merchandising as well as sales ad support.

Goals & Outcomes Achieved

Goals: Successfully place POP material in all 550 retail grocery stores, place POP properly by the SC Grown fruit or vegetable, answer questions/train produce managers as to product origin (which farm) help support the stores ad for product with display ideas. Answer questions when necessary to consumers regarding fruit and vegetable uses, recipes and generally become the ambassador for the category. Set sales goals with management of a minimum of 10% increase vs. same period last year. SCDA personnel to review with Store/Chain management for proper review and goal setting process.

The projected goal of an increase in sales by 10% was achieved by our target efforts. In reviewing the sales numbers to assess the impact we were able to conclude this positive increase by the following approach/review.

Review of sales numbers in produce departments compared to the same time period in the previous year confirmed that an average of 10% growth was achieved. In some cases an even higher percentage was achieved when supported by aggressive in-store displays and feature pricing. Because the consumer was able to shop with assurance that our POP material reinforced local product placement with visual pinpoint signage the dots were connected in order to finalize the purchase decision.

The time frame in which discussions were had with retail managers was July/August to discuss the effect of POP placement completed during the May/June time frame. We were able to take advantage of a greater number of fruits/vegetables in season. Additional sales numbers were validated at corporate/regional levels to compare with store level sales results. There were many cases where an even higher than 10% growth was experienced.

Due to the proprietary nature of actual sales volume numbers, the retail partners will not allow us to report the specific volume increases. However, the following grocery store chains agreed that the promotional efforts helped increase their sales in SC grown fruits and vegetables:

- Wal-Mart
- Piggly Wiggly
- IGA
- Food Lion
- Bi-Lo
- Food City
- Publix

Outcomes Achieved:

Successful completion of the targeted 550 retail stores in the following areas:

- Proper POP placement/close as possible to product
- Effective oral/electronic communication-see attached example
- Communication with produce managers-confirmed during SCDA audits
- Ad support-confirmed with ad reviews on a monthly basis
- Completed coverage in the May to June time frame
- Interaction with consumer to thank them for support

Beneficiaries:

- SCDA for proper merchandising opportunities/leadership
- Consumer needs are filled with fresh local produce
- Farmer obtains repeat business-produce growth-greater economic impact
- Healthier offering for consumer-lower healthcare output

Lessons Learned:

Attention to detail as well as communication is critical to successful project with fresh produce. Management buy-in is critical for store level implementation. Quality produce with GAP certified

growers is norm not exception. Consumers not tolerant of produce that is not quality in appearance as well as taste.

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Please click on the image to review the entire PDF file. This brochure was used to explain the goals of the Certified SC Grown program to retailers, and also expand upon the benefits of having the POP displayed in their store.



Peak Advertising Incentive Periods

January
 Leafy Greens Jan. 14-31

February
 Leafy Greens Feb.11-25

March
 Leafy Greens March 10-24

April
 Leafy Greens any time of month
 Cabbage April 14-28
 Green Onions any time of month
 Cilantro/Parsley/Bunched Radishes any time of month

May
 Leafy Greens any time during month
 Cabbage May 1-13
 Green Onions any time during month
 Cilantro/Parsley/Bunched Radishes any time of month
 Cucumbers May 13-27
 Yellow/Green Squash May 21-31

June
 Cilantro/Parsley/Bunched Radishes any time of month
 Yellow/Green Squash June 1-17
 Peaches June 23-30
 Cantaloupe June 23-30
 Watermelon June 24-30
 Tomatoes (all varieties) June 23-30
 Pepper (all varieties) June 23-30
 Sweet corn June 23-30

July
 Peaches any time during month—
 reduced during holiday period
 Cantaloupes July 1-10—reduced during holiday period
 Watermelon July 1-14—reduced during holiday period
 Tomatoes July 1-10
 Pepper (all varieties) July 1-14
 Sweet Corn July 1-10

August
 Peaches any time during month

November
 Leafy Greens any time during month
 except during holiday

December
 Leafy Greens any time during month
 except during holiday
 * Other Items Upon Approval



Nothing's Fresher
Buy South Carolina™
 Nothing's Finer



Retailer Advertising Program

Make the Most Out of Your Produce Division

As a retailer of fresh produce, you are aware that the South Carolina Department of Agriculture is committed to increasing the supply, availability and sales of South Carolina produce and products through its Certified South Carolina program.

Buy South Carolina.
 Nothing's Fresher. Nothing's Finer.™

Buy South Carolina.
 Nothing's Fresher. Nothing's Finer.™

Produce Availability Chart that was distributed to retail chains:



Commodity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Apples												
Asparagus												
Beans (Snap, Pole Variety)												
Beets												
Blackberries												
Blueberries												
Broccoli												
Butter Beans												
Cabbage												
Cantaloupe												
Cilantro												
Cucumbers												
Green Onions												
Leeks												
Mixed Leafy Greens (Collard, Kale, Mustard, Turnip)												
Muscadine Grapes												
Okra												
Oriental Vegetables												
Parsley												
Peaches												
Peanuts (Green)												
Peas												
Pecans												
Peppers (Variety)												
Radishes												
Yellow Squash												
Strawberries												
Sweet Corn												
Sweet Potatoes												
Tomatoes												
Watermelons												
Zucchini Squash												

Buy South Carolina.
Nothing's Fresher. Nothing's Finer.

Expansion of Activities at Fresh Fruit and Vegetable Industry Events to Facilitate Marketing Efforts of South Carolina Specialty Crops

South Carolina Department of Agriculture

Project Summary:

The SCDA appreciates the opportunities presented to promote fruits and vegetables at a number of key events in conjunction with growers within our state. State, local, and national venues provided an excellent vehicle to educate, secure distribution, and expand the sale of South Carolina grown products beyond traditional markets . New business partners were developed as well as account penetrations in traditional customers made for increased sales and profitability. Although fuel prices impacted farmers negatively and pushed pricing upward for fresh products, buyers reported growth in this category due to staying the course from the relationships fostered as well as validation of new business.

Project Approach:

Key Trade shows from local, state, and national “targets” were identified and attended by SCDA personnel as well as growers from the state of South Carolina to provide sourcing insight, volume capabilities, product quality, food safety guidelines, GAP certification emphasis as well as product tracing capability. Target shows were selected that provided a cross section of Wholesale, retail, foodservice, and restaurant attendees to maximize efforts to reach a cross section of buyers and decision makers. Attendees that had previously completed registrations were contacted via email, personal calls, as well as Trade show Committees to encourage booth/grower visitation for updates and discussions of new products, demonstrations, store tours, market visits and educational programs. Planning for trade show events completed by end of 4th quarter 2010 to include : show selection, space required, booth information goals, educational information packets, assignments, goal for lead securing (250 sales leads), producer profiles, and follow up requirements.

Goals and Outcomes Achieved:

Goals: Make contact with all levels of potential users of fruits and vegetables attending scheduled events. Communicate information with participating growers and Department personnel to foster teamwork and successful sales of products/distribution. Create a sales increase of 10% vs last year’s sales level. Present a level of professionalism that is quite recognizable by industry decision makers. Offer personal involvement in trade association growth and standards.

Outcomes Achieved:

Successful participation was achieved in the following target shows/conferences from Oct. 2011 through 2012.

Eastern Produce Council/ Produce Business Magazine attendees	November 2011	7,000
Southeast Produce Council 2200 attendees	March 2011	
Southeast Produce Council 2900 attendees	March 2012	
Produce Marketing Association Fresh Summit Expo attendees	October 2011 & 2012	32,000

Foodservice Distributor shows attended:
26,000 attendees.

- October 2011 & 2012 - 16 shows

Shows were conducted at the following Corporations: Sysco, U. S. Foods, Institutional Food House, Merchants Distributors. Total show attendees: 70, 575
Goal of 250 leads achieved with at least a 12% sales growth over the previous years.

Due to successful show participation we have had additional growers to request participation in the future show schedules. Retailer despite consolidations in the industry are allowing more purchasing personnel to attend. Request for additional varieties, new fruits and vegetables are increasing due to exchanges that identify needs held during our shows.

Beneficiaries:

SCDA personnel, grower personnel, retailers, wholesalers, distributors, restaurant owners, all benefitted in the following areas:

- Education-what does the customer need to sustain business.
- Food safety
- New products
- New varieties
- Contacts
- Communication
- Confidence in growing organizations

Lessons Learned:

Respect for all within the food distribution chain. Growers learned the “bare minimum standards” for conducting business with all partners in the food industry. Improvement is a way of life in the food industry and it is a continual challenge.

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Orchard Water Management in South Carolina Peach Production

Clemson University

Cooperators: J.W. Yonce & Sons Farms, Earth Tec Solutions

Project Summary

Surface waters comprise greater than 90% of the water used for peach irrigation in southeastern orchards. Soil type, soil profile, orchard floor management, and site topography can dramatically affect soil water availability to the tree root system. Too much water (flooding) or too little (drought) often results in fatal or sub-fatal performance of the trees. Either situation is taxing both financially to the farmer, and inversely affects the sustainability of an available water supply.

Therefore, irrigation management is a major concern in maintaining a viable and productive orchard. On an annual basis, approximately 17,000 acres of peaches are produced in South Carolina with an estimated water use of 2.1 billion gallons during the critical period of “final swell”. This study evaluated the use of soil capacitance moisture sensors to develop an automated irrigation scheduling plan for peach production, which would ultimately aid in the conservation of millions of gallons of water, while not incurring a deficit in overall fruit size or maturation.

Project Approach

During the first year of this project, soil electrical conductivity measurements were taken to determine the diversity of soil types/textures in the orchard selected for the project. The orchard is located in Johnston, SC and owned by JW Yonce and Sons, Inc. This orchard site has been in production for more than five years.

Soil moisture sensors were installed at site-location 1 to evaluate tree water usage during the different stages of physiological development of the fruit, and to determine the optimum location of sensor placement. Multiple soil samples were collected from the site and analyzed at Clemson University agronomy labs for soil texture and soil bulk density. The results from the soil analyses were then used to determine the water holding capacity (how much water the soil can hold per inch of depth), field capacity (maximum amount of water the soil can hold), and permanent wilting point (point at which moisture stress is detrimental for crop growth).

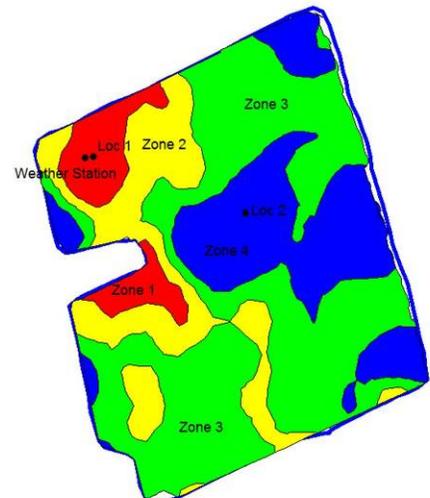


Figure 1: Soil Management Zones and Sensor Locations

Soil electrical conductivity data was collected and soil management zones were established for sensor locations. Two locations in the orchard were selected for sensor locations; one in the sandiest part of the field (Zone 1) and the other in the heaviest soil (Zone 4) (Figure 1). Two sensors were installed at each location with one at the base of the tree and the other at the drip line. Installation of the sensors at the drip line and base of the tree was needed to determine the “wetting” radius of the microjet emitters and to determine where the majority of the root activity is within the drip line of the trees. For future installations one sensor probe per site-location should be sufficient. The moisture sensors installed are capacitance probes with sensor rings at 10, 20, 30, 40, 50, 70, 100 cm. The capacitance sensors continuously monitored soil moisture and salinity. A weather station was installed on-site to give real time weather information (rainfall, wind speed, relative humidity, sunlight intensity). EarthTec Solutions in Vineland, NJ provided the weather station equipment and moisture probes. The data

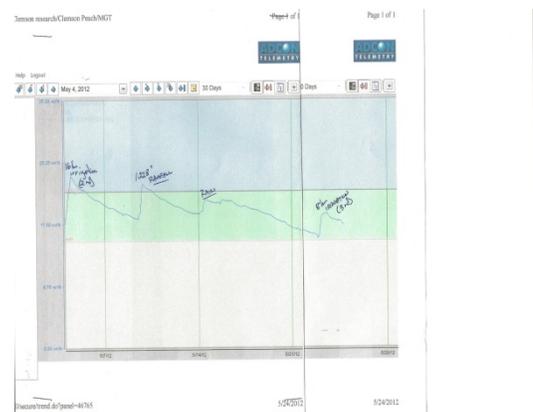
from the probes and weather station were uploaded to the EarthTec Solutions website to house the data.

Year-one of the current project was purely observational. The following observations were critical to the success of the project:

1. how the grower applies water to the orchard (duration and frequency)
2. how the tree responds and uptakes the water.

Results from year-one indicated that a peach tree has an affinity for water from 0-30 cm. As soil available water decreases the affinity for the tree to absorb water from depths greater than 30 cm decreases. Also the conclusion is to make more frequent irrigation cycles with a shorter duration.

SECOND YEAR PROGRESS: Year 2 of the project was conducted in the same site-location. In the approved project plan, it was stated that in year 2 the project would be moved to a different site-location but it became the consensus of the group to utilize the information from year one and move forward with plans of an automated irrigation management plan in the same site-location. Year 2 goal was to create and implement an irrigation scheduling plan for half of the orchard block (approx. 18ac.) with the other half being a control (grower's standard irrigation scheduling). Due to the existing underground irrigation supply, the control, or grower standard as approximately a third or +/- 9 ac.



Irrigation Scheduling Model

Using data collected from year one and existing soil moisture coefficients from NRCS soil survey, a simple soil available moisture and irrigation triggering model was developed to schedule irrigation.

The point of soil moisture in the primary root area (0-20cm) considered at “capacity” was established at 22.5% Vol from year 1 study. Irrigation need or initiation trigger was based on a

25% deficit level. Thus, tree available moisture was kept in this zone either from irrigation or incidental rainfall.

Goals and Outcomes Achieved

The grower could access this model from his computer in order to monitor soil moisture at the tree, schedule irrigation, monitor rainfall effectiveness in reaching tree needs, and terminate irrigation to reduce overwatering. The information the growers may see on their computer are not taken from a model on a website, but directly from the field/orchards where the monitors are located. The computer program determines the irrigation needs based on the sensor information, as well as the weather station data to decide if water is needed. Enabling the grower to review this information from any location saves the grower both time and energy in physically monitoring every orchard each day. This system reduced irrigation time per watering by as much as 60%. Overall water savings are estimated at 30% in addition to accompanying energy costs.

Lessons Learned

Yield per tree showed an approximate 6% advantage over the first two harvests for managed irrigation. Most likely increase in yield was from the increased size of harvested fruit. Data for the remaining harvests was not available. Economic advantage to managed irrigation can be assumed based on initial harvest data as larger fruit equates to a higher price, especially early in the harvest period. Prices for fruit generally decline as harvest season progresses both within and across varietal lines.

Beneficiaries

The peach growers in SC, and other states sharing the same soil types and environmental factors as those located in SC. These growers will be able to conserve millions of gallons of water annually through more efficient irrigation practices.

The information gleaned from this project was presented at the 2012 and 2013 Peach Educational Sessions at the Southeast Regional Fruit and Vegetable Conference held in Savannah, GA during each year, respectively. Attendance each year averages 55 growers, who come from different states all over the Southeast, although the predominant states represented are SC and GA. The presentation was made available electronically via a link, which was given to the attendees present, and was also made available upon request. The results and information gained as a result of this study are not readily available on-line, but can be accessed by contacting the project manager by email.

Additional Information

ORCHARD WATER MANAGEMENT IN SC
PEACH PRODUCTION

Grant funded project to modernize water use curves for peach irrigation
based on tree use and soil texture

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Preserving Locally Grown Specialty Crops and Produce

Clemson University

Project Summary:

Clemson University Cooperative Extension received \$25,300.00 for the “Preserving Locally Grown Specialty Crops and Produce” sub-award from the South Carolina Department of Agriculture Specialty Crops Block Grant Program Award #12-25-B-1093. We used the sub-award to promote locally grown specialty crops through educational programs on safe food preservation methods. We increased consumer access to food preservation information on specialty crops by tailoring existing curricula to them, by advertising and delivering curricula to consumers at locations throughout the state, and by increasing phone and on-line accessible specialty crop food preservation information available through the Clemson Home & Garden Information Center. To facilitate marketing workshops, we created the Carolina Canning™ logo, developed a Facebook page for our Carolina Canning™ activities and established the Carolina Canning™ website. Through the project, our Carolina Canning™ workshop leaders (eight Extension agents and a part-time specialist/faculty) delivered a sustainable statewide food preservation curriculum that helped consumers preserve specialty crops and thus promoted increases for their long term consumption.

Project Approach:

The need being addressed is that many consumers want to preserve locally grown fruits and vegetables but lack the science-based knowledge to preserve them safely. Without that knowledge, there is considerable potential for them to make food preservation mistakes that could result in serious foodborne illness and possibly death. An attractive curriculum for hands-on home food preservation workshops would provide food safety-based training to consumers at a modest price and would take advantage of Clemson Extension’s county network to reach consumers throughout the state. Intensive marketing of the program would be required to inform consumers of its availability. The impetus of the program was to increase consumer confidence in preserving fruits and vegetables safely and thus to increase purchase of South Carolina specialty crops including fruits and produce.

Funds for this project were used to provide a small portion of salary for the Clemson Public Service Activities web team, to purchase foods and supplies for in-service trainings and workshop delivery, to secure copies of the *Ball Blue Book® Guide to Preserving* for each workshop participant, to cover in-service and workshop travel for agents and to cover workshop costs for limited resource audiences. Five food safety-focused, hands-on home canning lessons for consumers were produced. The lessons include boiling water bath canning of acid foods (fruits and tomatoes), pressure canning of low acid foods (vegetables), making jam and jelly, making vegetable pickles and an overall introduction to home food preservation techniques.

Home canning workshops were promoted via various methods including e-mail, the Carolina Canning™ website, the Carolina Canning™ Facebook page, the Home & Garden Information Center, television, YourDay radio, other radio shows, newspaper articles and interviews, the South Carolina Department of Agriculture’s on-line calendar, the SCDA Market Bulletin, and Extension agents’ newsletters. County Extension staff members were familiarized with canning

workshops so they could answer callers' questions. Workshop flyers were distributed at farmers markets, produce stands, local grocery and hardware stores and Extension offices.

Outcomes and Goals Achieved:

Our goal was to increase knowledge, utilization and consumption of locally grown specialty crops by Extension clientele enrolled in home food preservation workshops. We proposed to deliver 32 hands-on canning workshops to an estimated 480 participants. With limited staff, we delivered 67 hands-on canning workshops to 713 members of the general public, youth and limited resource individuals in 25 South Carolina counties.

We pretested clientele at each workshop to determine current knowledge and current utilization of food preservation techniques and post-tested them to determine what they learned from the workshop and how they plan to use it. We expected 70% of clientele to increase their knowledge of food preservation techniques and 50% to increase utilization of those techniques. Based on responses from 168 participants, our workshops were successful in reaching clientele who lacked canning knowledge. Over 90% of participants classified themselves as non-canners or novice canners. Most responding participants (97%) found workshops to be very useful and nearly all (99%) reported gaining new knowledge. The proportion of participants planning to use safe home canning methods increased markedly after workshops. Before enrolling in hands-on pressure canning workshops, only 28% of the 92 responding participants used pressure canning methods. After the workshops, 79% said they would use pressure canning – a 180% increase. Before participating in the hands-on boiling water bath canning workshops, 54% of 67 responding attendees used this method. After the workshops, 85% planned to use the boiling water bath canning method for acid and acidified foods– a 57% increase. We exceeded our target expectations.

As a result of the project support for the Carolina Canning™ hands-on workshops, people used their learned knowledge to preserve more fruits and vegetables and to consume more preserved specialty crops. We confirmed this outcome by two methods. Our follow-up contacts with selected participants indicating they utilized the food preservation knowledge gained in workshops. Fifty-three participants responded to our on-line survey; 47 (89%) indicated they had canned more fruits and vegetables and 57% indicated that their families ate more fruits and vegetables. The on-line survey (although it was drawn from a smaller group of participants) supported the results of our post-workshop evaluations; 59% on-line respondents used pressure canning methods and 89% used boiling water bath canning methods

Beneficiaries and Lessons Learned

Direct beneficiaries were the 713 workshop participants who gained the knowledge and experience to preserve fruits and vegetables safely at home. The project increased knowledge, consumption and utilization of locally grown specialty crops by participants enrolled in the curriculum. Farmers from whom they purchase the fruits and vegetables that they preserve are indirect beneficiaries.

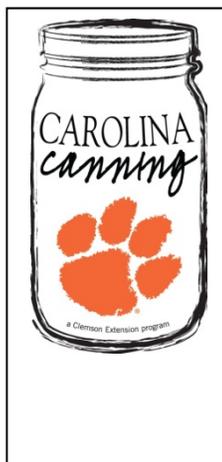
Clientele have requested workshops in the Pee Dee region and on the northern South Carolina coast – areas not covered by our eight Extension agents – but we have been able to provide only a limited number of offerings in those areas. One solution is to develop a train-the-trainer system

for regions that lack food safety and nutrition Extension staff; such a system will allow us to recruit and train volunteers who would then train members of their communities under Extension oversight.

Our marketing including web-based and social media efforts have been successful in making clientele aware of the Carolina Canning™ program. The program has successfully reached a large number of participants and its statewide visibility is high. Clientele – many new to Extension – continue to contact agents via the Facebook page, phone and e-mail for upcoming workshops and information on safe food preservation procedures.

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Sensitivity of the Gummy Stem Blight Fungus to Folicur and Other Group 3 Fungicides Clemson University

Project Summary

Gummy stem blight, which is caused by the fungus *Didymella bryoniae*, is one of the most serious problems that watermelon and cantaloupe growers face in South Carolina. This disease is present almost every year, and during seasons with normal or above normal precipitation, it results in small, unmarketable fruit. Currently, one of the fungicides used widely by South Carolina watermelon and melon growers is the active ingredient tebuconazole found in Folicur and generic formulations. Growers in South Carolina have been using Folicur on watermelon since it was introduced to the peanut market in the late 1990's. Thus, it is unknown if the gummy stem blight fungus is still sensitive to tebuconazole and other Group 3 fungicides or if it has started to become resistant. This information is critical in order to find out how much control growers can expect from newer fungicides that contain tebuconazole or other Group 3 active ingredients, such as Luna Experience. Isolates of *D. bryoniae* from South Carolina that were never exposed to tebuconazole or exposed for several years to applications of tebuconazole fungicide in the field were tested for sensitivity to the FRAC Group 3 fungicides tebuconazole and difenoconazole. Colony diameters were measured when isolates were grown on agar amended with 0.10 to 10.0 mg/l tebuconazole and 0.01 to 1.0 mg/l difenoconazole. All 147 isolates tested, regardless of previous exposure, were sensitive to tebuconazole and difenoconazole with mean EC₅₀ values of 0.41 and 0.054 mg/l respectively. Isolates did not grow at 100 mg/l tebuconazole or 10 mg/l difenoconazole. Because many watermelon growers rotate crops among fields every two years, local populations of *D. bryoniae* have not been exposed repeatedly to tebuconazole. In addition, growers often apply a rotation of systemic and contact fungicides. Thus, despite exposure to tebuconazole for up to nine years, isolates of *D. bryoniae* from South Carolina remain sensitive to triazole (Group 3) fungicides.

Project Approach

Isolate collection

One hundred forty-seven isolates of *D. bryoniae* that had been collected from watermelon that differed in exposure to Group 3 fungicides were selected from an existing culture collection. Forty-four isolates collected from seed (one isolate), greenhouse-grown seedlings (three isolates), or leaves of field-grown plants (40 isolates) between 1992 and 1996 that had not been exposed to tebuconazole or other DMI fungicides were designated as baseline isolates. Ten isolates had been collected in 2009 from leaves of plants in research plots in Blackville, SC, with documented fungicide applications. Eighteen isolates had been collected in 2009 from greenhouse-grown seedlings in South Carolina; whether they were exposed to Group 3 fungicides was unknown. The remaining 75 isolates collected from leaves of field-grown watermelon in South Carolina were exposed to tebuconazole applications made in the year they were collected, 2005 (10 isolates) or 2009 (65 isolates). Isolates collected in 2009 may have been exposed to tebuconazole in prior years, as this fungicide was used in prior years on these farms.

Fungicide sensitivity tests

Tebuconazole (99.6% technical grade supplied by Bayer CropScience) and difenoconazole (96.0% technical grade supplied by Syngenta) dissolved in acetone were added to autoclaved water agar to produce tebuconazole concentrations of 0.1, 1.0, 10.0, and 100.0 mg/l, and

difenoconazole concentrations of 0.01, 0.1, 1.0 and 10.0 mg/l. Each liter of fungicide-amended medium received additional acetone to bring the final concentration to 1.0 ml/l. Control media without fungicide received only acetone at 1.0 ml/l. Agar plugs (7-mm diameter) were cut from source cultures and placed onto fungicide-amended medium in 15-mm-diameter Petri dishes and incubated at 23 to 25°C with 16-hr photoperiod. Two replicate plates were used per test, and isolates were tested twice in repeated trials.

After 6 days of growth in trial 1 and after 5 days of growth in trial 2, two perpendicular colony diameters per plate were measured and averaged. Relative colony diameter was calculated by dividing the mean colony diameter on each fungicide-amended plate by the mean colony diameter across the two nonamended plates for each isolate. To calculate EC₅₀ values, relative colony diameter was regressed against the base-ten logarithm of three concentrations of each fungicide. The highest concentration for each fungicide was not included, because no isolates grew at 100.0 mg /l tebuconazole, and most isolates did not grow at 10.0 mg/l difenoconazole. The resulting linear regression equations for each isolate-fungicide combination were solved to calculate EC₅₀ values.

Significant Results

All isolates of *D. bryoniae* tested were sensitive to tebuconazole and difenoconazole. No isolates grew on medium amended with 100 mg/l tebuconazole. Only three isolates grew on medium amended with 10.0 mg/l difenoconazole, and relative colony diameters were reduced by $\geq 96\%$. Mean and median EC₅₀ values were 0.41 and 0.39 mg/l tebuconazole and 0.054 and 0.053 mg/l difenoconazole. The minimum tebuconazole EC₅₀ value for an individual isolate was 0.077 mg/l. Only one isolate, a baseline isolate from South Carolina, had an EC₅₀ value greater than 1.0 mg/l tebuconazole, 1.78 mg/l (isolate W53). As expected, EC₅₀ values were correlated between tebuconazole and difenoconazole ($r = 0.30$, $P = 0.0002$).

When groups of isolates based on previous exposure to tebuconazole were compared, the means of tebuconazole EC₅₀ values did not differ among the six groups. However, when difenoconazole EC₅₀ values were compared, isolates from the greenhouse had a lower mean EC₅₀ value, 0.039 mg/l, than the five groups of field isolates, regardless of exposure to tebuconazole ($P = 0.001$). It is not known why greenhouse isolates differed.

It is known that applying a mixture of fungicide active ingredients reduces the chance of selecting isolates with reduced sensitivity to Group 3 fungicides. On cucurbits, difenoconazole is registered in combination with cyprodinil in the fungicide Inspire Super. It also may be advisable for growers to apply tebuconazole in combination with a protectant fungicide, such as chlorothalonil or mancozeb. Alternatively, tebuconazole is now available in a pre-mix with fluopyram in the fungicide Luna Experience. Even if Group 3 fungicides are applied in combination with other fungicides, the limit of three applications of tebuconazole per season should be extended to include all Group 3 fungicides applied to a given field. There is an increased risk of resistance to Group 3 fungicides when fields receive more than four or five applications per season.

The gummy stem blight fungus attacks only cucurbits, which are specialty crops. Thus, this project benefits only specialty crops.

Three watermelon growers in South Carolina cooperated by allowing access to their fields and greenhouse to collect diseased plant samples, which were the source of isolates used in this study. The South Carolina Watermelon Association provided \$5,000 in 2011 to support this project.

Outcomes and Goals Achieved

The objective of this project was “to find out if the gummy stem blight fungus in South Carolina is becoming resistant to the active ingredient in Folicur and other Group 3 fungicides.” This objective was achieved in that isolates of the gummy stem blight fungus are not becoming resistant to tebuconazole or difenoconazole, two Group 3 fungicides. One hundred forty-seven isolates were tested, 12 more than originally planned.

The measureable outcome of this project was defined as “the number of South Carolina melon growers who have been trained in appropriate use of Group 3 fungicides to manage gummy stem blight.” To date, 621 growers, agribusiness personnel, county Extension agents, and crop consultants have been trained. The following seven presentations and trainings were made to achieve this goal:

- Oct. 4, 2012, Charleston County vegetable growers meeting that included growers from the lower half of the state. 65 vegetable and cucurbit growers.
- Jul. 12, 2012, Watermelon and Vegetable Field Day, Clemson Univ. Edisto Research and Education Center, approximately 150 vegetable and cucurbit growers, agribusiness personnel, and consultants.
- Mar. 8, 2012, Pee Dee Vegetable Grower meeting, Turbeville, SC, approximately 100 vegetable and cucurbit growers and agribusiness personnel.
- Jan. 13, 2012, South Carolina Watermelon Association annual meeting, 36 watermelon growers.
- Dec. 12, 2011, Clemson Public Service Activities Extension annual conference in-service training for Extension agents, 15 agents trained on fungicide resistance issues, including those in the gummy stem blight fungus.
- Nov. 29, 2011, 26th Annual Southeast Vegetable & Fruit Expo, Myrtle Beach, SC, 25 cucurbit growers from North and South Carolina and agribusiness personnel.
- Jul. 7, 2011, Watermelon and Vegetable Field Day, Clemson Univ. Edisto Research and Education Center, approximately 230 vegetable and cucurbit growers, agribusiness personnel, and consultants. Preliminary results presented.

Another major outcome of this project was an article was accepted for publication in the international journal *Journal of Phytopathology*. The citation will be:

Keinath, A. P., and Hansen, Z. R. 2013. Isolates of *Didymella bryoniae* from South Carolina Remain Sensitive to DMI Fungicides despite Multi-Year Exposure. *Journal of Phytopathology* 161: (accepted for publication Nov. 22, 2102).

Baseline Data Collected

One of the major outcomes of this project was to collect baseline data on sensitivity of the gummy stem blight fungus in South Carolina to Group 3 fungicides. We now know that the mean and median EC₅₀ values were 0.41 and 0.39 mg/l tebuconazole and 0.054 and 0.053 mg/l

difenoconazole. The range of tebuconazole EC₅₀ values for an individual isolate ranged from a minimum of 0.077 mg/l to a maximum of 1.78 mg/l. This is useful baseline information, because it can be used as a benchmark for future testing of isolates in cases of suspected resistance to Group 3 fungicides.

According to the USDA, NASS, 2010 Vegetable Chemical Use, 11% of the watermelon acreage in South Carolina was treated with an average of 3.45 applications of tebuconazole at 0.225 lb/acre/application, which is the labeled rate. At \$100/gallon cost for generic tebuconazole, each application costs \$6.25. Watermelon acreage in South Carolina in 2010 was 8,500 acres. Thus, the cost of tebuconazole applications to watermelon in South Carolina in 2010 was \$20,161. Growers can continue to make these applications, and applications of other fungicides that include Group 3 active ingredients, such as Inspire Super and Luna Experience, knowing that this is a sound investment in crop protection. Newer fungicides that include tebuconazole, such as Inspire Super registered in 2011 and Luna Experience registered in 2012, are much more expensive, \$31 and \$109 per acre per application, respectively. Thus, the economic impact of this project will be five to 17 times greater in the future, depending on which Group 3-containing fungicides growers use in addition to or in place of tebuconazole.

Beneficiaries

The direct beneficiaries of this project are watermelon and cantaloupe growers in South Carolina. Other beneficiaries include county Extension agents and private crop consultants who were trained in giving scientifically sound recommendations to control gummy stem blight. Other beneficiaries are agrichemical businesses who supply fungicides to melon growers, since if they know which fungicides growers will be using, they can stock their inventories with products that will be sold.

To date, 621 growers, agribusiness personnel, county Extension agents, and crop consultants have been trained. The economic value of tebuconazole applications to watermelon in South Carolina in 2010 was \$20,161. The value of the watermelon crop on acres treated with tebuconazole was \$3.9 million.

Lessons Learned

The experiments progressed as expected, in part because standard techniques were used. One lesson learned is that cultures must be measured after 5 days growth. In the first run of the experiment, the first cultures tested were measured after 7 days growth, but this data had to be discarded and the cultures retested, because the cultures growing on control medium without fungicide had reached the edge of the plate. This may have made cultures growing on fungicide medium look less sensitive than they really were when relative colony diameter was calculated.

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Feasibility Study for Specialty Food Crop Incubator

Clemson University

Project Summary

The purpose of the project was to support a study concerning the feasibility of a specialty crop food business incubator located at the State Farmers Market in Columbia, SC. The study assessed the factors required for the successful operation of such a facility based on input from a survey instrument, a stakeholder committee, and appropriately related data. A feasibility study was warranted to assess the probability of success in the establishment of a kitchen incubator. Secondly, the project was designed to lay the groundwork for the success of the kitchen incubator by establishing buy-in of critical players, while determining feasibility.

This study was timely as a recent study of the South Carolina agribusiness cluster (Carpio et al.) indicated that the state agribusiness sector lagged behind the nation in adding value added to locally grown fruits and vegetables. Establishing a food-business resource for developing value-added products by storing, packaging, freezing or preserving specialty crops and by providing vital generic business services and contacts would help resolve the “value added” gap. This feasibility study was designed to be a necessary first step in this process. If implemented, the kitchen incubator could be expected to have far-reaching effects in terms of further developing value-added products using fruits and vegetables grown in SC and providing economic opportunity to numerous people and businesses.

Project Approach

The primary objective was to determine the feasibility regarding whether the service of a kitchen incubator for value added specialty crop items was warranted in the midlands area of SC. The study was to evaluate if there would be sufficient number of clients to generate an adequate level of fees to support ongoing operating costs. Other elements critical to success were also evaluated. These other factors include community support, support by regional business service providers, technical experts in the fields of food processing, preparation and also regulatory issues.

The initial stage of the project focused on educating the project team on practices of food crop incubators and initial data collection.

At the start of the project, the project team developed a steering committee consisting of statewide specialists that are critical to partner with to create a successful food crop incubator. The committee included members of the SCDA, Clemson University, and local farming networks among others and focused on areas of food safety, regulations and business development. The committee also visited a successful food crop incubator in North Carolina and learned in more detail about the business model and everyday operations of a food crop incubator. Additionally, the project team studied similar feasibility analyses of food crop incubators.

The next step was to determine the interest for a food crop incubator. Secondary data was collected to help paint the picture of specialty food activity in SC, and a survey was developed to gather direct input from farmers, caterers, and other businesses involved in the specialty food industry in SC. Over 140 surveys were collected. The type of equipment needed, the storage space necessary, and operating costs have been determined by the research.

Clemson University served as a partner with this project, and is provided both in-kind and financial support to the study, specifically for all components not related to the competitiveness of specialty crops within SC.

Goals and Outcomes Achieved

An on-line survey was developed to help ascertain the level and nature of interest in a kitchen incubator facility. An emphasis was placed on determining respondents' general interest in use, demographic data, kitchen and other equipment needs, output markets, training needs, and degree of interest in cooperating with other incubator clients. Other studies and conversations with producers and kitchen incubator managers indicated that clients of a kitchen incubator facility are willing to drive some distance to use a facility. Accordingly, for a possible facility in the Columbia, S.C., area such as the State Farmers Market, results from survey respondents residing in Aiken, Calhoun, Fairfield, Kershaw, Lexington, Newberry, Orangeburg, Richland, Saluda, and Sumter Counties are discussed together. Survey respondents (both current producers of value added products and those interested in becoming producers) in general indicated a strong level of interest in using a kitchen incubator facility. Among the 131 respondents statewide, 89.3% (117) indicate at least a moderate level of interesting in using a kitchen incubator. For the Columbia area (Aiken, Calhoun, Fairfield, Kershaw, Lexington, Newberry, Orangeburg, Richland, Saluda, and Sumter Counties), 84.6% (22) of 26 respondents indicated at least a moderate level of interest. Among both groups, 69.2% (102) of respondents in the Columbia area and 77.9% (18) of respondents statewide indicated a high level of interest in use. Only one statewide respondent indicate they would prefer to use a co-packer or processor as opposed to a kitchen incubator.

Several questions were posed to gather demographic information about survey respondents. Survey respondents tended to be new farmers; while the average years of farming across all survey respondents is 8.3 years the median value is four years. Among the 89 respondents to the question, 21 respondents indicate they had been in operation for two years or less.

Among the survey respondents, 50% (13) in the Columbia area and 44.1% (56) statewide indicate that they are currently selling a value-added agricultural product. For those producing a value added product in the Columbia area, 41.7% (five) use a co-packer to produce their product, 25% (three) used a home kitchen, and 16.7% (two) rent a kitchen. For statewide producers of a value added product, 29.6% (16) use a co-packer to produce their product, 37% (20) use a home kitchen, and 27.8% (15) rent a kitchen.

Survey respondents were also asked where or to whom they currently sell or plan to sell their product. For the Columbia area among 83 responses, farmers markets are the most popular market outlet (15 or 18.1% of all responses) followed by online and roadside stands (both at 12 responses or 14.5%) and restaurants at 11 responses or 13.3%. Statewide the responses followed a somewhat similar pattern, with farmers markets as the most popular market outlet among 388 responses (83 or 21.4% or all responses) followed by online (14.4% or 56 responses), restaurants at 54 responses or 13.9%, retail stores at 49 responses or 12.6% and wholesalers (40 responses or 10.3%).

Respondents either are already preparing or are interested in preparing a wide range of value added specialty crop products. Jam and jellies are the second most popular item in the Columbia area (nine responses) and the most popular item statewide (53 responses). Baked

goods were the second most popular response statewide (51) and the third most popular response (eight) in the Columbia area. Sauces, condiments, marinades, and dressings were the third most popular item statewide (41 responses) and the most popular choice in the Columbia area (10).

Beneficiaries

The project's intended beneficiaries would be SC famers wishing to add value to their fruits and vegetables. The consumers would be enhanced due to greater access to local foods.

There are no direct beneficiaries of this project to date. The intent of the project was for Clemson University to determine if a kitchen incubator for specialty crops was feasible. The study has concluded that this would be a beneficial component to the specialty crop industries. Should this kitchen become a reality, the producers using the facility would become the direct beneficiaries.

Lessons Learned

It was determined that a specialty crop kitchen incubator used towards generating more value-added products in SC is feasible given that a strong working relation is formed with a variety of partners with the primary job of generating client flow, that grant support is obtained to cover much if not all facility construction costs and an excellent incubator manager is hired with appropriate interest, experience and skills, and that sufficient time is allowed (two to three years) to develop a sufficient number of clients necessary for meeting operating costs.

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Advertising Strategies to Increase Consumer Traffic at Plant and Flower Shows

South Carolina Department of Agriculture

Project Summary

The SCDA hosted six Plant and Flower festivals in 2011. Three Spring Festivals: Southern Plant & Flower Festival, April 7-10 at the Florence (Pee Dee) Farmers Market; the Midlands Plant & Flower Festival, April 14-17 at the Columbia Farmers Market; and the Piedmont Plant & Flower Festival April 28-May 1 at the Greenville Farmers Market. Three Fall Festivals: Autumn Fest at the Market September 23-25 at the Greenville Farmers Market, Pee Dee Fall Plant and Flower Festival September 30-October 2, and the Midland's Fall Plant and Flower Festival October 7-9 at the South Carolina State Farmers Market in West Columbia.

The Festivals provided 330 vendors the opportunity to gain visibility and to make direct product sales to more than 148,000 customers. All vendors present were selling ornamental horticulture crops. Many of these vendors grow the materials themselves. A lot of the materials are either heirloom varieties and/or what gardeners call "passalong plants". These old fashioned varieties are often not grown by larger commercial ornamental nurseries.

Project Approach

Intense advertising campaigns are conducted by the SCDA for each of the festivals. Artwork for the posters, outdoor boards and other signage is created by the marketing staff. The SCDA also drafts the copy used for the radio commercials, and print advertisements for local newspapers. Many, if not most of the local television stations also feature special stories about the Plant and Flower Festivals, as they are annual community events.

The SCDA website, www.agriculture.sc.gov, posts information, and staff also posts information on Facebook about each Festival, through its Fan Page for Certified SC Grown.

The following information relays a better insight into the advertising for each Festival:

- Southern Plant & Flower Festival
 - April 7-10, 2011
 - \$7039 spent on advertising
 - 69 vendors
 - 38,825 attendees (8% increase over 2010)
- Midlands Plant & Flower Festival
 - April 14-17, 2011
 - \$13,516 spent on advertising
 - 95 vendors
 - 47,643 attendees (6% increase from 2010)
- Piedmont Plant & Flower Festival
 - April 28- May 1, 2011
 - \$8557 spent on advertising
 - 30 vendors
 - 8547 attendees (15% decrease from 2010)

- Autumn Fest at the Market
 - September 23-25, 2011
 - \$7357 spent on advertising
 - 26 vendors
 - 14,201 attendees (12% increase from 2010)
- Pee Dee Fall Plant and Flower Festival
 - September 30-October 2, 2011
 - \$7929 spent on advertising
 - 41 vendors
 - 23,000 attendees (40% increase from 2010)
- Midlands Fall Plant and Flower Festival
 - October 7-9, 2011
 - \$14,112 spent on advertising
 - 65 vendors
 - 22,572 attendees (no significant change from 2010)

Goals and Outcomes Achieved

The Festivals experienced an increase of 13.5% more customers than in previous years. The Vendor Survey results showed the following increase in the estimated sales.

ESTIMATED SALES

	Greenville	Columbia	Pee Dee
<\$500	10%	11%	20%
\$501-\$1000	10%	25%	40%
\$1001-\$2000	20%	30%	30%
\$2001 - \$3000	10%	20%	
\$3001-\$4000	10%	10%	

A review of the analytics of the site, www.agriculture.sc.gov, indicate that the number of views increased by more than 2000 in September and October, surrounding the dates of the Festivals. In April, the number of views increased by more than 6000. These facts translate to a 4% increase in the number of visitors to the site when advertising for the Festivals is taking place.

The Project Manager compares the number of vendor applications from year to year, as well as the number of vendors who return each year. Since 2007, the number of vendor applications has increased. Between 2010 and 2011, the number of applications increased more than 20%. The returning vendors are requesting larger spaces for them to be able to rent, because the sales they experienced were higher than what was anticipated. From these facts, it can be extrapolated that the outcomes the vendors have are positive, that sales are strong, and that they intend to continue participating in the Festivals.

- *Thing(s) liked best about the festival*
 - *Great crowds*
 - *Great sales*

- *Bus loads of people*
- *Good advertising*
- *Nice assortment and placement of vendors*
- *Good booth size*

- *Thing(s) liked least about the festival*
 - *Poor parking*
 - *Not enough staff to run festival efficiently*
 - *Theft*
 - *Need longer hours*
- *Things(s) to be added to future festivals*
 - *ATM machine*
 - *Healthy food for sale*
 - *Longer hours; especially weekend hours*
 - *More signage*
 - *Vendor input with planning of shows and dates*
 - *Wi-Fi availability*
- *Thing(s) to be deleted from future festivals*
 - *Flowers need to be separated from produce*
 - *Delete garden center vendors*
 - *Delete food vendors*
 - *Clean area up more*
- *Thing(s) you would change regarding future festivals:*
 - *Better traffic flow*
 - *Better parking*
 - *Shuttle bus*
 - *Provide Children activities*

Beneficiaries:

The vendors who participated in the Plant and Flower shows benefitted. The events were very well attended and the vendors were pleased with their sales numbers. Due to the proprietary nature of sales figures, vendors are reluctant to report this information.

The Festivals provided 330 vendors the opportunity to gain visibility and to make direct product sales to more than 148,000 customers.

Lessons Learned:

Without the advertising efforts of the SCDA, these shows would not be such a success. Many of these vendors are small, and depend on “local” shows for their income.

It was learned through administering brief surveys to the customers, that 35% heard about the Festivals by newspaper ads, 16% heard from television and 10% saw postings on the internet. Most customers (55%) were returning. Some ideas taken for future consideration include providing wagons, more parking spaces, the inclusion of guest speakers and having children activities.

Contact Information

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Additional Information

Example of advertisement below:

Art for Everyone! in Aiken, SC
Gallery Sales
Cultural Events
Fine Art Exhibition Galleries
Art Exhibitions, Classes
Fairs
Event Facilities
Volunteer Opportunities
AIKEN CENTERS FOR THE ARTS
122 Limestone St. SW
Aiken, SC 29801
803-641-9094
www.aikenmarketforthearts.org

Santee Cooper Country
Come for a day, a weekend, a week, or vacation here for the best of both worlds.
Santee Cooper Country is a beautiful area with scenic views, historic sites, and recreational opportunities. Discover it all in the heart of South Carolina.
Visit our website and become a member today!
For more information, call 803-734-2210 or visit www.santeecoopercountry.org

Have you met Helen lately?
Alpine Helen White County
A Natural Beauty in the Northeast Georgia Mountains.
1 hour north of Atlanta
800.858.8027
www.helenga.org
Alpine Helen Georgia
Helenga.mobi

SOUTH CAROLINA DEPARTMENT OF AGRICULTURE
2011 Fall Plant & Flower Festivals

AutumnFest at the Market
Greenville State Farmers Market
1251 Rutherford Rd., Greenville
SEPTEMBER 23-25
Friday & Saturday 8 a.m. - 5 p.m.
Sunday 10 a.m. - 4 p.m.

Pee Dee Fall Plant & Flower Festival
Pee Dee State Farmers Market
2513 W. Lucas St., Florence
SEPT. 30-OCT. 2
Friday & Saturday 8 a.m. - 6 p.m.
Sunday 12 - 5 p.m.

Midlands Fall Plant & Flower Festival
South Carolina State Farmers Market
3482 Charleston Hwy., West Columbia
OCTOBER 7-9
Friday & Saturday 8 a.m. - 6 p.m.
Sunday 12 - 5 p.m.

Visit www.agriculture.sc.gov for more information

SLIKING.COOP | SEPTEMBER 2011 | SOUTH CAROLINA | 29

Production of Point of Purchase Materials for use at Industry Events, for Retail Promotion, for use at Local Farmers Markets, and Roadside Markets

South Carolina Department of Agriculture

Project Summary:

The funding from this project has enabled the SCDA Marketing Division to provide supplemental signage to the members of its ‘Certified SC Grown’ program, with the intent for customers recognition of locally grown produce, and ultimately purchase. This signage, or POP material, was created in part by the Project Manager, and the PR Firm that SCDA contracts with, Chernoff-Newman.

The signage/material was created to focus on the increase of sales of specialty crops. Also, upon distribution of the material, SCDA staff ensured for only those who grow and sell specialty crops received the materials.

Project Approach:

For the working timeframe of this agreement, the Certified SC Grown program had 1,174 members. 70% of the membership (822) are specialty crop producers. There were also 190 Certified Roadside Markets and more than 80 Community Farmers Markets in the state that received point of purchase materials at the beginning of the primary produce season (spring) so that they were able to make attractive displays with SC grown fruits and vegetables. The largest sector that received materials are the 500+ retail chain stores in SC.

Materials were either hand delivered to the Market or Retail Store, or mailed by bulk, depending on the size and weight of the promotional piece(s). In most cases regarding a Farmers Market or Certified Roadside Market, the materials were hand delivered. The Project Manager used this as a method of conducting site visits of each market to verify that the markets were truly eligible for the program materials.

In an effort to effectively reach all of the retail chain stores, a merchandising company was hired as a labor source to deliver and set the pieces in each store. This relationship worked out extremely well. The Retail Merchandiser for the SCDA worked out a schematic plan for the pieces for each individual retail chain. All materials were placed in the fresh produce section of the store, by the items that are grown in the State. The Retail Merchandiser worked with the Vice President of Produce, or the Merchandiser for produce within each chain to obtain approval for the signage to be displayed. Then, he followed up with store visits to personally check that the signage was being used properly.

While there, a meeting with the produce manager would take place, so that the employees would be aware that the signs were to only be merchandised or displayed with SC grown specialty crops, such as peaches, watermelons, leafy greens, onions, bell peppers, and tomatoes. Harvest Finders and Produce Availability Charts were also given to each produce manager to use as a training tool for his/her staff.

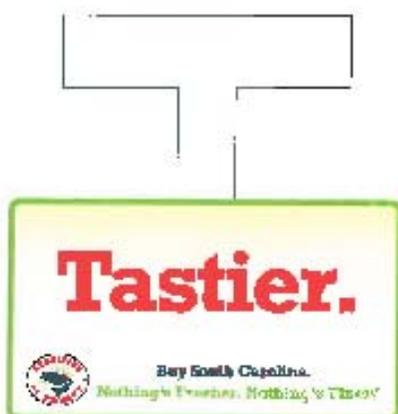
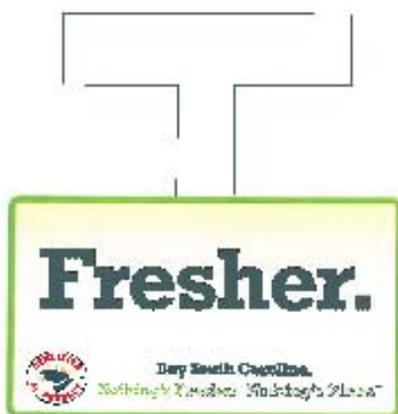
Specifically, the following were purchased and distributed with project funding:

- 6000 2012 Certified Roadside Market Directories
- 5000 Recipe Brochures featuring SC Grown Products
- 3200 'Certified SC Grown' logo ceiling hangers
- 10,000 large price cards, 5,000 small price cards. Each card has CSCG logo.
- 13,750 aisle interrupters, CSCG logo
- 300 channel strips, 'Im Fresher", CSCG
- 25,000 'Certified SC Grown' Harvest Finders

These were distributed to the members as described above.

Because the Certified SC Grown branding program does include members who are non-specialty crop producers, monies from the SCDA Marketing budgets, which are appropriated by the SC General Assembly, are applied to the cost of this project to supplement the monies of the SCBGP. Prior to purchasing the materials, the Assistant Commissioner of the SCDA reviewed the Purchase Orders and Requisitions to insure that both accounts were identified prior to payment for the materials.

Below are examples of the POP materials, as well as two photos to explain how they are used by merchandisers and growers:



SC Product Shelf Dangles



SC Product Aisle Signs (front/back)

Ceiling Hangers
(front/back, 21 inches wide)



Buy South Carolina. Nothing's Fresher. Nothing's Finer.™

Large Price Sign (10 by 7 inches)

Fresher.



Buy South Carolina. Nothing's Fresher. Nothing's Finer.™

Large Fresher Sign (11 by 7 inches)

Buy South Carolina.
Nothing's Fresher. Nothing's Finer.™



Vertical Store Banner



Buy South Carolina.
Nothing's Fresher. Nothing's Finer.™

Fresher.



Buy South Carolina.
Nothing's Fresher. Nothing's Finer.™

Tastier.



Standing Door Window Sign



Certified SC Grown Logo on CD



Small Price Card



SC Product Channel Strip





Outcomes and Goals Achieved

The primary goal of the program was set to increase the consumer awareness of SC specialty crops. By doing so, a competitive advantage would be created for our local producers.

The SCDA does not have a benchmark to use in reporting the effectiveness of this program. One way to interpret the program as a success is to realize the increase in number of specialty crop producers in the 'Certified SC' branding program, which continues to increase each year. Also, while retail partners are reluctant to disclose specific sales information, these partners are returning year after year requesting that the same POP material be used in merchandising their produce departments.

Currently, the SCDA is tabulating the results from a survey sent to all members of the Certified SC Program in January. The survey was sent as a method to seek the program effectiveness, and how the program may be modified to better position SC grown specialty crops in the marketplace. So far, only half of the results have been received. Therefore it is too early to predict what the outcomes will be regarding the branding program.

Certified SC Membership growth from 2010-2012:

2010-2011 = 53%

2011-2012 = 19%

2010-2012 = 83%

Or

715 members on 1-1-10

1,093 members on 6-10-11

1,306 members on 7-18-12

Preliminary findings from the **2012** survey of Certified SC participants indicate a 12% increase in sales from the previous year.

The preliminary results also indicate participants collectively invest approximately \$10M each year of their own money in branding.

ROI study determined that for every \$1 of state investment in Certified SC Grown, \$10 is coming back in revenues.

Beneficiaries

The beneficiaries of this program are the specialty crop producers, and the owners of the retail and roadside sales outlets who each experienced and increase in sales of specialty crop products grown in SC.

Lessons Learned

Overall, the program is a huge success, and one that the SCDA hopes to regenerate each year.

Most of the lessons learned are in regard to the materials used to produce the POP. In some cases, where budget was a concern, a lighter weight material was substituted. In the end, this led to the signs becoming “worn” much more quickly. In coming years, it will be noted to use the heavier, although more costly, material.

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Small Grant Program to Assist Community Based Farmers Markets South Carolina Fruit, Vegetable and Specialty Crop Association/ SCDA

Project Summary

This project enabled the South Carolina Fruit, Vegetable and Specialty Crop Association (SCFV&SCA) to build on the achievements accomplished with funds from previous Specialty Crop Block Grant Program Agreement #12-25-B-0948. The importance of the continuation of this campaign is that it has promoted health and wellness through demonstrating the direct relationship between healthy eating habits that include eating locally grown fresh fruits and vegetables. The funds provide an opportunity for markets (particularly those markets that are located in the smaller communities that are surrounded by nutritionally challenged persons) to enhance their marketing program.

The continuation of this project has provided funding to specifically promote specialty crops at ten community based farmers markets in SC. Each successful community based farmers market can directly benefit more than 200 small and minority farmers. Many of the residents served reside in rural areas, where no retail chain grocery store is located. Promotional activities funded by this project are used to raise awareness about the availability of locally grown fresh fruits and vegetables along with the day and time that market is operating and some ideas about what fresh specialty crops are available.

Project Approach

The information about the Mini-Grant Program was sent to all market managers registered with the SC Association of Farmers Markets. All managers were made aware that the funds from the Mini-Grant had to be used towards the promotion of fresh fruits and vegetables, specifically specialty crops grown in SC. All managers received written information about this stipulation, and all agreed to monitor the use of funds as prescribed by the SCDA. South Carolina currently has more than 100 community based markets working in the State. Each manager received the application in an email attachment in January and an announcement about the mini-grant was made at Market Managers Workshop on February 9, 2012.

Goals and Outcomes Achieved

Fourteen markets completed applications, and all were approved. However, only ten returned the required information and thus fulfilled the agreement, and received monies.

The mini-grant funds were used to buy authorized promotional materials to help promote the consumption of fresh fruits and vegetables. The Project Manager conducted site visits during the months of June, July and August, and observed the types of promotional materials that market managers were using and the type of promotional materials were some newspaper advertisements stating that the market is a place where people can buy locally grown fresh fruits and vegetables. Other markets printed flyers, or purchased directional signage featuring pictures of fresh fruits and vegetables.

In 2011, the total number of visitors to the markets was estimated to be 61,743. This was an increase of more than 13,850 persons over the approximate 48,000 visitors in 2010. In the 2011 season, which lasted 30 weeks on average, an average between the markets for gross sales by the vendors was \$204,500. This was a slight increase from the previous season. The number of

customers increased, but the spending per week was less. This was more than likely due to the depressed economy.

Lessons Learned

The primary problem with this program has been the ability to ensure that all funds received by the market managers are used exclusively for the increase in sales of specialty crops. The Project Manager further defined the application process, with specific clauses that identified what the allowable expenditures are of the funds. The Project Manager has also spent numerous hours being diligent in discussing the terms of the agreement with each market manager. As a result, the program has become more manageable, and the intent of the mini-grants are being upheld.

Beneficiaries

The specialty crop growers at the farmers markets benefitted from the project. Ten markets received monies for improving their marketing of fresh fruits and vegetables, and the vendors of these locally grown products benefitted the most. At each market, there are on average fourteen specialty crop vendors per market day. This brings the direct impact of the project to approximately 140 fruit and vegetable growers in the state, who each sold more of their products as a result of the additional advertising. The market managers at these community based markets confirmed an increase in sales of specialty crops through verbal communication with the vendors. Each specialty crop vendor sold 100% of their produce at market days. Most vendors reported that the extra advertising and promotions made by the market managers, letting the public know that fresh fruits and vegetables were available at the community markets, helped bring in more customers. The consumers benefitted from the knowledge that fresh fruits and vegetables were available at the markets, and they also benefitted from consuming more nutritious foods.

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Organic Farming Conservation Outreach Project

Carolina Farm Stewardship Association

Project Summary

The three overall objectives of the Organic Farming Conservation Outreach Project (OFCOP) were for the Carolina Farm Stewardship Association (CFSA) to 1. To educate organic and transitioning specialty crop growers in South Carolina on the opportunity to qualify for the USDA Environmental Quality Incentive Program – Organic Initiative (EQIP-OI) funds 2. To develop new conservation practice documents compatible with organic farming and the goals of the EQIP-OI program, and 3. To provide training and guidance materials for soil and water conservation personnel at NRCS on how organic practices align with existing EQIP resource conservation practices.

OFCOP has enhanced the competitiveness of South Carolina organic growers in the rapidly expanding markets for organic fruits and vegetables. The growing number of organic producers in the state made this project timely and necessary. The primary beneficiaries of the project have solely been specialty crop producers. Training time and guidance documents developed and compiled with project funding were intended only for specialty crop producers and did not provide information about management and marketing techniques in other sectors of organic agriculture such as commodity crops, dairy or livestock production.

Issue Addressed: Federal cost share programs for adopting organic farming practices in the 2008 Farm Bill, such as EQIP-OI, have given SC specialty crop growers an opportunity to improve their competitiveness in the organic food market. In 2009, only 21 EQIP contracts had been awarded to SC specialty crop growers. These contracts had a total value of \$326,000. The original allocation for SC EQIP contracts was \$616,000. Therefore, \$290,000 went unclaimed by SC growers. This money was then redistributed by the USDA to other states that received more applications.

This project was both important and timely, as the domestic organic market share has steadily continued to grow. Organic food sales have maintained a steady increase over the past decade, despite the economic recession in the United States. South Carolina has the unique environment of a year-round growing season for specialty crops, high-quality agricultural resources, and a day's proximity to retail markets in many population centers on the East Coast and Chicago areas. The launch of the EQIP-OI in the 2008 Farm Bill provided many important resources for SC growers interested in transitioning to being organically certified, so that more may be able to seize the growing organic market opportunities.

CFSA and the Clemson University Sustainable Agriculture Program were approached by personnel at NRCS to provide grower outreach to specialty crop producers on EQIP-OI. In doing so, new conservation practice documents needed to be created, and many existing documents required modification to address organic production systems.

This project assisted the staff of the CFSA with the necessary resources to assist the NRCS in research and surveys on this topic. The CFSA also provided practical training to soil and water resource conservation personnel on the intersection of National Organic Program approved

practices and EQIP resource concerns. The OFCOP enhanced the ability of SC specialty crop producers to successfully compete for cost share funding. Therefore, the outreach activities accomplished by this project have enabled SC producers a greater efficiency in helping them to understand about resource conservation programs, enabled many of the specialty crop producers to be more financially stable, increased the adoption of conservation practices, and secured more resources for future use.

Project Approach

The first outcome of the OFCOP project was to develop and publish guidance documents for organic and transitioning farmers of specialty crops who were interested in applying for EQIP-OI funding. The guidance documents needed to include specific examples of organic practices that related directly to resource concerns. The need for such guidance documents was identified by the CFSA members that are fruit and vegetable growers. Members of the CFSA staff worked to develop nine (9) guidance documents for conservation practices specific to organic production and reviewing ranking criteria for EQIP-OI applications. These were completed and made available on the CFSA website in June 2011. By the end of 2011, 605 unique views of these documents were made. Also, the CFSA provided direct outreach to specialty crop producers by having thirty (30) direct in-person meetings, and email communications to 233 members of CFSA list serve. Seven (7) training days took place in 2011. These trainings were delivered by the CFSA to 124 NRCS personnel on organic production, hoophouse production, and conservation practices. Additionally, CFSA staff completed site visits to seven 2011 EQIP-OI program participants, and conducted a survey to all NRCS district conservationists to get feedback on implementing the EQIP-OI program. Results showed that an increased amount of money was allocated through the EQIP-OI program to SC by 513% from 2010 to 2011. In 2010 \$122,640 was allocated, in 2011, \$690,341 was allocated.

One target of the second outcome of the project was to conduct three (3) training sessions based on the guidance materials with 100 local soil and water conservation personnel so that their ability to assist specialty crop producers in integrating EQIP-OI practices into an organic transition plan, and then tap into EQIP-OI cost share funding to support organic transition would be enhanced. The CFSA completed a forty (40) page organic production handbook for soil and water personnel. The handbook was distributed to all SC NRCS district conservationists in December of 2011. The handbook was made available on the CFSA website on March 15, 2011. Also, the CFSA exceeded their goal of three meetings, and conducted five training sessions to 99 soil and water conservation personnel in 2011. A pre and post survey was delivered by the CFSA personnel to determine the efficacy of the workshops, and all participants reported a greater understanding of the basic organic principles covered in the new handbook, and discussed by CFSA personnel in their presentations. Outreach to members, and feedback on emails from members have been positive, and the applications to the EQIP-OI program in SC continue to increase.

Goals and Outcomes Achieved

An increased amount (513%) of money allocated through the EQIP-OI program from 2010 to 2011. In 2010, \$122,640 was allocated; in 2011, \$690,341 was allocated. These monies are granted by the USDA, through the EQIP-OI program, to be used exclusively by specialty crop growers in SC who are transitioning to organic production methods. The overwhelming

percentage increase indicates more specialty crop producers were enabled through education, outreach program, and the increased training of NRCS personnel to successfully receive EQIP-OI funding. In 2012, eighty (80) specialty crop producers received EQIP-OI funding. Prior to the execution of this project, twenty one (21) SC producers had received funding.

A pre and post survey was delivered by the CFSA personnel to determine the efficacy of the workshops, and all participants reported a greater understanding of the basic organic principles covered in the new handbook, and discussed by CFSA personnel in their presentations. Outreach to members, and feedback on emails from members have been positive, and the applications to the EQIP-OI program in SC continue to increase.

Beneficiaries

The specialty crop producers in SC who are already organic producers, as well as those transitioning to organic production are the beneficiaries of this project. Specifically, 118 organic specialty crop producers benefitted. Five more producers of specialty crops are currently working under the transitional three year period to obtain their organic certification. The CFSA has worked directly with all of these producers.

Lessons Learned

Providing outreach to farmers who are spread throughout the state was a challenge. The most cost effective way for reaching the largest number of farmers was not always face to face programming but rather heavy reliance on email list serves and the CFSA website.

Developing new conservation practices is determined at the federal level, making it very difficult to have a strong voice in that process. However, we have started communicating with Western and Eastern regional NRCS employees who work with the EQIP-OI program in order to effect change on the national level. WE are doing this by sharing the needs of organic and transitioning farmers in regards to resource concerns and specific practices that help address those concerns while following National Organic Program regulations.

This year, the NRCS national headquarters made many changes to the way the EQIP-OI program will be implemented in 2012. One major change was regionalizing payment schedules and job scenarios for the top fifteen conservation practices in the EQIP program. Because of a very tight deadline for state offices to meet new deadlines while working collectively with other states, it was difficult to have an impact on determining job scenarios that would be offered under the EQIP-OI. However, we will have a voice in that process for conservation practices that will be regionalized in 2012.

Gathering useful information from EQIP-OI program participants was challenging. Site visits was determined to be the best way to gather this information. We would have like to do more site visits but a limited travel budget prevented us from doing more than seven visits. We had to then rely on feedback from email inquiries in order to gather information from program participants.

Getting NRCS district conservationists and soil and water personnel to attend training was difficult. Without the NRCS state office requiring employees to attend such training attendance

was not always good. Had the state office required participation in the May and November trainings, as they did for the December 13th training, we would have been able to reach more district conservationists. The need for their support in this is crucial in order to be successful in reaching more district conservationists.

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South Carolina Horticulture Industry 2011 Seminar Program

South Carolina Nursery and Landscape Association

Project Summary

The SCNLA Education Committee met to select topics and speakers for seminars that covered business issues, environmental sessions that include pest and disease control topics and recertification for many industry professionals that have a Pesticide Applicator license, new plant varieties, product marketing to consumers to increase sales, and good production practices. In the weeks following the committee meeting SCNLA Executive Director, Donna Foster, contacted the recommended speakers and assembled the program. The next step was to create the promotional brochures to advertise the program. A 12-page color brochure was designed and mailed out to potential attendees along with coordinating reminder postcards. Print ads, and free passes were also created and printed.

In early December the first postcard mail-out was distributed. A few weeks later the 12-page brochure was mailed out, then a second mail-out of the postcard was sent. During this time the master mail list was updated as corrected address information came from the Post Office.

On-line registration started in early December 2010. Registrations could also be mailed or faxed. In December Foster sent each of the speakers a packet containing a copy of the program, a list of the audio/visual equipment available, the speaker's hotel room reservation, and a speaker reimbursement form to be completed after the seminar.

A speaker/topic evaluation form was developed. To encourage attendees to complete the forms and turn them in a drawing for \$50 was made from the completed surveys. In the weeks following the seminars the evaluations were tallied. The results will be used to plan other educational programs in the future.

On February 3-5, 2011 the program was held at the Myrtle Beach Convention Center in Myrtle Beach SC. 197 attended the Thursday program (+21 exhibitor/growers who did not have to register separately for seminars). 25 attended the Friday Garden Center program. 30 attended the Friday Computer Imaging seminar. 51 attended the Saturday Landscape Management program. 58 attended the Free Trade Show floor seminars.

Within the month following the program, Foster sent thank you letters and reimbursement checks to the speakers.

Project Approach

Our approach to the Educational Program at the 2011 Trade Show was to provide a wide variety of educational topics for the nursery industry and its stakeholders. The economic recession has hit all segments of the nursery industry and we wanted to continue to provide a quality program that industry members could afford to participate in. The program was built around suggestions from attendees at other similar events, a committee of industry representatives (growers,

landscapers, retail garden centers) and on business issues facing the industry.

Outcomes and Goals Achieved

A total of 26 presentations were given over the 3-day period, to over 382 *participants*. Growers, landscape installers, garden retailers and others in the industry had the opportunity to learn about a variety of production, environmental and business issues. Many participants who needed to acquire re-certification credits to maintain their pesticide applicator's license were able to do so.

A total of 5.5 hours of recertification credits were offered. Selecting topics that met the qualifications for approval was one of the necessary goals. The seminars offered education information as well as the opportunity to earn credits to retain their certification. We developed a program that attracted attendees from across the state to participate. *The following information shows the list of classes approved for SC Pesticide License credits, as well as the number of class participants:*

- *Recognition and Management of Ornamental Plant Diseases (81)*
- *Hard and Fast Rules (60)*
- *New Pesticides (64)*
- *Landscape Pest Management using Pest Resistant Plant Materials (31)*
- *Pesticide Safety – Back to Basics (20)*
- *Water and the Green Industry (51)*

Evaluations were given to the attendees. There was a drawing out of all the completed surveys. The winner was given \$50. We did this to encourage attendees to participate in the evaluation process. *The surveys were geared towards the quality of the speakers and their knowledge of the material shared.* The evaluations were tallied and the results will be used to plan other educational programs. Another outcome of this event was that it drew growers and the customers together; some to meet for the first time, others to renew business relationships. While this was not a primary goal it was an additional benefit.

To help insure a successful event we promoted the event to those in the industry by postcard mail outs and a full color brochure with the entire program. The program was posted on our website and on-line registration was also available. We have developed an extensive mailing list that includes those in the industry beyond our membership. The attendee list was cross-referenced with our existing mailing list and the new attendees were added. Brochures were distributed by many of our member nurseries to their customers to further expand the base of possible attendees.

We feel that we provided a broad selection of topics that would be of interest and helpful to the various segments of the nursery industry. The evaluations indicate the approval of the participants.

Beneficiaries and Lessons Learned

The beneficiaries were those who participated. They gained knowledge to be more productive in their businesses. They earned needed recertification credits. *There were 281.5 credits earned; 5 classes offered one credit each and 1 class offered .5 credit.* The entire vertical integration of the nursery industry benefitted because growers learned to grow and market a better product. Those

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who install the nursery plants and related products learned about new technologies to provide better services and those who retail nursery products learned about new avenues of marketing as well as plant health.

The final consumers (home owners and commercial property owners) also benefit because the industry professionals who attended the seminars are now better trained to provide more and better services.

We will also continue to modify and redesign our evaluation form to provide more specific and useful information.

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Enhancing Value Added AgriBusiness Opportunities

Carolina AgriSolutions Growers Association and Clemson University

Project Summary

South Carolina's specialty crop growers and consumers benefit from a range of agricultural assistance programs and projects. From the South Carolina Department of Agriculture (SCDA) to the Clemson Extension Service and the South Carolina Farm Bureau to the Palmetto Institute, organizations statewide are working to ensure the profitability and sustainability of agriculture for future generations of South Carolinians. In many circumstances these organizations work collaboratively to leverage limited resources in the achievement of program goals. Through its existing efforts such as the Research in Agriculture, Industry and Nature Conference (RAIN), Carolina AgriSolutions Growers Association (CASGA) works to build relationships with statewide agricultural organizations and institutions as a means to enhance agribusiness economic development.

Value-added products derived from specialty crops are numerous and included in those that result from the plant/fruit stabilization or preservation and those that are developed from the constituent parts of the specialty crop. The outcomes of this project are focused on resources that will continue to facilitate the production and processing of the products directly related to the specialty crops grown in SC.

For six years, CASGA nurtured the relationships amongst businesses and organizations engaged in specialty crop production through the RAIN conference. In addition to bringing the partners engaged in production and processing of specialty crops together to share best practices and experiences, the conference serves as a platform to connect producers with resources available through agricultural service organizations.

Based on the identified needs of specialty crop producers and processors, work associated with this project has resulted in the development of a resource directory of information on value-added products and services. The directory serves the needs of producers and processors as an information resource related to: specialty crop production, processing, packaging, marketing, distribution, financial resources and assistance programs, organization and projects. The directory will be available to all specialty crop producers through the Clemson University Extension network. Participation in the RAIN Conference is open to producers outside of the value added sector, but conference programs are specifically targeted at the needs of specialty crop producers.

Project Approach

The approach between CASGA and the Clemson Cooperative Extension Service was to launch two projects that each enhance the delivery of information about value added product procedures and services available to specialty crop producers. Work associated with this project proceeded in a two distinct, yet interrelated parts based on initially proposed objectives. Objectives associated with the project include, but are not limited to:

Objective One: Coordinate and delivery of the Seventh Annual RAIN Conference

Objective Two: Compile value added consumer marketing and distribution model information for specialty crop producers

Objective Three: Develop a SC Value Added Resource Guide for Specialty Crop Producers

Project work began with the planning and delivery of the Seventh Annual RAIN Conference hosted on March 15, 2011 at Francis Marion University in Florence, SC. As a direct follow-up to the conference agenda, CASGA worked with researchers from Clemson University to conduct focus group sessions informing research on methods of linking specialty crop producers with institutional consumers.

Participation in the Conference totaled (114) participants. Overall participation in the event declined in relation to previous conferences and did not achieve goals for participatory increase. Possible reasons for this decline may be due in part to change of venue, competing events and prevailing economic conditions affecting conference participants.

Positive outcomes associated with the conference include the utilization of information presented on specialty crop topics and programs by business participants in their field of work. Additional outcomes have resulted in greater networking capacity for producers of specialty crops and value added products of specialty crops that leads to the cooperative development of business assets that result in growth of specialty crop production in the state.

The RAIN VII Conference was also sponsored by the Clemson Cooperative Extension Service, Francis Marion University Center for Entrepreneurship, and the SC Farm Bureau. Collectively, these organizations paid for all costs with the conference. The monies were used from these additional sponsorships in conjunction with the monies from this grant so that any topics covered that were not specialty crop related were accounted for by one of the other groups involved.

Per a Memorandum of Agreement between Clemson Cooperative Extension and the SC Department of Agriculture entered into on April, 2012, Clemson Cooperative Extension was established as a sub grantee for the above mentioned award. Clemson's obligations include the production of a SC Value Added Producers Guide.

As described in the initial grant proposal, objectives associated with this project are focused on the development of resources that facilitate the production and processing of products directly or indirectly related to the above mentioned specialty crops. Project outcomes include a resource directory of information on value-added products and services.

The resulting guide will serve the needs of producers and processors as an information clearinghouse on resources related to: specialty crop production, processing, packaging, marketing, distribution, financial resources and assistance programs, organization and projects.

Working directly with Dr. David Hughes of the Clemson Institute for Economic and Community Development, project coordinators utilized graduate assistant support for the purposes of conducting background research on similar guides and/or manuals that have been developed in

other states. Such research has resulted in the development of document template that offers information on the following topics, each of which will be covered in the guide:

- Value Added Production Opportunities in SC
- New Venture Start-Up
- Direct Marketing
- Intermediate Marketing
- Product Development
- Regulatory Considerations

Additional information included in the guide addresses market trends/data, and additional programmatic resources available to prospective specialty crop and value added producers.

(500) copies of the guide entitled “SC Value Added Agriculture: A Resource Guide for Value Added Product Producers and Businesses” have been printed in initial draft format and will be distributed through University Extension Network. Given the time limited nature of information provided in the initial draft, follow-up revisions and regular reprints will inevitably be required of the guide. Resources maintained through the SC Market Ready program will be used in support of these future adjustments. All manuals will be available free of charge to any producer participating in related Extension programs or seeking information through Extension network.

The resulting guide covers a range of subject matter relevant to both specialty crop and value added agriculture producers, but all of which are focused on non-commodity farm producers and businesses.

Goals and Outcomes Achieved

Project Goal	Outputs	Output Performance Measure	Outcomes	Outcome Performance Measure	Impacts
Project 1- Host Seventh Annual RAIN Conference	(114) specialty crop producers and growers participating in conference presentations, panels and roundtable discussions.	Number of conference attendees	Increased knowledge and awareness of local foods business potential, demands and opportunities.	Number of conference attendees indicating familiarity with conference topics and/or concepts.	Increased awareness of local food system opportunities for specialty crop and value added product businesses.
	Develop summary input from attendees on the development potential for local/regional	Results of locals foods planning roundtable discussions	Summary of roundtable discussions on steps that may be taken in support of developing local food	Summarized findings related to local foods planning discussions facilitated at conference.	Regional awareness of steps that may be taken in support of local food programming for specialty

	food system.		systems.		crop producers.
Project 2- Compile SC Value Added Producers Guide	Hard copy and digital versions of resource guide for value added producers; associated web based resource material and framework for material revisions	Number of printed resource guides	(500) hard copy resources guides entitled	Number of resource guides that are distributed to specialty crop producers and value added producers through Extension efforts.	Improved capacity of specialty crop and value added produce producers to develop business models. Enhanced awareness of resources available through public and private agricultural service organization to develop value and specialty crop businesses

Outcomes associated with the RAIN conference included the utilization of information presented on specialty crop topics and programs by business participants in their field of work. Additional outcomes included greater networking capacity for producers of specialty crops and products that will lead to the cooperative development of business assets to facilitate growth in the production of specialty crops.

Each of the outcomes was intended to enhance the operating environment for SC specialty crop producers and processors. Resources developed through the value-added resources directory (or guide) will enable producers and processors to access information related to equipment and services that are utilized in their field of work. Likewise, consumer product research and statistics will enable specialty crop producers to make informed decisions regarding marketing, packaging and distribution, thereby enhancing their individual business operating model.

Participation in previous RAIN Conference events increased gradually over the events 6-year history. The previous year's attendance of approximately 150 participants was used as a baseline number for increasing participation in RAIN VII (2011). Conference planners sought to expand the 2011 program by approximately 20% through program, marketing, and advertising resources made available through this grant.

In spite of approximately a 20% decline in participation in the 2011 conference, all attendees surveyed at the conclusion of the event indicated great success with the program and increased knowledge related to topics presented. Given the expandable nature of the value added producers guide and potential for integration in future training formats, many additional stakeholders may benefit from information similar to that presented at the conference event.

Beneficiaries

Beneficiaries of this project include not only those (144) specialty crop and value added producers that participated directly in the RAIN Conference proceedings, but also those that take advantage of the Value Added Resource Guide. The guide will be used as a template for future trainings offered for small farm and food entrepreneurs through the SC Market Ready program and other related Extension efforts.

(500) copies of the guide entitled “SC Value Added Agriculture: A Resource Guide for Value-Added Product Producers and Businesses” will be distributed through Clemson Extension office throughout the state and be made available by request to any producer seeking copies. The guide template will be continually revised in accordance with needed changes and will be posted in digital form on the Clemson Extension website.

Lessons Learned

Following the delivery of the Seventh Annual RAIN Conference, CASGA leadership determined that completion of subsequent project goals would need more involvement from project partners. In that project coordinators maintained a need for the items proposed in the original proposal, a creative solution that leveraged the support of organizations with symbiotic objectives was sought. In response, Clemson Extension personnel were contacted to facilitate the development of resource materials in support of specialty crop producers, and those whom operate business using specialty crops to make value-added products.

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Fresh Fruit Promotions and Consumer Education Materials geared towards the Increased Consumption of SC Grown Peaches and Watermelons

South Carolina Peach Council and South Carolina Watermelon Association

Project Summary

The SC Peach Council and the SC Watermelon Association shared the goals of this project; to increase the awareness among consumers of the benefits of eating fresh SC Grown fruit when in season. Peaches and watermelons are both grown in abundance in SC. Combined, these two industries have an annual value of more than \$100 million. The purpose of the project was for consumers to receive new recipe information and ideas about these fruits from the new brochures, recipe booklets, website and social media posts, commodity days at the SC Farmers Market, as well as many other public engagements.

Project Approach

With the purpose of this project being to inform both adults and children of the nutritional benefits of peaches and watermelons, as well as increasing the understanding of the availability of fruit grown locally in SC, both commodity organizations used funding from this project to develop new brochures and educational materials, and promotional display banners. More than 5,000 pieces of educational materials were distributed to consumers at numerous events, including but not limited to the following:

- SC State Fair, Information booths set up, materials distributed (approximately 3000 booth visits and material pieces given)
- SC Welcome Centers, Taste testings of fresh fruit at 12 centers (numbers of guests varied between 75 and 200+ persons at each Welcome Center promotion, depending on weather and location of the Welcome Center in the state)
- EdVenture Children's Museum, samples of fruits given (1 peach, 1 slice watermelon to 300+ children that attended; recipes and brochures distributed to parents)
- 'Peach Day' at the Farmers Market, 1 peach and 1 recipe booklet given to each visitor (approximately 850 persons)
- 'Watermelon Day' at the Farmers Market, 1 slice and one brochure given to each visitor (approximately 1200 persons)
- Retail in-store tasting demos, watermelon association only, 1 slice per customer during promotional timeframe (thirty stores, ten melons used at each store, twenty slices per melon, equals approximately 6000 personal interactions with consumers)
- Festivals held throughout the State, watermelon association only (two festivals; approximately 5000 persons attended both festivals combined)

In 2012, the SC Peach Council was able to hire a full time summer intern through the funds of this grant. The intern focused all efforts in promoting the sales and consumption of SC peaches on all social media outlets, and general public relations efforts. Accomplishments made include a Twitter account being created (99 followers, currently), a Facebook Fan Page (297 followers, currently) created, and the entire SC Peach Council website being redesigned and re-launched as www.scpeach.org.

Goals and Outcomes Achieved

The following goals were met:

- Recipe cards, brochures and display banners were professionally designed and printed for both commodities.
 - 3000 recipe cards and 2000 brochures
 - 4 banners
- Staff members and representatives travelled throughout the state promoting SC Grown peaches and watermelons.
 - Retail store appearances (60), farmers market days (4), welcome center giveaways (12 dates)
- The importance of fresh fruit consumption was communicated both in public and social networking venues.
 - State fair appearances by SC Watermelon spokesperson (4 dates), increased presence for SC Peaches on social media outlets (99 Twitter followers, 297 Facebook Page likes), distribution of materials at events designed for children at EdVenture (2 dates), SCETV 'Making It Grow' Television show (2 dates)
- Educational meetings between the growers and the spokespersons took place via farm tour visits. The farm tour visits are truly educational sessions, as the spokespersons were able to talk one on one with the watermelon producers, and learn about harvest times, varietal differences, volume expectations, and other information to assist in the marketing of their fruit.
 - Farm tour visits (4 dates)
- Increased sales were reported by participating retailers in post-promotional follow up communications. The smallest volume percent of sales lift was 34%; the largest volume percent of sales lift was 133%. Both of these indicate peach sales. The watermelon association determined that an average increase of 12% in volume sales took place during the in store taste demonstrations.
- The National Watermelon Association Meeting was attended by the two spokespersons and Director of the SCWA, but all costs associated with this meeting, as well as the local in state SCWA growers meetings were incurred by the SCWA, and not charged to this grant, as initially indicated.

Beneficiaries

The watermelon and peach growers in the state were the direct beneficiaries. Collectively, there are 97 growers of these commodities. Sales of both commodities increased more than 10% during the time frame of this grant project.

Lessons Learned

Compiling the information for reporting purposes on brochures is difficult. There is no follow up with those who received brochures and recipe ideas to see how much fruit was purchased. From here forward, neither association will be using grant funds for the purchase of brochures or recipe cards.

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South Carolina Peach Facts

About our State Fruit

Peaches were first cultivated in ancient China. They are part of the plant genus *Prunus* spp., which also includes other stone fruits like cherries, almonds and apples.

The peach is a symbol of immortality in Taoist mythology. Numerous books, poems and songs were written in ancient China describing the pink peach blossoms, peach trees and peach orchards. The magical fruit spread westward to Persia and Rome via caravan trade on the Silk Road in the second century B.C. From Rome, its popularity spread throughout Europe.

A horticulturist by the name of George Minifie supposedly brought the first peaches from England to the Colonies in the early seventeenth century, planting them at his estate in Virginia. Various American Indian tribes are credited with spreading the peach tree across the United States, taking seeds along with them and planting as they roved the country. Although Thomas Jefferson had peach trees at Monticello, southern farmers did not begin commercial production of peaches until the nineteenth century. In 1924, the first rail car loaded with peaches made its way north over the rolling hills of the upstate and into the commercial marketplace.

The peach is still revered as a delicious and healthy summer fruit. It is the State fruit of South Carolina, and is celebrated throughout the growing season in festivals, pageants, parades and kitchens worldwide.

South Carolina Peach Production

South Carolina is ranked as second in the production of peaches in the US, behind California. Over 5 million boxes of peaches are commercially shipped each season from the eight packers in the state. When combined with basket sales, the South Carolina peach industry each year contributes more than \$60 million to the state's agribusiness economy.

South Carolina peaches are available from mid-May through September. The peak of the season is in July and August.

Over 40 varieties of peaches are grown in the state. East variety is harvested for approximately ten days, so the varieties available are always changing as the season progresses. This ensures a constant and steady supply of SC peaches throughout the season

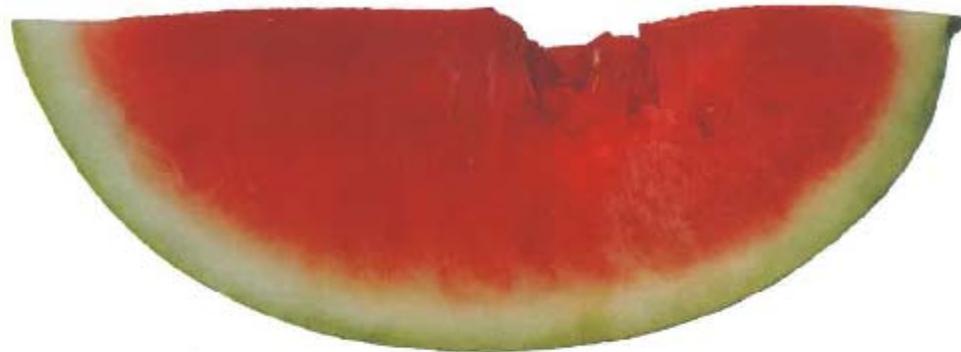
Most South Carolina peaches are grown in three distinct areas of the state; *the Ridge, the Sandhills, the Piedmont.*



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WHEN PERFORMANCE IS DOWN TO THE SCIENCE OF REPLENISHMENT

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To learn more about the science, research, and discoveries around watermelon, visit www.watermelon.org



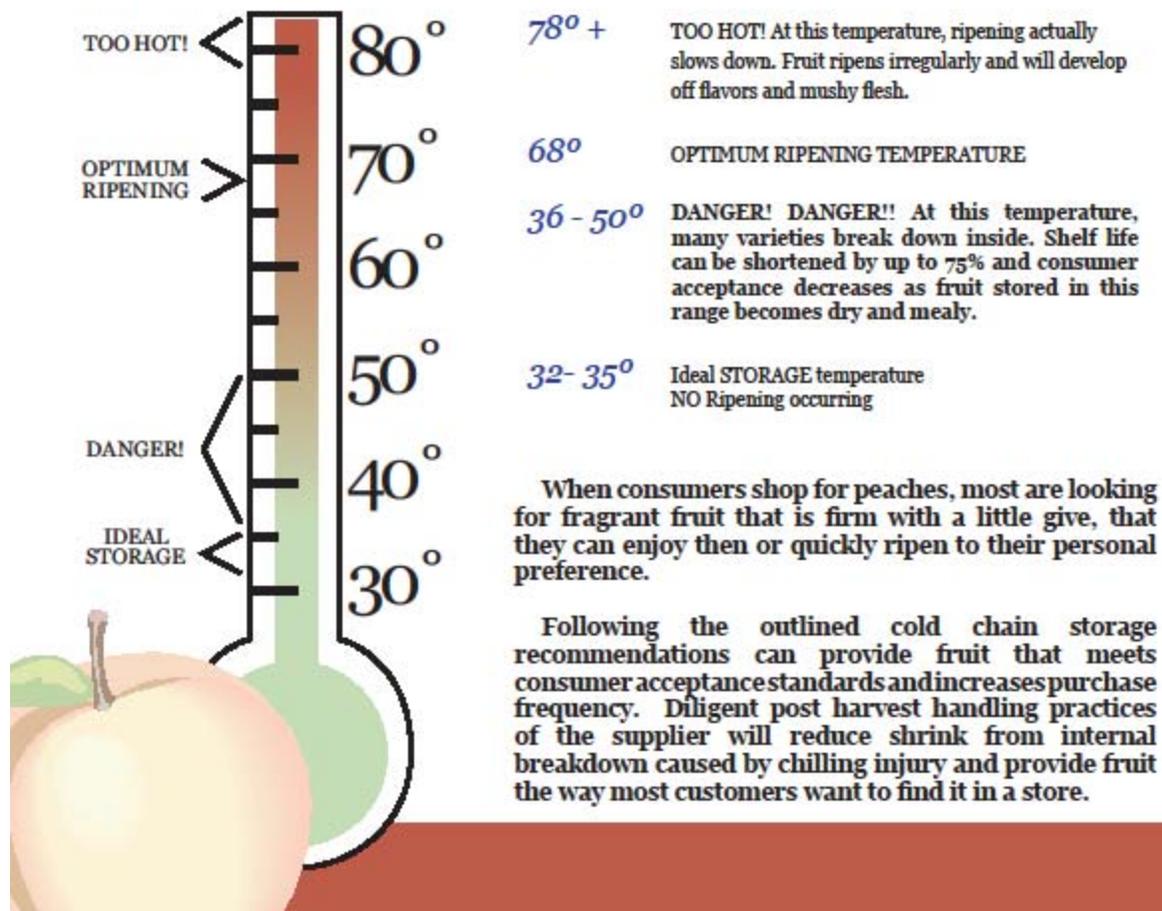
South Carolina PEACH COUNCIL

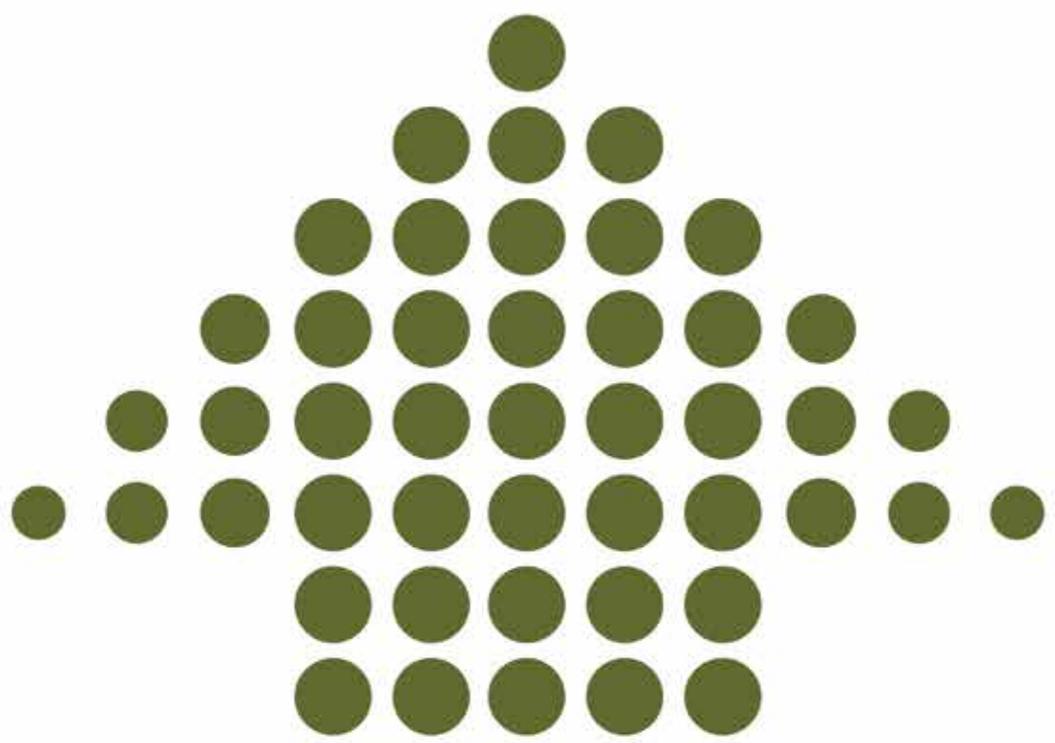
POST HARVEST CARE OF STONE FRUITS

Each summer, more than 80% of households purchase peaches. To most consumers, the word "peach" is synonymous with "summertime". The unique characteristics of the peach, their sweet, juicy, flavor coupled with the soft fuzz and gentle fragrance of the fruit, for many brings back equally sweet memories of summer's past. But the fruit doesn't sell on nostalgia alone.

Providing a great peach eating experience to the customer requires proper fruit handling throughout the supply chain. Stone fruit is temperature-sensitive, and is especially so before ripening. There are two safe ranges in which to store unripened stone fruit: either very cold, (32°-35°F) or at room temperature. Very cold temperatures are suitable for storage, as they will keep the ripening process on hold. Room-temperature conditions allow ripening to progress. Temperatures in between, from 36° - 50° F, which includes typical cooler temperatures, are dangerous to unripened stone fruit, as they can cause chilling injury and internal tissue breakdown. This translates to loss of flavor and the development of dry and mealy fruit for the consumer.

Once fruit is ripened, it can be safely stored at typical room temperatures.





PRODUCT
DEVELOPMENT

MARKETING

REGULATIONS



Growing SC Agriculture:

A Resource Guide for Value Added
Producers & Businesses

CLEMSON[®]
COOPERATIVE EXTENSION

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INTRODUCTION

In South Carolina, as well as in the rest of the United States, agriculture is constantly changing. Customers are becoming more and more interested in not only the food itself, but also in the land on which the food is grown. Farming is no longer only abundant on large scale operations, but small and medium sized farms are becoming more popular along with the presence of growing food in small gardens and greenhouses in both rural and urban landscapes. With all of the growth that is occurring in agriculture, South Carolina's food and agricultural markets are poised and ready to expand and evolve.

The rise in demand and interest for locally grown and processed, healthy and nutritious food products in South Carolina has created a market full of opportunities for new and current agricultural producers to succeed.

This guide serves as a resource for South Carolina producers, processors, distributors, local food groups and others interested in expanding and strengthening the state's food and agriculture industry. This guide is intended to be a resource for all agricultural related

businesses regardless of size, production practices or the diversity of products. From information on how to select a market that best fits an individual farm operation, to food safety, pricing and market development, we hope you will find this guide useful to your business. However, this guide is just to be used as a reference and any specific actions taken should be consulted with a regulatory agency or an attorney for further guidance.

THE SOUTH CAROLINA GROWING SEASON

The growing season in South Carolina typically varies from the mountains to the Lowcountry. The southern portion of the state averages around 290 days of growing season, whereas the northwestern portion of the state usually has a growing season less than 190 days. The state experiences four seasons, including a pretty mild winter when snowfall may occur around one to three times a year. Because it is located on the eastern coast, South Carolina rainfall is typically enhanced due to the presence of tropical storms off the coast in the summer and fall months. The climate here is capable of growing a variety of crops, from cotton to peaches, wheat, and soybeans throughout the state.



SECTION 1: VALUE ADDED AGRICULTURE PRODUCTION IN SOUTH CAROLINA

Many farmers or food entrepreneurs add value to crops through processing. As these crops are harvested and then turned in to another food product, value is added to the product, and often consumers are willing to pay more for a ready to use food product than they are for the initial raw crop. Some examples of value added agriculture products include jams, jellies, and canned vegetables. These items often have a longer shelf life than raw crops, and are therefore considered more valuable in some markets. Though value-added agriculture also encompasses organic production, season extension, and any other activities or processes that yield an increase in the value of the product, this section is referencing a processed food product.

If you think that value-added production sounds like something of interest to you, you need to make sure that you fully understand what all is required of producing a value-added product for sale. Depending upon the products that you intend to sell, this type of production can be very time and labor intensive. Finding your niche in the market can also be challenging at times, and there are many regulations and requirements that must be met in order to produce a value-added product. In South Carolina, as in most states, value-added products must be produced in an approved and certified kitchen. Consumer food safety is a major priority in producing value-added products for sale and strict requirements are in place so as to assure that. By following the regulations and producing food safely, you benefit through things like customer loyalty, lowered liability risk and insurance costs, and more confidence in the quality of your product.

Regulations intended to assure food safety start at the federal level. The Food and Drug Administration (FDA) regulates food producers, regardless of the size of the business. The state of South Carolina then adopts and incorporates those federal regulations into state requirements that producers must comply with. South Carolina has specific procedures set aside for getting licensed to produce value-added agricultural products.

It is important to understand that depending on the products that you would like to sell, you will potentially need to obtain multiple permits, and must meet the same facility and food handling and manufacturing process standards as any other food manufacturer in the state.

If you want to make a product or products that can be sold directly to the consumer, you will have to meet the Department of Health and Environmental Control's (DHEC) requirements for a retail food establishment permit. This basically means that you must have a separate, certified kitchen, and also meet all of the DHEC or the SC Department of Agriculture (SCDA) requirements listed at this website, www.scdhec.gov/environment/envhealth/food/htm/food-safety-regulations.htm, prior to applying for a permit. You are also going to need to provide further information on how the product is processed and depending upon the product, will have to meet the requirements of the South Carolina Department of Agriculture and the South Carolina Meat and Poultry Inspection Department.

In order to meet the certified kitchen requirements in South Carolina, you have a few options. Basically a certified, also known as a commercial kitchen, is a kitchen that is separate from your home that you use to prepare your products. These kitchens must meet state and local standards in order for it to be certified and meet the regulations for producing value-added products. Depending on the product processed in the kitchen, SCDA, SCDHEC, or both could be the regulatory agency for your operation. If you decide to build your own kitchen facility, keep in mind that the input costs can be high. The licensing process to build a certified kitchen can be costly, and you should contact DHEC and the Department of Agriculture prior to construction to discuss their requirements.

An alternative would be to rent a pre-existing certified kitchen. These kitchens are typically already equipped with the essential equipment and have met the regulations required for certification, so you will not have to waste time and money trying to get a facility built and certified yourself. When renting a space, you need to make sure that all of the equipment that you will need is available in that facility. Another popular alternative to building your own certified kitchen in South Carolina is to use a kitchen incubator or a shared use kitchen. Kitchen incubator projects are catching interest across the state and can be very useful for beginning food entrepreneurs to test products and their business model. A kitchen incubator is a certified kitchen that you can typically rent by the hour or day and is equipped with the items

that you will need to prepare, package, and label your product. Often times a kitchen incubator will have staff that will also assist you on the business side of your food venture in addition to the production.

Another popular alternative to having your own certified kitchen is to use a co-packer. A co-packer is a company that takes your raw inputs and your recipe and then processes, packages, and labels them for you. These types of facilities are popular because they save farmers the valuable time that they would be spending doing all of the necessary production work themselves.

If you want to sell your products wholesale, or to other intermediate markets, you will need to make sure that you meet all regulations and requirements listed under the South Carolina Food and Cosmetics Act, which is administered by the Department of Agriculture. You need to do your research prior to starting your production, and make sure that you comply with regulations set forth by the South Carolina Department of Agriculture as well as the South Carolina Department of Health and Environmental Control.

SOUTH CAROLINA'S COTTAGE FOOD LAW

In South Carolina, the Cottage Food Law exists to allow producers of certain food products who aim to only sell directly to the consumer for their own personal use, such as at farmers markets, to be exempt from the regulations requiring the use of a certified kitchen. People who qualify for this exemption must make under \$15,000 per year in gross sales, and are very limited in what can be produced in their home kitchen for sale. To read more on the South Carolina Cottage Food Law, go to the website at www.cottagefoods.org/laws/usa/south-carolina.



RESOURCES FOR VALUE-ADDED FOOD PROCESSING

Company	Phone	E-mail/ Website
Edgewater Kitchens 2487 Ashley River Road, Charleston, SC 29414	843-225-6263	magnus@edgewaterkitchens.com edgewaterkitchens.com
Applause Catering, Inc. 1208 Laurel St, Columbia, SC 29217	803-933-9580 803-351-1221	applausecatering@gmail.com www.applausecatering.net
DER Kitchen 2501 Main St, Columbia, SC 29201	803-779-3003 803-261-8383	smiley@derkitchen.com www.derkitchen.com
Blue Ridge Food Ventures Candler Knob Rd, Asheville, NC 28806	828-348-0128 828-348-0130	mlsurgi@awnc.org www.blueridgefoodventures.org
Cimply Cydni Commercial Kitchen 100 Hillsborough Rd, Carrboro, NC 27510	919-563-1089 919-585-3426	cooking@cimplicydni.com www.cimplicydni.com
Tripodi's Catering Kitchen 1920 Dairyland Rd, Chapel Hill, NC 27516	919-969-8019 919-619-3448	sambond370@aol.com www.the-kitch.com
Shared Commercial Kitchen for Rent Magnolia Estates Dr. Cornelius, NC 28031	704-953-0987	barchocolateclt@gmail.com www.the-kitch.com
The Cookery 1101 W Chapel Hill St, Durham, NC 27701	919-908-8974	hello@DurhamCookery.com durhamcookery.com
Piedmont Food & Ag Processing Center 500 Valley Forge Rd, Hillsborough, NC 27278	919-245-2336	mroybal@co.orange.nc.us www.orangecountyfarms.org
Piccatas 909 Catering Co & Shared Use Kitchen 909 Arendell St, Morehead City, NC 28557	252-728-8888 252-240-3380	piccatascatering@hotmail.com www.piccatas.com/909kitchenhome.htm
SoCo Food INC. 136 Fayetteville St, Pittsboro, NC 27312	919-259-0699	socomarket@gmail.com www.socomarket.com
Atlanta Commercial Kitchens - Independent Kitchen 1708 Peachtree St NW #107, Atlanta, GA 30309Solutions	404-913-4111	info@CommercialKitchensForRent.net www.CommercialKitchensForRent.net
The Shared Incubator Kitchen @ Bella Cucina Food & Farm Hub 1708 Murphy Ave SW, Atlanta, GA 30310	404-987-6958 404-273-7367	doug@commericalkitchensforrent.net commercialkitchensforrent.net/our-shared-kitchens-commissary-kitchens-food-truck-kitchens
Shared Kitchens, LLC 215 Laredo Dr, Decatur, GA 30030	404-377-3151	tom@sharedkitchens.com sharedkitchens.com
Atlanta Performance Kitchens 2045 Attic Pkwy, Kennesaw, GA 30152	770-514-8814	www.costapastas.com
Shared Kitchen Excellent Desserts Rentals 245 Scenic Hwy, Lawrenceville, GA 30046	404 484 4588	corneliafloreia@yahoo.com www.247sharedkitchen.com
The Collective Kitchen 2995 Johnson Ferry Rd, Marietta, GA 30062	770-650-8442	info@thecollectivekitchen.net www.thecollectivekitchen.net
Commercial Kitchen Rentals 2671 Centerville Hwy, Snellville, GA 30078	770-598-8031 678-624-1646	Faithhealth@gmail.com
Shared Kitchens, LLC 3635 Burnette Park Dr, Suwanee, GA 30024	770-945-9494 404-932-4959	julie@sharedkitchens.com www.sharedkitchens.com
BeesKnees Kitchen 6687 Bells Ferry Rd, Woodstock, GA 30189	771-591-4000	cook@beeskneeskitchen.net www.beeskneeskitchen.net
Creative Foods, Inc. 5912 Campbell St. Hanahan, SC 29410	843-747-5102	geargeo@creativefoodinc.com www.creativefoodinc.com

Company	Phone	E-mail/ Website
Taylor Manufacturing, Inc. PO Box 518 1585 US hwy. 701 S, Elizabethtown, NC 28337	800-545-2293	tmi@intrstar.net www.taylormfg.com
C.F. Sauer Foods (Manufacturing Mayonnaise & Salad Dressings) 728 N. Main Street Greenville, SC 29662	800-876-2433	www.cfsfoods.com
Hillside Orchard Farms 105 Mitcham Circle Tiger, GA 30576	866-782-4995	kiley@hillsideorchard.com www.hillsideorchard.com
Braswell's (A.M Braswell Jr. Food Co) 226 N Zetterower Ave. Statesboro, GA 30458	912-764-6191	www.braswells.com
Flavorcraft, LLC 2123 Watterson Trail Louisville KY 40299	502-240-0076 Fax 502-240-0650	www.flavorcraftllc.com
Golding Farms Foods, Inc 6061 Gun Club Road Winston-Salem NC 27103	336 766-6161 Fax 336 766-3131	www.goldingfarmsfoods.com
Bobbee's Bottling 3959 Highway 39 S. Louisburg, NC 27549	919-496-4286	www.bobbeebottling.com
The Wizard's Cauldron, Inc. 878 Firetower Road Yanceyville, NC 27379	702-492-7783 Fax 336-694-5284	ron@wizardscauldron.com www.wizardscauldron.com

FOOD SAFETY FOR INDUSTRY

Food2Market is a Clemson Extension program designed to help food entrepreneurs through the many steps of food safety regulations that are necessary to prepare food products for sale. Our faculty and staff have extensive knowledge in food safety, food processing and packaging and the federal and state regulations that are necessary in South Carolina to produce and market your products for sale. Also provides information on product and nutritional testing.

www.clemson.edu/extension/food_nutrition/food2market/

South Carolina Department of Health and Environmental Control

An overview of requirements for producing specialty food products with links to agencies and their specific regulations.

www.scdhec.gov/environment/envhealth/food/htm/specialty-food-products.htm

South Carolina Department of Agriculture Food Safety and Compliance Program

agriculture.sc.gov/foodsafetyandcompliance

SC Meat and Poultry Inspection Department

www.clemson.edu/public/lph/scmpid/

An Entrepreneur's Guide to Starting a New Agricultural Enterprise: Managing Risk

University of Delaware, Cooperative Extension

Please note the other states' regulations may differ, but this is to be used as a guide.

www.mredc.umd.edu/Documents/Agritourism/EntrepreneursGuide.pdf

Checklist for Starting a Value-added Agriculture Enterprise

North Carolina State University, College of Agriculture and Life Sciences

Please note the other states' regulations may differ, but this is to be used as a guide.

www.agmrc.org/media/cms/checklist_F3BEA4371F662.pdf



SECTION 2: NEW VENTURE START UP

When you decide that you are ready to start up a new agricultural related business, or if you already have one and want to improve upon your practices, it is important to create a business plan. Regardless of the goods that you are trying to market, a business takes an investment of both time and money in order to be successful. A business plan can help you examine production methods, identify opportunities in the market, and aid in communicating your ideas to business partners, lenders, and family members. Developing a business plan is vital in that it helps you to truly define your business by setting goals and providing a means to measure your progress.

A business plan gives your company the structure needed to increase your chance of success. By writing your plan, you can measure the resources that you have and those that you will need in order to achieve your goals. It also enables you to examine the capital that you currently have and then identify what materials you will need in order to carry out your production. It is also important to make sure that your business plan contains cost and income projections, which can help you to secure a loan or an investor to help you start up your business if you need to do so.

This business plan should have a realistic view of your expectations, goals, and long-term objectives. Through developing and drafting your business plan, you gain a clear perspective on what you want out of your business, as well as how and when you can reach those objectives. Through the analysis of your business objectives, you are able to determine the feasibility of your goals, and can adjust your company's path according to your findings. By creating a business plan and adhering to your plan you are giving your business a sense of structure and direction that will increase your chances of success in the market.

RESOURCES FOR GETTING STARTED

Agricultural Business Planning Templates and Resources

www.https://attra.ncat.org

Start2Farm.gov

Provides information and resources for training and assistance programs for beginning farmers.

start2farm.gov/

USDA Farm Service Agency

Programs to help stabilize farm income, conserve land and water resources, and provide credit to new or disadvantaged farmers and ranchers, and help farm operations recover from the effects of disaster.

www.fsa.usda.gov

USDA Rural Development

Business and Industry Loan Guarantees for acquisition, start-up, and expansion of rural businesses that create employment.

Value Added Producer Grants

www.rurdev.usda.gov/BCP_VAPG.html

Other Federal Grant Programs

www.grants.gov

South Carolina USDA Rural Development

803- 765-5163 Fax: 803- 765-5633

www.rurdev.usda.gov/sc_home.html

Small Business Administration (SBA) South Carolina District

803-765-5377 Fax: 803-765-5962

www.sba.gov/about-offices-content/2/3145

South Carolina SCORE Chapters

A non-profit organization that provide education and mentorship to help small businesses get off the ground.

Coastal SCORE

843 -727-4778

Grand Strand SCORE (aka mbscore)

843- 918-1079

Midlands SCORE

803- 765-5131

Piedmont SCORE

864- 271-3638

SC Lowcountry SCORE

843- 785-7107

South Central Region SCORE
803- 641-1111



Agricultural Marketing Resource Center (AgMRC)

Iowa State University, Ames, Iowa

Business advice, strategies and resources to farmers and ranchers, including how to use grants, branding, business communication skills, customer relations, and feasibility studies.

www.agmrc.org/business_development

Beginning Farmers: An Online Resource for Farmers, Researchers, and Policy Makers

Michigan State University, Department of Community, Agriculture, Recreation, and Resource Studies

www.beginningfarmers.org

Building a Sustainable Business, A Guide to Developing a Business Plan for Farms and Rural Businesses

Minnesota Institute for Sustainable Agriculture, St. Paul, MN; and the Sustainable Agriculture Network, Beltsville, MD

www.misa.umn.edu/Business_Planning_and_Goal_Setting.html

Clemson University Cooperative Extension Enterprise Budgets

Budget tools designed to project costs and returns for South Carolina crop and livestock enterprises.

www.clemson.edu/extension/aes/budgets/

Budget Projection for Vegetable Production

Iowa State University Extension

Enterprise budgeting tool for vegetable growers to help estimate the costs and revenue associated with producing a product.

www.extension.iastate.edu/agdm/decisionaidscd.html

Enterprise Budgets

Center for Integrated Agricultural Systems, University of Wisconsin-Madison

Enterprise budgeting tools for dairy sheep, dairy goats, poultry, and specialty foods

www.cias.wisc.edu

Beginning Farming 101 Online Course

Cornell University, College of Agriculture and Life Sciences

Publicly available materials on a stand-alone website coupled with a virtual classroom for registered students only.

www.smallfarms.cornell.edu

“AgPlan” Free Business Planning

University of Minnesota

Designed specifically for farms and agricultural businesses. AgPlan provides guidance in writing business plans.

www.agplan.umn.edu

Penn State Agricultural Marketing

A website that is full of information covering many topics including wholesale and retail marketing, farmers markets, beginning farmers, business management, financial tools and much more.

agmarketing.extension.psu.edu

National Sustainable Agriculture Information Service

Sustainable agriculture and organic farming news, events, and funding opportunities, plus in-depth publications on production practices, alternative crop and livestock enterprises, innovative marketing, organic certifications, and highlights of local, regional, USDA, and other federal sustainable agriculture activities.

www.attra.ncat.org





SECTION 3: MARKETING

SELECTING A MARKET FOR YOUR BUSINESS

When beginning to market your products, you must first determine which market is the best fit for you and your business. Keep in mind that if you want to directly sell your products to consumers, then you are responsible for finding and attracting those consumers as well as negotiating the sale to completion. When you take on a direct marketing scheme, you, as the producer are responsible for preparing, packaging, pricing, and even delivery of your products to the buyers. As the direct contact for consumers, you must learn and possess the skills required for you to carry out all production steps necessary to successfully sell your product and grow your business into a stable and successful one.

It is also important to possess specific skills when marketing and selling your products to a middle party, such as a retailer, wholesaler, or processor. Even though you personally do not have to deal with the consumer, you must still possess the skills to meet your buyer's needs and wants.

When it comes down to picking a marketing strategy for your business, you must take into account your own personal preferences, strengths, and weaknesses, as well as those of your business. It is also important to know what products you aim to produce and at what quantity you feel comfortable, as well as the financial risk that you are willing to take on in growing your business. You must also decide how much contact you would like to have with the consumer when creating your marketing plan so that you can be prepared to meet the licensing, regulatory, and safety needs for the market in which you intend to sell your products.

MARKET OPTIONS

There are many options available for marketing your agriculture and food products. You can choose to start with one marketing approach, or you can use a combination of approaches and find what in those approaches works best for your business. It is more common to use the combination of approaches because it allows you to take parts of other approaches that you like, apply them, and then see which parts are most beneficial to your business. Once you have decided upon which marketing approaches you will use and which market you will enter, make sure that you are aware of the time and effort commitments that you are holding yourself to upon entry into the market. Be sure to not over extend yourself, and realize that you can always expand production and hire more staff as your business grows and you become more experienced in the marketplace.

DIRECT MARKETING

Direct marketing is selling your agriculture and food products straight to the consumers for their personal use of the products. Direct marketing cuts out the middleman, so this method allows for producers and consumers to directly connect and interact at the point of sale. Some confusion can arise on the topic of direct marketing, because this term is also used to describe the sale of products directly from the producer to the grocery store, restaurant, or caterer who will then prepare the product and sell it again. These types of sales are actually considered sales to intermediate buyers, which will be covered later in this guide. By using the direct marketing approach, consumers often make a greater connection with where the products come from and their story, something that is becoming more important and popular amongst consumers. Consumers want to be informed on the products that they are using, and a direct marketing approach provides them the opportunity to ask questions on how the product was grown or processed, as well as get ideas for recipes and ways to prepare the good. Some common examples of direct marketing include farmers markets, agricultural tourism, community supported agriculture (CSAs), pick-your-own and U-pick farms, online or catalog marketing, and on-farm stores and roadside stands.

As seen in any market, there are both benefits and challenges to using direct marketing. Agriculture and food producers who enter into a direct market often benefit from being able to charge higher prices than in the conventional market. The benefits associated with direct marketing include giving you the ability



to set your own product price and get a better price by simplifying the steps in the distribution systems, through “cutting out the middleman.” Small to medium sized farmers typically do very well in a direct market because although they cannot produce large quantities of their products, they are able to market their goods directly to consumers as unique and special, something that customers tend to value.

Direct marketing is also beneficial in that it allows you direct contact with your consumers who can give you almost immediate feedback on their reactions to changes in products, prices, and varieties. Producers begin to build relationships with their consumers, and in return, these consumers tend to become more loyal to the producers with which they interact. Producers who enter into direct marketing often reap enjoyment and fulfillment from being a part of the entire process from start to finish of selling their products, and being able to interact with consumers and see the appreciation and enjoyment that they get from the products often increases the happiness of the producer.

Direct marketing may not be for everyone, and can be challenging in that there is a lot of importance placed on having excellent people skills and making sure that you are committed to customer relations, areas that not all people excel in. Direct marketing can also be challenging in that it requires a great deal of your time as a producer. As the producer, you are responsible for allotting the time needed to harvest, wash, package, transport, set up and sell your products, which can prove challenging for some.

Many successful producers in a direct market work very hard to produce and market high quality products to their consumers. The focus on quality and freshness works to attract enough customers who are willing to pay the given price so that producers can make a profit. Direct marketing really works to foster economic development on a local basis, as well as connects producers and consumers in the community so that they can build relationships that will last in the future.

For many current and potential consumers, the type and location of direct markets plays a huge role in their demand for products. People who shop in direct markets often seek the ability to make a personal connection with the farmer or producer, and are very interested in the story behind the product. Many successful ventures in direct markets often include an educational and social component, which makes shopping at the venue much more interesting and appealing for the consumer. There are several methods of direct marketing to choose from. These methods are outlined in the remainder of this section.

FARMERS MARKETS

Farmers markets are one of the oldest means of direct marketing used by small farmers in the United States. In the last decade, the popularity of farmers markets as a marketing method has taken off, and many shoppers prefer attending farmers markets over other locations to get their fresh goods each week.

A farmers market is a place where many local food growers and processors go on a certain day and time each week to sell their products to consumers. These sites are often parking lots or parks in which producers can rent booths to sell their products. Most of the farmers markets in South Carolina operate seasonally,

typically early spring through late fall, which is the traditional growing season. Some farmers markets, like the South Carolina State Farmers Market is open year round. Many farmers markets provide almost a festival like experience, with food to sample, demonstrations, and even live music at times, which helps to create an enjoyable atmosphere for both the vendors and the customers.

Farmers markets provide a good opportunity for producers interested in testing the market because the barriers to entry are relatively low. Most farmers markets cost the vendor a relatively low rental fee for their booth, transportation to and from the market, and a few other inexpensive inputs. The low input costs associated with farmers markets allows new producers, or even those just curious about direct marketing to give it a try without putting their business at a great financial risk. Farmers markets are often even beneficial to vendors because products tend to sell at the retail or above-retail prices, allowing the producers to make a good profit on their venture.

Different farmers markets are held on different days of the week, so oftentimes farmers participate in several different markets in order to make more money. It is also important to look into the location, rules, licensing regulations, and insurance requirements when deciding on which farmers markets to participate in.

In order to assure the success of the farmers market in which you choose to participate, it is vital that you maintain good working relationships with the market manager and the other vendors. Think of it this way, if a customer enjoys everyone in the market, they are much more likely to come back week after week and become loyal customers. It is important to uphold a sense of community and friendship in a farmers market setting because you never know when you might learn something new that could aid your business from another vendor.

Another key factor in your success at farmers markets is the location of the market itself. The market should be located close enough to your farm so that it is easy for you to continue to go to the market on a weekly basis, as you will begin to develop loyal customers if you are present on a regular basis. The market should be highly visible from the roads and walkways. These locations should also cater to you as a vendor in that they should have access to power, restrooms, and telephones – anything that you may find a necessity to carry out the sale of your products. Most importantly they should make it easy for customers to attend and shop by providing ample access to parking and other modes of transportation.



Benefits and Challenges of Farmers Markets

Farmers markets are very beneficial to vendors in that they provide a lot of flexibility and learning opportunities in marketing and selling products. While participating in a farmers market, you learn to price your product, build a customer base, learn from customers, sell and try different types of products, and build your business' reputation. New vendors can reach out to veteran vendors and learn what typically works and what does not. Vendors also have the opportunity to expand their business following by advertising other locations customers can find or request their products. From a financial perspective, profit margins from sales at farmers markets tend to be much higher than sales to wholesalers and distributors. By selling through farmers markets, the vendor does not have to worry about costly methods of shipping, but only has to pay for the transportation of goods each week to and from the market. For someone new to methods of direct marketing, farmers markets provide a relatively low risk environment to learn and grow your business, while immersing oneself and business into the local community.

The community itself in which the farmers market is taking place also tends to benefit from the market because money that is spent going to and from the market, as well as at the market is kept within the community and recycled, which often provides a boost to the local economy.

While farmers markets are often very beneficial to the vendors, some challenges do arise when participating in farmers markets. One of the primary challenges of participating in a farmers market is that there is absolutely no guarantee that you will sell all of the products that you bring to the market. Many of these products are perishable, so you need to decide what you are going to do with those items by the end of each market. You need to be careful in your decision, because you do not want to get in the habit of selling your products cheaper at the end of the market – customers will recognize this and other vendors will not be pleased. Once you have participated in a few markets and spoken with other vendors, you should get adjusted to knowing how much to bring to each market. You must also consistently come to market, regardless of weather conditions because one of the goals in doing a farmers market is to build a clientele base, and you do not want to lose customers because you do not show up consistently. Another challenge that you will initially face is making yourself known to customers and building relationships with them. You should try your hardest to differentiate your product from that of other vendors, and also work to get to

know your customers on a personal basis. The more connected a customer feels to you, the more loyal they will be, and the more they will spread word of your products.

Finding and Joining a Farmers Market

The South Carolina Association of Farmers Markets (SCAFM) is an association dedicated to acting as a resource and voice for farmers markets in the state. It is committed to supporting and promoting sustainable food, as well as creating and sustaining economic opportunities through farmers markets. This organization provides a variety of resources on insurance, regulations, contact information, and training to vendors, managers, and other involved in farmers markets. Along with SCAFM, there are several other resources available for more information on farmers markets, and those will be listed at the end of this section.

South Carolina Regulations on Food Safety and Labeling at Farmers Markets

The South Carolina Department of Agriculture is the state agency that is responsible for food safety at farmers markets. Vendors at farmers markets must comply with the regulations set forth by the Food Safety and Compliance Program. The main reason for the licensing and inspection regulations done through SCDHEC and SCDA is to ensure the safe handling of food products, and thus the safety of the consumers.

The South Carolina Department of Agriculture provides a Farmers Market Guidelines document which serves as an informational sheet and checklist of the regulations that must be adhered to when participating in farmers markets. This regulatory guideline document can be accessed at toolbox.studiobanks.com/content/onlyinoldtown.com/sponsored_events/info/50.pdf



Nutrition and Food Recovery Programs

The Farmers Market Nutrition Program (FMNP) is a program of the United States Department of Agriculture Food and Nutrition Service (USDA FNS). This program provides the elderly and WIC clients with fresh, nutritious fruits and vegetables purchased with vouchers at farmers markets. The goal of programs like these is to improve the nutrition of the low-income individuals while at the same time stimulating sales at farmers markets. The USDA FNS also manages the Supplemental Nutrition Assistance Program (SNAP) which is a similar program in which SNAP benefits can be used to purchase any approved food, food product, seeds, or plants. Clients use their EBT card to purchase the items through vendors that are registered and licensed with the FNS. The farmer is then reimbursed by the government for the purchases made by low income clients. More information on these programs can be found online at www.scdhec.gov/health/mch/wic/farmers.htm or www.fns.usda.gov/fmnp

Farmers Market Resources

South Carolina Association of Farmers Markets (SCAFM)

Resources for producers, market managers and others involved in farmers markets.

803-734-2224/803-387-2564

www.scfarmersmarkets.org

Clemson University Institute for Economic and Community Development Farmers Market Resource Guide

A resource guide for starting a market, market managers, and market vendors. www.clemson.edu/public/ciecd/focus_areas/agribusiness/programs/markets/index.html

Farmers Market Coalition

www.farmersmarketcoalition.org

USDA Agricultural Marketing Service (AMS)

Information about starting markets, resource publications and the Farmers Market Promotion Program, a grant program for expanding and promoting local farmers markets, roadside stands, and similar agricultural ventures.

www.ams.usda.gov/farmersmarkets

Farmers Markets: Marketing and Business Guide

www.attra.ncat.org/publication.html

Understanding Farmers Market Rules

Farmers Legal Action Group, Inc., Article for farmers to understand their responsibilities and rights as vendors at farmers markets. www.flaginc.org/wp-content/uploads/2013/03/FarmersMarket.pdf

The New Farmers Market: Farm Fresh Ideas for Producers, Managers & Communities

www.sare.org/Learning-Center/Books/The-New-Farmers-Market

Nutrition and Food Assistance Programs

Farmers Market Nutrition Program (FMNP)/ Project FRESH and Supplemental Nutrition Assistance Program (SNAP)/Food Assistance Program.

U.S. Department of Agriculture Food and Nutrition Service

www.fns.usda.gov/fns



COMMUNITY SUPPORTED AGRICULTURE

Community Supported Agriculture (CSA) is a marketing system in which farmers sell subscriptions or a share to their crops. Customers typically pay in advance for their share of the harvest, and then receive baskets each week with their share of the produce during the harvest season. Basically a group of individuals pledge their support to a farm so that the farm becomes the community's farm in a sense, where the producers and consumers support each other and share the risk and benefits that go along with growing food.

Community Supported Agriculture farms are quickly becoming one of the fastest growing and most popular forms of direct marketing today. CSA's have become so popular because both the consumer and the producer benefit in different ways by 'sharing' the farms in a sense. The consumers benefit by getting farm fresh products each week during the growing season, while the farmers benefit by getting money up front early in the growing season during a time when cash can be tight. CSA's are pretty flexible and can be carried out in a number of ways, making them especially good for small farms, which really need the instant cash flow early on in the season.

Benefits and Challenges of CSA

A major benefit the farmers receive from participating in CSAs is that they get the money up front before the product is grown, something that reduces the financial risk to farmers and enables them to vary the items that they produce. Farmers' financial risk is decreased, because they no longer have to take out as big of a loan as they would without the income from doing a CSA. The farmers are also guaranteed the money paid by the 'investors' regardless of what the crop yield may be for that season, something that makes farmers feel much more fiscally secure and serves as a motivator for taking part in CSA farms.

The member also benefits because they only pay a flat fee for their share of the harvest, whereas if they just bought the items separately, they may pay more depending on the size of the harvest. One thing to remember as a member of a CSA is that you pay the same amount regardless of whether it is a year of an abundant harvest or if it is a poor year. Agriculture is not always in the full control of the farmer, but CSA's help to distribute the risk of a poor year amongst the many members.

Another thing to take into account when considering a CSA is that farming for a CSA is very labor and time



intensive. You must be fully prepared with workers, equipment, and a strategy for what crops you will grow in order for a CSA to run smoothly. Often, CSA's have member work days in which customers must come out and work the fields. This helps to further connect the customer to their food, while at the same time providing the farmer with valuable free help.

Starting and Operating a CSA

Many things need to be taken in to consideration when deciding whether or not to set up a CSA. You must decide upon the number of shareholders to recruit, how much you will charge per share, the size of the share, harvesting, packaging, delivery and pick-up, and what you will grow to include in the CSA shares. Once you have established your CSA, you should survey your customers to get their input on what you should grow for the following year. This will make customers feel more invested, and will enable you to retain customers while meeting the needs for the next year. You should also be pretty knowledgeable in growing a variety of crops so as to be able to provide a variety of crops to your members each week. It is also important to be strong in customer service, planning, and record keeping to ensure that next year's CSA will be successful.

Planning and Record-Keeping

Planning is crucial in growing your CSA into a successful business venture. You must possess extensive knowledge about the different types of plants and their growth rates so that you can accurately plan out what to plant in your CSA before the growing season has begun. You need to be able to perform

calculations as to how many plants to plant in order to feed your members on a weekly basis. You also need to be very good at creating and adhering to a schedule, as you will have to plant and harvest different crops at different times in order to provide members with a basket of farm goods each week.

Record-keeping is also vital in ensuring that you make a profit off of the CSA, and also that you can guarantee that the members are getting their money's worth. You need to be able estimate your total expenses prior to planting so that you can make sure to set the membership price at a level that you earn a profit and a level that makes it worthwhile to you as a farmer. Record-keeping is also important on the member's end because you want to make sure that they feel as if they are really getting their money's worth out of the CSA. As long as you make sure that they are getting the full value out of the CSA, your clientele should remain stable if not grow more through the word of mouth of you previous customers.

CSA Resources

Community Supported Agriculture in South Carolina
agriculture.sc.gov/CSA

Community Supported Agriculture
www.attra.ncat.org/attra-pub/PDF/csa.pdf

ON-FARM STORES

An on-farm store is a store located on the farm property that sells the goods grown and raised on the farm. These stores are often located along busy roads that the farm backs up to so as to attract more customers. On-farm stores can operate year round and often sell value-added goods like honey, baked goods, and ice cream. They often also sell homemade goods such as crafts and clothing. Some benefits to on-farm stores are that the goods do not need to travel very far in order to be sold. The close proximity to the farm also allows the consumer to feel a connection to the product that they are buying, something that consumers are valuing more and more these days. Some of the drawbacks to an on-farm store include that you have to hire employees to operate the store and that you may also need to invest in attractive displays.

It is important to look into whether or not part of the farm will have to be rezoned for commercial purposes so that you can run a store on the farm. Make sure to check with local officials regarding regulations to starting an on farm store in your area.



PICK YOUR OWN OPERATIONS

Pick Your Own farms, also known as U-Pick farms, are farms that grow their crops and then let people come in and pick and pay for the crops that they want to take home. This method is still popular amongst families because people want to find that connectivity between their food and the farm, and they especially want their children to understand that connection. U-Pick operations are also beneficial to the farmer because they do not have to take on the cost of labor to pick their crop and prepare it for market. Instead, the customers come and do the picking for the farmers and the farmer does not have to pay any transportation costs to move the product to market because the product is picked by the consumer and leaves with the consumer that same day.

Customers enjoy U-Pick operations because they get very fresh produce at a price that is usually lower than retail. The customer can pick and purchase large quantities and freeze or can them for later consumption, thus saving the customer money. The farmer benefits from U-Pick operations because they do not have to pay the labor to harvest the crop.

An important aspect to remember as a farmer of a U-Pick operation is that you need to clearly distinguish and enforce the boundaries that customers can pick from so has not to damage or waste your crops. If you decide to sell products by weight, you must have a trade-legal scale for use. If you decide to sell by the container, you need to let your customers know up front the cost of the container, as well as additional fees for overfilling their containers. Another important thing to remember is to get insurance on your farm so that you are not liable for any accidents that may occur. In order to be in compliance with South Carolina Law, you must post and maintain a warning

sign at the entrance of the agritourism activity, or in a conspicuous location on or near where the agritourism activities are carried out. This signage must have a minimum letter size of 1 inch in height. Every written contract that is signed by a participant must have a printed warning notice in or attached to the contract. The warning notice must be clearly legible and the words in the notice must be in bold, twelve-point font. For more information on the warning notice regulations, please see Section 46, Chapter 53 of the South Carolina Code of Laws entitled “Agritourism Activity Liability”, which can be found at www.scstatehouse.gov/code/t46c053.php

While you may not need to employ laborers to harvest the fields due to running a U-Pick operation, it is important to remember that you will need to have a staff that can handle checking people out and monitoring the fields during hours of operation. You will also need to make sure that you set aside time to care for the fields, whether that be weeding or other farm chores. Operating a U-Pick farm can be very time consuming, so you must make sure that you are prepared for that when you decide to enter that form of direct marketing.

ROADSIDE STANDS

A roadside stand is a booth set up along a roadside on or near a farm during the growing season. The farmer uses this booth to sell products like fruits and vegetables, jams, jellies, and even baked goods directly to consumers. Although most of the produce sold in the stand is grown on the farm that owns the stand, it is not uncommon for goods from other farms to be sold at a certain farm’s roadside stand. The times and dates of operation depend upon the preferences of the farmer who runs it.

A roadside stand is beneficial to the producer because it provides a source of supplemental income and an outlet for selling extra produce. By selling goods in roadside stands, the farmer is able to avoid having to pay transportation costs because the goods never really leave the farm until they are in the hands of the consumers. Roadside stands also benefit the farmer because they are able to connect with the customers directly and get feedback on their products.

Roadside stands can range in form from a truck tailgate to an open-sided shelter. They can be manned by employees or can rely on the honor system for customers to leave payment in a container. It is important to make the stand displays attractive and full with enough of a variety of goods so as to attract customers to pull off the road and shop. Prior to



setting up your roadside stand, make sure to check with your insurance agent on liability issues, as well as check with your city/county regulations. The Certified South Carolina program offers a Certified Roadside Market Program, which you may be beneficial to your roadside stand. Further information on the Certified Roadside Market Program can be found at certifiedscgrown.com/CertifiedRoadsideMarketss

ONLINE OPPORTUNITIES

The Internet provides producers and consumers with a convenient means of connecting with each other. Pretty much all households have access to the Internet, so this is a potentially large market for farmers to reach out to. Some options for advertising include creating your own website or being listed on a farm directory. Once you have your own website, you can then list all sorts of information about your production, as well as time frames in which certain crops and products will be available. Basically, having your farm advertised online allows you to place any information you want on your website about products, CSA’s, and even staff information – the possibilities are endless. The use of the Internet can also be beneficial in selling some value-added agricultural products that can be shipped elsewhere to customers who order them online.

Online Marketing Resources

E-Commerce Strategy Plan for Farm Markets

University of Delaware, College of Agriculture and Natural Resources, Department of Food & Resource Economics; and Innovative Exchange, Inc.

www.agmrc.org/curriculum/expanding-e-commerce-opportunities

Online Marketing Tip Sheets

Community Involved in Sustaining Agriculture (CISA). Tip sheets for creating a farm website, online store, blog and eNewsletter.

www.buylocalfood.org

Local Harvest

Listing of farmers markets, family farms, CSA, and other sources of sustainably produced foods.

www.localharvest.org

Real Time Farms

Local food guide that includes farm, market and restaurant listings.
www.realtimefarms.com

Certified SC Grown

www.certifiedscgrown.com/

INTERMEDIATE MARKETING

Intermediate marketing is selling of your products

to specific buyers who will then resell your products. These buyers include restaurants that use your products for their menus; grocery stores that sell your products to consumers, wholesalers and distributors who buy from you and then sell to others; processors who purchase your product and further process or package it; or institutions, like schools, hospitals or correctional facilities, that use your product in their food services.

Customers in South Carolina are beginning to demand more locally grown and processed products because they find importance in supporting the state's economy, making a direct connection between the products and the farm or company that produced them, and assuring the fresh and healthy aspects of the food products they consume. This increase in demand from consumers for local products means that

the players in the intermediate market, such as the grocery stores, restaurants, and schools, are now going to be purchasing more products locally, and providing more opportunities for South Carolina producers to sell their products in intermediate markets.

Some of the benefits associated with intermediate marketing include the potential for your brand to reach more customers, and for your customer base to expand beyond its current level. Working through intermediate markets also gives you the ability to make consistent, reliable relationships with intermediate companies who can often buy your products at a larger volume and sell them than you could on your own, often making your business more efficient.

On the other hand, there can be some challenges faced when dealing with intermediate markets.

Through selling in an intermediate market, you could

potentially see that there can be a higher rate of turnover in owners and/or buyers with intermediate markets. This means that you might have to work harder to stay in contact with and maintain good relationships with companies due to the higher rate of turnover. Another challenge that comes with

intermediate marketing is that the price that you get for your product in an intermediate market is often lower than the price that you would expect to receive through a direct market simply because the "middlemen" that you sell to have to buy your product at a low enough price so that they can turn around and sell your product and still make a decent profit off of it. The three key components to being successful in an intermediate market are: 1) complying with food safety regulations; 2) post-harvest handling, storage, and distribution; and 3) packaging and labeling.

When marketing food products, it is vital that you have an understanding of the food safety regulations and licensing requirements. These regulations are designed to prevent the transfer of unsafe food products, and thus keep your market and potential customer base



safe. It is important to note that while food safety regulations may seem strict, they are not so strict as to prevent your opportunity for entering the market. You just need to make sure that you examine all of the regulations and work to meet all requirements that will be listed later in this guide.

Another important aspect to being successful in intermediate markets is to make sure that you have a means for proper handling, storage, and distribution of products after they are harvested. Because there is often some lag time between when a food product is harvested and when it is consumed, you need to make sure that you are able to store the goods in temperature controlled environments so as to prevent spoiling and waste, and to ensure the safety of consuming the food. If you are storing fruits and vegetables, you need to cool them down immediately after harvest and maintain that temperature for the goods until they are sold to the buyer. Some common methods of cooling products include hydro-cooling, icing, and forced air cooling. If your business continues to grow and expand, you may want to invest in a refrigerated facility or a refrigerated truck. It is important to monitor the handling and storage conditions of your goods, so as to increase the shelf life of the goods and maintain a high quality, something that will help you attract more customers. If you are selling meat, eggs, or dairy products, you need to follow the specific temperature guidelines for those goods. It is important for meat and dairy to be refrigerated at all times so as to prevent spoiling. If you decide to freeze your meat, it must remain frozen for the duration of the time prior to being sold. Eggs also have specific temperature requirements during all phases post-harvest that must be followed to ensure safety and quality. More information on post-harvest handling, storage, and distribution can be found in the resources at the end of this section.

In regards to packaging your products, you need to make sure that you label and package the goods in a way that can be used by your buyer when they resell the product. Communicate with your customers to ensure that your packing suites their needs. It is important to consistently package and label your goods in a way that creates brand recognition for your customers. Additional information on packaging and labeling of products can be found in the resources listed at the end of this section and more discussion for specific products can be found later in the document.



STEPS FOR SELLING TO INTERMEDIATE MARKETS

When you decide to sell to an intermediate market, there are several critical aspects that you should take into consideration: schedule meetings to create a relationship with the buyer, develop a written agreement for the buying/selling of the goods, at all costs deliver on your end of the agreement, and maintain contact with the buyer throughout the year. When you first meet with the buyer, you need to bring samples of your products, as well as labeling, packaging, farm information, and any other marketing materials that may help complete the sale. You should also have an idea of your pricing in mind so that you can relay that to the buyer when they ask. It is also a good idea to ask your buyer if there are any other goods that they may be interested in purchasing so that you can give descriptions of your other products that may meet their needs.

Once you and your buyer have agreed on terms of sale, you need to have a written agreement signed so that you and the buyer know what is expected from each of you in the transaction. A well written agreement should cover the quantity of good expected per week, the price, packaging and size requirements, quality standards, order and delivery schedule, licensing/ insurance/certification requirements, and the payment method and schedule. You can also include anything else that you and the buyer find important in your contract. Essentially, include everything you and the buyer agree upon in your contract so that all terms of the agreement are laid out in a legal and professional manner. Keeping contact throughout the tenure of the agreement is also very important because by staying in regular contact, you can get feedback on your products, address any issues the buyer may have with your product, as well as maintain a working

relationship with the buyer for many seasons to come. By staying in regular contact with the buyer, you can make them aware (usually about 2 weeks prior) of when they will receive their next batch of delivered goods. If you cannot provide the quantity or quality of product you agreed to, it is critical to notify the buyer as early as you can. By staying in regular contact and keeping the buyer informed, the buyer will be much more understanding and able to act in case of an unforeseen event that could disrupt the regular delivery of goods. As long as you maintain a regular, working relationship with the buyer with expectations outlined in the signed agreement, you should be successful in selling to intermediate markets.

Resources for Intermediate Marketing

Wholesale Success: A Farmer's Guide to Selling, Post Harvest Handling, and Packing Produce

www.familyfarmed.org

Postharvest Technology Research and Information Center University of California-Davis

postharvest.ucdavis.edu

Quality and Packaging Standards

U.S. Department of Agriculture, Agricultural Marketing Service

www.ams.usda.gov/AMS

(click on grading, certification and verification, then standards)

Restaurants

Many restaurants are becoming more interested in using fresh, local foods for their menus. Not only do these foods taste fresher and last longer, but they attract customers who want to eat locally. This increase in interest in local foods from restaurants has set the stage for farmers and food producers in South Carolina to enter the intermediate market of



restaurants. The benefits of selling to restaurants includes the ability to get your brand name exposed to consumers when it is listed on menus, as well as being able to experiment with producing different varieties of goods depending upon what products are of interest to the restaurants. Customers also benefit from intermediate marketing to restaurants because they get a fresh, local meal, which in turn helps to keep money in the local economy. Some challenges include getting the goods to the restaurants when they need them. Oftentimes restaurants do not have a lot of storage, and want only the freshest product, so you as the producer may have to arrange several small deliveries, instead of one big delivery. Because menus change and preferences may be different, it is important that you keep in close contact with the chef and restaurant buyer/manager so as to plan for each next delivery.

When trying to build a relationship with a chef, it may be challenging to coordinate a time to meet with them. The best time to touch base with a chef is typically before 10 a.m. or in the afternoon between 2:00 and 3:00 p.m., once they are done with the lunch rush and dinner has not begun. It may take several meetings with chefs in order to get them interested in your product, but once you develop a working relationship with them, it is important to try and cater to their needs so as to keep their business. As with any form of marketing, customer relations are key to expanding and growing your business.

Grocery Stores

As the demand for local foods grows, places like grocery stores are working to meet that demand and support their customers' desires to support the local communities and economy. If you decide to sell to grocery stores, it is beneficial in that they require large quantities of products to stock their shelves. Another benefit is that your brand will be available to the consumer base seven days a week, as grocery stores have a steady flow of shoppers all week long. Although you can sell larger quantities of your product to grocery stores, it may be important to make sure that your pricing is competitive in order to keep that relationship going with the grocery store. Additional labeling of your products, such as a Universal Purchasing Code (UPC) or Price Look Up (PLU) label may be required depending on the grocery store's preferences. Overall, grocery stores provide a good opportunity to enter into the intermediate market and grow your business.

Some Things to Consider when Selling to

Restaurants and Grocery Stores

In order to establish a strong working relationship with chefs and grocers, you should work to:

Establish consistent, professional communication with your buyer;

Ensure that your product is clean and consistently of good quality and grade;

Identify and meet the packaging and labeling requirements of your buyer;

Understand and meet your buyer's schedule. Grocery stores and restaurants may need your goods more frequently than other outlets, so it is important to be able to meet both their needs and their schedules;

Create an accounting system in which you can easily receive orders and payments from buyers.



Restaurant and Grocery Resources

South Carolina Restaurant and Lodging Association

803- 765-9000

FAX: 803- 252-7136

info@scrla.org; www.schospitality.org/

National Grocers Association

703-516-0700

Fax: 703-516-0115

www.nationalgrocers.org

Associated Food and Petroleum Dealers

800-666-6233 or 248-671-9600

Fax: 866-601-9610

info@AFPOnline.org; www.afpdonline.org/index.php

Selling to Restaurants

National Center for Appropriate Technology, ATTRA, Successful strategies and points to remember when working with chefs.

www.attra.ncat.org/attra-pub/PDF/sellingtorestraurants.pdf

Tools for selling to restaurants, retailers and institutions: Keys to a successful relationship Pricing and Invoicing

Community Involved in Sustaining Agriculture.

www.michigan.gov/documents/mda/MDA_guide_335948_7.pdf

PROCESSORS/DISTRIBUTORS/WHOLESALERS

Processors and wholesale food distributors play an integral part in the supply of food to the food service industry. Typically, schools, caterers, and other food buyers can get most of what they need from one or two distributors. It is often challenging for farmers and food producers to sell their goods directly to the varying consumers due to the time, staff, and monetary limitations that they face, so distributors step in and do the selling because they do not have to worry about all of the responsibilities of growing the food, they just sell it. Distributors are valuable in that they can do all of the organizing and coordinating needed to get the food to consumers. This frees up the farmers and food producers and allows them to only worry about the growing stages of their products. Farmers often benefit from selling to distributors because they can sell a large quantity of goods to the distributor at one time. Farmers only have to worry about finding a few distributors for their goods, and then the distributors do the rest of the work in getting the products to the consumers. Although the role of distributors allows farmers to focus solely on their production, this type of system can disconnect the

consumer from the farmer and does not allot for much brand recognition. The farmer also typically receives a lower price when selling to processors and distributors because they then have to turn around and sell and distribute the product.

There are three general types of wholesalers in intermediate markets:

1. **Manufacturers' sales branches and offices (MSBO):** merchant wholesale operations maintained by grocery manufacturers to market their own products.
2. **Merchant wholesalers, excluding MSBO:** These are also referred to as third-party wholesalers, these firms are primarily engaged in buying groceries and related products from manufacturers, or processors, and reselling to retailers, institutions, and other businesses. Sales by merchant wholesalers account for the bulk of grocery wholesale sales.
3. **Brokers and agents:** Wholesale operators who buy or sell for a commission as representatives of others and typically do not own or physically handle the products.

Food Brokers play an important role in the movement of food products to consumers. Producers and manufacturers often choose to use food brokers to sell their food because it is often cheaper than hiring a staff member to do so. These food brokers also represent a number of producers, processors, manufacturers, distributors, and retailers, so they are often better equipped with connections to sell the products.

There are three general types of distributors in intermediate markets:

1. **General-line distributors:** Also referred to as broadline or full-line distributors, these are companies handling a broad line of groceries, health and beauty aids, and household products.
2. **Specialty distributors:** Operations primarily engaged in the wholesale distribution of items such as frozen foods, baked goods, dairy products, meat and meat products, or fresh fruits and vegetables. Specialty wholesalers account for nearly half of grocery wholesale sales.
3. **Miscellaneous distributors:** Companies primarily engaged in the wholesale distribution of a narrow range of dry groceries such as canned foods, coffee, bread or soft drinks.



Key Considerations When Selling to Wholesale Distributors

- Distributors usually require certain things from the businesses that they purchase from. There requirements include:
- Product liability insurance
- “Hold harmless” agreement: Farmers may be asked to sign an agreement accepting responsibility for any injury that may result from people eating their product.
- Good Agricultural Practices/Good Handling Practices (GAP/GHP) certification: Not all distributors require GAP or GHP certification. This requirement is generally driven by the end retailer. However, even if GAP or GHP certification is not required, it is a good idea to develop an on-farm food safety plan.
- “Non-compete” agreement: If a farmer chooses to sell to both distributors and their potential retail customers, a distributor may ask the farmer to sign an agreement stating they will charge their retail outlets the same base price as the distributor does.
- Product analysis and nutrition labeling: These may be required for processed products.
- Consistent packaging and sizing
- On-farm storage: Farmers may be asked to hold their products until the distribution has a need for them.
- Transportation: Farmers may need to arrange for shipping their product to a distributor’s warehouse. This may involve hiring a truck, purchasing a truck, or coordinating delivery with a distributor-owned truck.

- Quality product

Resources for Processor and Distributors/ Wholesaler

South Carolina Specialty Food Association

www.scfsa.org

Institutional Food Service

Institutions such as schools, nursing homes, and prisons are continuing the trend of demanding more use of locally grown food products in their food service sectors. Many of the same motivations for using locally grown foods applies to these institutions, like nutritional value and boosting the local economy. Selling your goods to an institution can be a great way for you to enter an intermediate market. Selling to institutions can be beneficial in that you can sell large quantities of goods to one institution and usually draft up contracts that extend through each growing season. By selling to institutions, you are exposing your products to a large, and often varied audience – something that can expand your customer base down the road.

When it comes down to contacting an institution, you need to first figure out who to talk to. Often, institutions contract out all of their food related services to a food service management company, or they may have an employee strictly in charge of planning meals. Before you approach a buyer for a food service institution, you should do your research and see how receptive they are to using local foods in their operations. Once you have kind of figure out how they operate, you should see if you are able to produce enough products to match their demand. These institutions often provide thousands of meals per week, and may be used to buying things wholesale, so you should establish a wholesale pricing scheme for your products. You must also be able to consistently supply the institution with the products they demand. You may have to invest in better storage systems and preservation practices in order to do this. A lot of times these institutions are very interested in purchasing locally grown and processed items like fruits and vegetables, so food processors may find institutions to be a good market for them. It is very important to fully understand your client's preferences in terms of packaging, size, and delivery. You will probably have to provide refrigerated delivery depending upon your items, so it is important to take that time commitment into account when looking into selling to institutions.

Regular contact is vital in maintaining working relationships with institutions, so be prepared to commit a good portion of your time to meeting their needs. Make sure to keep ordering and payment methods very simple and easy. You should to keep a record of all receipts of sale and delivery, and make sure that a copy of the same goes to your client. Set up an online, phone, email, or fax order system, and make sure to keep track of invoices. Payment procedures should be predetermined and on a simple and regular schedule. Most institutions work on a 30 day billing cycle and pay through a credit card. Whatever business methods you decide to use, make sure that they are consistent and that you remain in regular communication with the buyers so as to address any issues or concerns as they come up.

Liability insurance is also something that farmers or food producers who want to market to institutions typically need for their products. The amount of insurance that you need depends upon the type, and amount of products you are selling and whether you are selling them to a public or private institution. For example, fresh, uncut, raw fruits and vegetables are typically considered lower risk than meats, which have a higher insurance rate due to the higher risk level. Check with several insurance agents on what they can offer you specific to your business's needs before making a decision on which insurance plan to take.

Schools

South Carolina participates in the "Farm to School" program which provides school children with locally grown agricultural products, and helps to better connect the students to where their food comes from. Programs like the "Farm to School" program provide a ready market for farmers and food producers to sell their products. More information on the South Carolina Farm to School program can be found on their website at the following link: www.farmtoschool.org/SC/



[programs.htm](#)

Another way for farmers to partner with schools is to participate in fundraisers, of “farmraisers” as they are sometimes called. Basically the farmer supplies some type of fresh agricultural good, whether it be pumpkins or fresh fruit, that the children sell to raise money for their school. This process creates a local connection between the children and the farm in which these products are grown, and also helps the farmer to make a little money while getting their name further out there in the community.

Correctional Facilities

Another potential market for selling your food products is to correctional facilities. Currently the South Carolina Department of Corrections has a Horticulture Services Branch which has inmates serve on farms and then supply the food that they harvest to the prison facilities to feed the inmates and cut down on food costs. You may want to contact the food service director for the South Carolina Department of Corrections and see if they are interested in



purchasing any of your locally grown products for their inmate food services.

The Federal Government

The federal government also provides a market for the sale of food products. The Commodity Procurement Branch of the USDA Fruit and Vegetable Programs buys fruits and vegetables for use in their domestic assistance programs. These programs are beneficial to the consumers because they are given nutritious food products, and producers also benefit because the government essentially purchases the goods and removes the excess surplus from the market, thus aiding in bringing the market conditions back up to a

satisfactory level for producers. The USDA has a policy where it will only purchase United States grown and processed food products, so that takes away foreign competition that could potentially outbid American farmers. The Commodity Procurement Branch receives bids for contracts, and the contracts are then distributed to the lowest bidders typically. More information on how this process works can be seen on the How to Sell USDA website at www.ams.usda.gov/fv/howtosell.htm

Several different institutions and agencies in South Carolina currently receive over 87 different types of food items from the USDA commodity food program. These agencies and institutions include all public schools, private schools, residential child care institutions, and charitable institutions. There is definitely a market for providing food to these programs in South Carolina, and this could be a possible intermediate market for you to enter.

Institutional Food Service Resources

National Farm to School

Connects schools (K-12) and local farms with the objectives of serving healthy meals in school cafeterias, improving student nutrition, providing agriculture, health and nutrition educations opportunities, and supporting local and regional farmers. www.farmtoschool.org/index.php

Farm to Hospital

Occidental College, Urban and Environmental Policy Institute, Center for Food and Justice, 323-259-2991; Fax: 323-259-2734 www.vepi.oxy.edu/tag/farm-to-hospital

Health Care Without Harm/Ecology Center

www.ecocenter.org/healthy-foodd

National Farm to College Program

Community Food Security Coalition. Provides detailed information about Farm to College programs including recommended policies and support, barriers, benefits, and recommended strategies.

www.farmtocollege.org

Bring local food to local institutions: A resource guide for farm to school and farm-to-institution programs

National Center for Appropriate Technology (ATTRA). Provides farmers, school administrators, and institutional food-service planners with contact information and descriptions of existing programs that have made connections between local farmers and local school lunchrooms, college dining halls, or cafeterias in other institutions.

www.attra.ncat.org/attra-pub/PDF/farmtoschool.pdf

How to Sell to USDA

U.S. Department of Agriculture Commodity Procurement, Fruit & Vegetable Programs, Agriculture Marketing Service

www.ams.usda.gov/fv/howtosell.htm

Small Farms/School Meals Initiative, Town Hall Meetings A Step-by-Step Guide on How to Bring Small Farms and Local Schools Together

U.S. Department of Agriculture, Food and Nutrition Service

www.fns.usda.gov/fns

Fresh from the Farm, Using Local Foods in the Afterschool and Summer Nutrition Programs

Food Research and Action Center

www.frac.org

COLLABORATIVE MARKETING

Collaborative marketing is known as working together to achieve marketing goals. Examples of collaborative marketing can include farmers, non-profits, and even consumers working together to benefit one of the parties involved, that usually being the farmer. Farmers often work together to increase interest in their products. Collaborative marketing is often very useful for small farmers who do not have the time or money to invest into marketing efforts on their own. Collectively working together as a group often enables small farmers and the other parties involved to have a little more market power when negotiating prices or working on getting contracts with distributors. Collaborative marketing allows farmers to pool resources together to achieve things that they normally could not do on their own, such as entering in to larger markets. An important thing to keep in mind with collaborative marketing is that you need to make sure that your goals and ideals mesh well with the direction that the group is moving in. As in most aspects of business, communication is very important in collaborative marketing, and when done effectively, all members of the group can benefit.

Collaborative Marketing Resources

Collaborative Marketing – A Roadmap and Resource Guide for Farmers

University of Minnesota Extension

www.extension.umn.edu/distribution/businessmanagement/DF7539.html

Food System Economic Partnership

Business Development Program

www.fsepmichigan.org





SECTION 4: PRODUCT DEVELOPMENT

Once you have decided on the market in which you intend to enter, you need to work on pricing, brand development, and marketing strategies to aid in the sale of your product. The goal is to create an identity for your product so that consumers continue to come back to your specific brand to fill their needs, whatever they may be.

One of the first steps towards creating a strong product is to develop a marketing plan. Marketing plans typically cover time frames of one to five years, and are often incorporated in to business plans. It is very important to pay attention to and document the development process when coming up with your marketing plan. Like a business plan, a marketing plan makes you evaluate where you stand and also realize where you want to be in the future. In order to get good feedback on how well your marketing plan worked, you need to make sure that your plan supplies quantifiable results, input from those who will work with it on a daily basis, and should be clear and realistic in the objectives that it outlines. In order for a marketing plan to do its job, you must look back on it after every season and learn from what worked and what did not work when making future decisions.

When working on creating your brand, you need to have something available consistently with your product, whether it is your physical self, a website, or just a logo on a sign, hat, or t-shirt. Whatever it may be, customers need to think of your product when they see it. Developing a brand identity is crucial to the success of your business. Labels are a good, consistent way to enable customers to recognize your products and build customer loyalty.

Labels provide a simple and relatively inexpensive means for marketing your product, and their design can say a lot about the product from just a moments glance. You could show a landscape of your farm, or even use an eco-label to show that your agricultural practices are sustainable and environmentally friendly. No matter what label you decide to use, make sure that you keep design changes to a minimum so that customers associate

your quality goods with the label every time that they see it.

There are many different kinds of labels that convey different production practices. The free-range label indicates that your poultry and egg products come from birds that were not caged, and were allowed to roam freely outside. This type of label is not regulated by the USDA. The grass-fed label indicates that your meats come from animals feeds strictly on grasses and forages, and never on grains. The USDA regulates this label according to meat standards. Naturally raised is another label that you may run across and it indicates that livestock have not been managed under certain production processes. Most often, these animals have not been given antibiotics or growth hormones, and there are no artificial ingredients or dies added to the meat. The USDA regulates the standards for this label. You can visit www.ams.usda.gov/AMSV1.0 for further information on the different types of labels and their regulations.

There are also other types of labels that can only be obtained if your business is enrolled in a third-party certification program and if you meet the criteria for that certification. In order to keep up your certification, you must keep good records of how you meet the criteria and pass an inspection of your records and practices. The USDA Organic: The National Organic Program (NOP) has labeling standards for qualifying something as being organic. In order to use the word “organic” with your product, you must meet the criteria and be certified. The Animal Welfare Approved label indicates that you have met certain standards for the humane treatment of animals on your farm. Another label that exists is the Certified Humane Raised and Handled label, which is for the certification of eggs, dairy, meat, and poultry products. Products that qualify for this label have been certified to come from facilities that meet standards of farm animal treatment. The Certified South Carolina Grown program provides members with signage and labels that indicate that the products that they sell are born and raised in South Carolina. This kind of labeling allows consumers to consistently see what products are from South Carolina and enables them to support the local economy. As you can see, there are many different ways to express special things about your products through the use of labels.

When it comes time to promote your product, there are a variety of ways to do it, but promotional tools like brochures, websites, and specials really help to draw customers in to try your products. The Internet provides ample opportunity to reach a broad range of potential customers and is a very powerful



promotional tool. By just designing a website, you are able to put a lot of information on your practices and goods out there for customers to find in one single place. Websites are also good promotional tools because they can be relatively inexpensive to run and maintain. You may want to look in to listing your website in directories to make it easier for customers to find you whenever they feel like it. Social media has also taken off in recent years and posting updates about your products on Facebook and Twitter accounts allows for a broad range of people to see you message relatively quickly.

In order to keep your market supplied with your goods year round, you may need to alter a few production practices so as to expand your crop supply beyond seasonal limitations. Farmers have begun to use several different methods to expand their supply beyond the normal season. One such method is the use of greenhouses. Greenhouses allow for plants to grow in trays and pots on shelves year round if the greenhouse remains heated. When deciding whether or not a greenhouse is for you, consider the input costs of supplying heat and labor to the greenhouse year round. Another thing used to protect crops from the elements is a row cover. A row cover is a lightweight fabric that sits on the plants, protecting them from freezes and other cold conditions. Many farms are also moving towards more winter storage for vegetables that last a little longer in a unit until it is moved to a buyer or customer in the winter.

As previously discussed in this guide, value-added food processing can differentiate your product and bring in a higher return than the raw version of that product normally would. Consumers tend to value products that are ready to be eaten a little more simply because of the convenience factors coming in to play.

When developing your product, pricing also plays a very important role. Pricing can be challenging because you need to charge enough to make a profit

on each sale, but you do not want to price yourself above what customers are willing to pay because you will lose clients and your business will suffer. It is important to establish a system for pricing your products. When you are entered in to a direct market, you get to decide what your product is worth by gathering information on competitor prices and consumer willingness to pay. Because you do most of the work throughout all of the phases of production and packaging in a direct market, you need to make sure that you price your items at a level high enough to cover the value of the work that you put in.

If you are entered in to an intermediate market, you need to gather pricing information in order to negotiate a price with your buyer. Make sure that you do your research and know the wholesale prices that competitors are selling their products for so that you can better negotiate the sale agreement. If you are selling an extremely specialized, high quality product, that costs a lot to produce, make sure that you set a price to cover your costs and turn a profit. You may face questions regarding why the price is so high, so be ready to defend your pricing by expanding on the production practices and quality of the good that make it worth the price that you are asking. Packaging can also aid in getting a higher price. A product that is visually appealing and well packaged may help to persuade the buyer that it is worth the price being asked.

When it comes down to pricing, it really boils down to supply and demand for that product on the market in which you have entered. The more scarce the item, typically the greater demand for it, and thus the more you can charge. When developing a pricing system you need to make sure that you keep good financial records so that you can ask for the cost of producing, packaging, and delivering that good plus a little more so that it is worthwhile to you.

PRODUCT DEVELOPMENT RESOURCES

Agricultural Marketing Resource Center (AgMRC)

Iowa State University, Ames, Iowa. This website offers business advice, strategies, and resources to farmers and ranchers, including how to use grants, branding, business communication skills, customer relations, feasibility studies and more.

www.agmrc.org/business_development

The Learning Store

University of Wisconsin-Extension
www.learningstore.uwex.edu/Direct-Marketing-C12.aspx

Guidebook for Organic Certification

Midwest Organic and Sustainable Education Service (MOSES)

www.mosesorganic.org/wp-content/uploads/2013010MOSES.CertificationGuidebook-for-web.pdf

Eco-label Value Assessment: Consumer and Food Business Perceptions of Local Foods Research Report

Iowa State University, Leopold Center for Sustainable Agriculture.

www.leopold.iastate.edu/pubs-and-papers/2013-11-ecolabel-value-assessment

An Independent Guide to Eco-Labels

www.ecolabelindex.com/ecolabels/?search=food

Extending Seasons and Profitability through a Growing Environment

Center for Innovative Food Technology
ciftinnovation.org/local-food-systemsurban

Greenhouse & Hydroponic Vegetable Production Resources on the Internet

www.agrisk.umn.edu/cachelar/01481.htm

Conventional Wholesale Prices from Terminal Markets

U.S. Department of Agriculture, Agricultural Marketing Service

www.ams.usda.gov/fv/mnacs/terminal.htm

Today's Market Prices

www.todaymarket.com

Organic Wholesale Market Prices (market produce)

Rodale Institute

www.newfarm.org/opx

Crop Budgets for Direct Marketers

University of Wisconsin-Extension

learningstore.uwex.edu/Assets/pdfs/A3811-09.pdf





SECTION 5: REGULATORY CONSIDERATIONS

When you are planning out your business and which food products you would like to sell, it is very important to be knowledgeable of the local, state, and federal laws and regulations for the licensing, handling, processing, packaging, and labeling of food products. You need to be prepared to run your business within the regulation requirements so as to pass any inspections that may take place. All of the rules and regulations that you will deal with stem from the common goal of making sure that the food products on the market are safe for customers to consume. Abiding by these regulations can at times be costly and challenging, so you need to fully consider all regulations before selecting which products you would like to sell.

When it comes down to licensing and regulations, the raw and unprocessed foods that are sold in small quantities or directly to a consumer tend to have the least strict guidelines and requirements that must be followed. On the contrary, the more involved and processed foods that are sold in large volumes tend to face stricter regulations. This section will provide you with information on guidelines and regulations that you may face as a producer. This section will be useful in your planning, but you should make sure to contact South Carolina Department of Health and Environmental Control and the South Carolina Department of Agriculture prior to making any permanent plans to assure that you fully understand the requirements that you must meet for your specific products.

STATE AND LOCAL REGULATIONS

The South Carolina Department of Agriculture (SCDA) is the agency in charge of regulating food production in South Carolina, but they also work closely with the South Carolina Department of Health and Environmental Control (SCDHEC) to regulate food safety. On the local scale, counties, towns, and cities often have regulations of their own that you must follow such as zoning, building codes, and business licensing. Make sure to check with state and local agencies prior to beginning your business so that you can catch and correct mistakes and fulfill all requirements to ensure the safety and quality of your food products.

BUSINESS LICENSING

In addition to obtaining food and processing licenses, you will need to obtain business licenses in order to run your company. Depending on your products, you could potentially have to get business licenses at the federal, state, and local level. To find out if you need to get a federal license, please see Obtaining Federal Licenses and Permits guide, available on the Internet through the “Permit Me” tool at www.sba.gov/content/obtaining-business-licenses-permits

If you are transporting animals or plants, you may want to check the USDA’s requirements for licensing which can be found at www.aphis.usda.gov/permits/

Information about obtaining business licenses in South Carolina can be found at the South Carolina Business One Stop (SCBOS), online at www.scbos.sc.gov/

or by phone at (803)898-5690. For information regarding licensing requirements in your local area, make sure to contact your county and town or city administrative office for specific details.

WEIGHTS AND MEASURES

Weights and measures laws exist to make sure that customers are getting exactly what they are paying for. Scales used must meet commercial scale standards set by the National Institute of Standards and Technology (NIST), and they must be “legal for trade”, National Type Evaluation Program (NTEP) approved, and calibration. The scales are subject to inspection at any time by the state or local weights and measures inspector. According to the law, if a product is being weighed at the time of sale, the indicator on the scale must be visible to the consumer so as to avoid any wrongdoing. Liquid items must be sold by liquid measure, while non-liquid items must be sold by weight.

RESOURCES

Growing Your Local Food Business in South Carolina: A Guide to Laws and Regulations

Carolina Farm Stewardship Association, September 2012

www.carolinafarmstewards.org/wp-content/uploads/2012/10/CFSA_RegGuide-SC2012_08-webres2.pdf

A Food Labeling Guide

U.S. Food and Drug Administration www.fda.gov/Food/GuidanceComplianceRegulatoryInformation/

[GuidanceDocuments/FoodLabelingNutrition/UCM2006828.htm](http://www.fda.gov/oc/GuidanceDocuments/FoodLabelingNutrition/UCM2006828.htm)

Standards, Product Certification, Education and Risk Management

NSF www.nsf.org/regulatory

FOOD SAFETY

Food Safety is one of the most important areas of all food and agriculture businesses. When dealing with food safety, it is important to adhere to the guidelines to keep your food clean, and contamination free.

Keep in mind that if you do not handle food products correctly, then your customers and buyers may refuse to purchase anything else from you, and you also run



a greater risk of a lawsuit if somebody gets sick from your products. You may face scrutiny from buyers regarding your food safety handling procedures, but as long as you abide the rules and take extra caution in ensuring that the food is being properly handled, consumers will trust you. A lot of businesses use the Hazard Analysis and Critical Control Points (HACCP) guidelines for ensuring food safety. These guidelines can be very helpful to producers, sellers, processors, and even packagers of food and can be found at sop.nfsmi.org/HACCPBasedSOPs.php

GAP/GHP

Lately a lot of importance has been placed on the use of good agricultural practices to make sure that farms are using the safest manners possible in the production of fruits and vegetables. Buyers are now catching on to this movement and making sure that sellers and producers follow Good Agricultural Practices (GAP) and Good Handling Practices which insure safe and non-contaminated food products in the market.

The U.S. Department of Agriculture offers a voluntary, auditing program to verify that Good Agricultural Practices and Good Handling Practices are being carried out. As part of the GAP/GHP audits, every operation must have documentation of the operating procedures and policies that are in practice in order to a true GAP/GHP producer. The USDA Audit Verification Checklist can be found at www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC50913269.

Build your own plan and learn about the GAP and GHP verification program, the SC Farm Traceability Program and more at cufan.clemson.edu/gap/

Additional information and assistance can be found through the SCDA at agriculture.sc.gov/gradingandinspection

FOOD SAFETY RESOURCES

Guidelines to Minimize Microbial Contamination for Fresh Fruits and Vegetables

U.S. Food and Drug Administration
www.fda.gov/downloads/Food/GuidanceComplianceRegulatoryInformation/GuidanceDocuments/ProduceandPlanProducts/UCM169112.pdf



GAP/GHP Program Brochure

U.S. Department of Agriculture
[agriculture.sc.gov/userfiles/file/GAP_Promo%20010213\(1\).pdf](http://agriculture.sc.gov/userfiles/file/GAP_Promo%20010213(1).pdf)

Good Agricultural Practices Network for Education and Training

National GAPs Educational Materials
Cornell University, Department of Food Science
www.gaps.cornell.edu

Farm Food Safety

Penn State College of Agricultural Sciences,
Cooperative Extension
www.extension.psu.edu/food-safety/farm

Key Points for Control and Management of Microbial Food Safety for Growers, Packers and Handlers of Fresh-Consumed Horticultural Products

University of California, Vegetable Research and Information Center.
ucanr.org/freepubs/docs/8102.pdf

On-farm Food Safety: Guide to Good Agricultural Practices (GAP)

Iowa State University Extension
www.extension.iastate.edu/Publications/PM1974a.pdf

On-farm Food Safety Project

FamilyFarmed.org A tool for small to mid-scale fruit and vegetable farmers to help them create a personalized on-farm food safety plan.
www.onfarmfoodsafety.org

LIABILITY AND FARM INSURANCE

Most farms and businesses have a mixture of personal and business liabilities. As agribusiness continues to rise in importance, insurers across the United States are finding ways to meet the insurance needs of farms and food related businesses. Often producers are intimidated by the potential cost of acquiring liability insurance. However, many wholesalers now require a minimum amount of coverage and it reduces the risk for the food and farm entrepreneur as well. The cost is typically a small fraction of your production cost and it is well worth your investment. You should work very carefully with your insurance agent to ensure that all of your insurance coverage needs are met.

Finding the right liability coverage plan for your business can be a little more challenging because there are so many options for covering your farm. The main areas of coverage that you will typically need are liability coverage for products sold, liability coverage for visitors to your farm, and liability coverage for farm workers. There are often package coverage deals that can encompass these needs and more for your farm.

Liability and Farm Insurance Resources

Risk, Liability and Insurance for Direct Marketers

University of Wisconsin Cooperative Extension
learningstore.uwex.edu/Assets/pdfs/A3811-07.pdf

Online Publications and Crop Fact Sheets

USDA Risk Management Agency

www.rma.usda.gov/pubs/rme/fctsh.html

RMA Online Agent Locator

USDA Risk Management Agency

www.rma.usda.gov/tools/agents/companies/RMA

STATE REGULATORY REQUIREMENTS BY PRODUCT AND MARKET

The following section provides a general outline of the state and federal regulations for marketing food related products in South Carolina. The charts separate the requirements by product and market. For a full description of the rules and regulations in South Carolina, please see the Carolina Farm Stewardship Association's Growing Your Local Food Business: A Guide to Laws and Regulations online at www.carolinafarmstewards.org/south-carolina-reg-guide/



Meat and Meat Products

In order to sell meat, whether directly to the consumer, through a farmer's market, or to a distributor, the meat must be processed at a facility that has been inspected by federal and state officials. Meat inspected by a state official may only be sold within that state, whereas meat inspected by a federal USDA official can be transported across state lines. All meats must be properly inspected, marked, and labeled prior to sale. It is mandatory that the meat labels include the contents or the package, its weight, additional ingredients, safe handling instructions, and the mark of inspection (USDA or SCDA) with the processing plant number, name and address. South Carolina allows licensed processing facilities to conduct custom processing of meat and requires that the package is labeled "Not For Sale". These products must have the following included on their label: handling instructions, product name, list of ingredients, SC

Inspection Indication and establishment number, company name and address, and a net weight statement. Clemson Livestock Poultry Health provides more information on regulations for producers, facilities, and meat labeling in addition to a processing establishment directory at www.clemson.edu/public/lph/scmpid/index.html.

Dairy

The FDA requires that all milk set aside for interstate commerce be in compliance with the Pasteurized Milk Ordinance (Grade A Milk Ordinance). This ordinance prohibits the interstate sale of any unpasteurized milk. The SC DHEC regulates all Grade A dairy facilities that produce, transport, process, package, and distribute milk and milk products except butter and cheese which are regulated by the SC Department of Agriculture. Producers, transporters, processors, packagers, and distributors must get a Grade A permit from DHEC before they can sell milk, while those who transport milk for others must get a Bulk Milk-Hauler/Sampler's permit. All roles involved in the producing and sale of milk must pass regular inspections by DHEC to make sure that their product is up to standards. South Carolina DHEC also provides construction standards for facilities to meet prior to being given a permit. The receiving, cleaning, processing, and packaging of milk must be done in separate rooms in order to be within the regulations for processing facilities. Milk and milk products must be labeled with the following: "Grade A", identity of the plant where the product was processed, the words reconstituted or recombined if necessary along with the amount of water added, the words "keep refrigerated after opening", and if the milk originated from somewhere other than a cow, the name of that animal immediately before the word "milk".

In order for South Carolina dairies to produce raw milk, they must have it inspected and receive a permit from SC DHEC. Many of the regulations for Grade A and Grade A Raw milk are the same, but raw milk also requires stricter inspections and zero tolerance for bacteria. The packaging of raw milk must display the words "Grade A Raw", as well as "this is a raw milk product that is not pasteurized". The label must also indicate the name, address, and permit number of the dairy where packaged. More information can be found through SC DHEC at scdhec.gov/administration/regs/61-34.htm.

Butter and cheese are not considered Grade A milk products, instead they are referred to as manufactured milk products and fall under the regulations of the South Carolina Department of Agriculture. In South

Carolina these products must be produced in facilities that are licensed and inspected by the SCDA. It is illegal to operate a facility for butter and cheese products without a valid inspection certificate. South Carolina law requires that raw cheese be aged a minimum of sixty days so as to reduce the threat of foodborne illness that can be caused by the presence of milk in cheese making. Like all licensed facilities, it is required that they be maintained in a clean and organized manner. In order to sell cheese, you must have an inspection certificate for your production facility, basically guaranteeing that your facility is kept clean and sanitary and that the conditions of the facility ward off contamination. South Carolina has also adopted and adheres to all federal rules regarding the production and sale of cheese. More information can be found at agriculture.sc.gov



Poultry

Poultry and poultry products must be slaughtered at a USDA or SCDA licensed facility. Labeling of poultry and poultry products must not be misleading and should include the name and address of the manufacturer/packer/distributor and the weight/measure/count of the slaughtered bird. Poultry producers who run a small facility of less than 250 turkeys or 1,000 other birds are exempt from inspection regulations as long as the only slaughter poultry raised on their farm and sell the poultry within the state of South Carolina. You should contact the SC Meat and Poultry Inspection Department for more details. Poultry producers can also slaughter their birds on their own property for sale without licensing and other regulations as long as the poultry is sold directly to the consumers who will use it. These products must contain the name and address of the processor and must be clean and fit for human consumption. A farmer may also slaughter his own poultry without needing to meet regulations as long

as he personally intends to consume the product by himself or with his family. The custom slaughter of poultry is also allowed as long as the poultry is only consumed by the client for whom it is slaughtered. Clemson Livestock Poultry Health provides more information on regulations for producers, facilities, and meat labeling in addition to a processing establishment directory. www.clemson.edu/public/lph/scmpid/index.html

Eggs

The USDA has the authority to regulate eggs due to the Egg Product Inspection Act. The agency regulates eggs so as to assure that the eggs intended for retail are refrigerated at a temperature of no greater than 45 degrees Fahrenheit after packing, and contain a label indicating that refrigeration is required. Inspections are done every quarter, and tight records must be maintained on the status of the eggs from order to delivery. Facilities for the processing of eggs must meet high standards of cleanliness, and are subject to continuous inspection. All egg containers must be labeled and the label must be approved by the Administrator of the Agriculture Marketing Service. The container must indicate the name and address of the packer/distributor, the net contents of the container, and the lot number or date of production. The Egg Safety Rule was implemented to prevent salmonella from contaminating the food source.

In order for eggs to be labeled as organic, the chicks must be raised as organic beginning from their second day of life. The egg layers must be fed 100% organic food and may not be housed in cages, but rather given access to the outdoors. Farmers who sell less than \$5,000 in egg sales are exempt from organic regulations, but may still use the term organic on their product as long as it is not misleading.

South Carolina follows the SC State Egg Shell Law which requires all parties who want to sell eggs in South Carolina to file for a license with the SCDA. The form, "Eggs Application for License to Distribute" can be found online at agriculture.sc.gov/forms. This license is free, and licensees must maintain records and invoices of their egg purchases for at least 90 days that show the person or firm to whom the sale was made, the purchaser's address, and the kind and quality of eggs involved in the sale. South Carolina follows the USDA's standards of refrigerating, grading, and packaging preparation. A chart with the grades and weight classes of eggs can be found on page sixteen of the following file www.carolinafarmstewards.org/south-carolina-reg-guide/ and at agriculture.sc.gov/content.aspx?MenuID=98



Aquaculture, Fish, and Seafood

These goods are regulated according to the federal Food, Drug, and Cosmetic Act. By using Good Manufacturing Processes, you can ensure the healthiness and level of safety during the processing of fish products. Every processor of fish is also required to create a Hazard Analysis Critical Control Point (HACCP) plan which is specific to each type of fish that you market and addresses safety considerations when dealing with each individual type of fish. The purpose of this process is to ensure that no product harmful to humans enters the market. You must keep detailed records that can be submitted for inspection to make sure that you are still operating within the regulations. The processor is also required to create a Sanitation Operating Plan (SOP) in which they ensure clean working conditions and maintain sanitation control records.

The sale of shellfish is monitored and regulated by the National Shellfish Sanitation Program which falls under jurisdiction of the FDA. This program works with many agencies to provide sanitary conditions for the processing of shellfish in order to prevent any negative impacts on humans. The FDA further explains this in the National Shellfish Sanitation Program Guide for the Control of Molluscan Shellfish (2009 Revision): www.fda.gov/food/guidanceregulation/federalstatefoodprograms/ucm2006754.htm.

In South Carolina, multiple agencies are responsible for the regulation of the fish and seafood industry. For example, SCDNR is responsible for the taking of fresh and saltwater fish. Aquaculture applies only to freshwater fish in South Carolina and is administered by the SCDNR. Producers interested in entering into the aquaculture market must contact SCDNR to see about getting an annual aquaculture permit. If you plan on engaging in the wholesale of aquaculture products, you must have a wholesale aquaculture permit. Those who buy, receive, or handles any

live or fresh saltwater fish or any saltwater fishery products taken or landed in South Carolina and packs, processes, ships, consigns, or sells such items at other than retail, and not solely for bait must first obtain a wholesale seafood dealer license. Every licensed dealer must maintain accurate records detailing the information that SCDNR would like for up to a year in case of inspection. The locations at which the products are processed, shipped, and sold must be non-mobile, and be licensed separately. Commercial saltwater fishermen who sell their catches of saltwater fishery products must only sell to wholesale markets or else they must get a wholesale dealer's license. More information on commercial fishing can be found at www.dnr.sc.gov/licenses/commercialpricing.html.

State licensed wholesale seafood dealers who deal with the federally managed Atlantic migratory species such as the tuna and swordfish must get the appropriate federal dealer permit for the fisheries for which they are participating in.

For Atlantic Shark and Swordfish Dealer permits, contact NMFS Southeast Regional Permit Office at 727-824-5326 or visit sero.nmfs.noaa.gov/.

For Atlantic Tuna Dealer permits, contact NMFS Northeast Regional Permit Office at 978-281-9370 or visit www.nero.noaa.gov/.

For Snapper-Grouper Dealer permits, contact NMFS Southeast Regional Permit Office at 727-824-5326 or visit sero.nmfs.noaa.gov/.

For Dolphin/Wahoo Dealer Permits, contact NMFS Southeast Regional Permit Office at 727-824-5326 or visit sero.nmfs.noaa.gov/.

Raw Fruits Vegetables, and Nuts: Raw fruits and vegetables being sold directly to the consumer do not need to be licensed because they are assumed to be an "approved good", meaning they meet food safety regulations on their own and do not need to be inspected. The Agricultural Marketing Service (AMS) of the USDA has developed a set of standards for grading and standardizing the marketing for many types of produce. These standards provide a point of reference and comparison to assist with marketing and quality control of the products. It can be important to get your products inspected under this program because often-times restaurants and grocery stores require a certain standard to be met before they will purchase your products. In order to get products inspected, growers must submit an application and be prepared to pay a fee to the inspecting agency for their services. In South Carolina, the Agricultural Commodities Marketing Act regulates marketing,

labeling, grading, and quality in addition to those services already performed on a federal level as listed above. More information on grading and inspection can be found through the SCDA at agriculture.sc.gov/gradingandinspection.



Honey

Federal regulations exist to protect honey bees from various pests and pathogens. The Agricultural Marketing Service will determine the different grades of honey on a fee for service basis. Because honey is described as a raw food product it is important to label it with the name of the product, name and address of the manufacturer, and the net weight. Labeling of honey must fit within regulations of the SCDA. Honey sold in a wholesale market to other retail outlets for resale must be processed and packaged in a registered and certified food processing facility. A recent amendment to laws regarding honey now allows the beekeepers who produce no more than four hundred gallons of honey a year and who sell only directly to the consumer, to be exempt from inspections and regulations requiring the honey to be processed in a certified facility. Labels are still required on all jars of honey sold, regardless of whether or not you qualify for the exemption. In order to receive the exemption, beekeepers must file for it with the SCDA. More information on honey production and labeling can be found through the SCDA at agriculture.sc.gov/foodsafetyandcompliance.

Value-Added Foods

All food processors in South Carolina are required to comply with the “Good Manufacturing Practices” requirements mandated in federal regulations. These regulations focus on how food is to be prepared so as to avoid contamination. The FDA also set standards for what types of items products may contain, and how they should be stored. These standards



can be found in Title 21, Chapter I of the Code of Federal Regulations and are available online at www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/CFRsearch.cfm?CFRPart=50=25&showfr=1. When creating fruit butter, jams, and jellies, the regulations set the required minimum level of each ingredient, as well as how to package and label the products so that every ingredient is identified on the label. Food preparation standards are set as well for these goods.

Pickled foods are another value added agricultural product that are subject to state and federal regulations. Pickled foods must maintain a pH of 4.6 or lower and must be thermally processed, or contain preservatives so as to destroy microorganisms that can contaminate the food and risk the safety of the consumer. The standard labeling information applies, and the preparer of the product must maintain detailed records for three years after the date of manufacture. The records should detail ingredients and their sources, production methods used, and the product’s point of sale or distribution. Both pickled/acidic foods and canned products like jams and jellies must be produced in a certified kitchen facility in South Carolina so as to ensure safety, unless you

qualify for an exemption under the Cottage Food Law that was described earlier in this reference guide.

Baked goods, however, can be produced at home without inspection by SC DHEC as long as requirements are met. Baked goods can be stored in a home and then are sold directly to the consumer. In order for a producer to be able to work from their home, they must take all precautionary steps to ensure the cleanliness of the work space and to prevent contamination of the foods. All products produced must still comply with federal and state

labeling requirements, and must also read ““NOT FOR RESALE – PROCESSED AND PREPARED BY A HOME-BASED FOOD PRODUCTION OPERATION THAT IS NOT SUBJECT TO SOUTH CAROLINA’S FOOD SAFETY REGULATIONS.”

As you can see, the regulations put in place by both the federal and South Carolina government work to ensure that the food practices yield a safe, consumer friendly product that will benefit the food industry. For more information on regulations, please contact the USDA, the SCDA, and SC DHEC with further questions.

Nutrition Facts	
Serving Size 2 Tablespoons (15g)	
Servings Per Container 128	
Amount Per Serving	
Calories 20	Calories from Fat 0
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 140mg	6%
Total Carbohydrate 5g	2%
Dietary Fiber 0g	0%
Sugars 4g	
Protein 0g	
Vitamin A 0%	• Vitamin C 0%
Calcium 0%	• Iron 0%
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	
	Calories: 2,000 2,500
Total Fat	Less than 65g 80g
Saturated Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300mg
Sodium	Less than 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Dietary Fiber	25g 30g
Calories per gram:	
Fat 9 • Carbohydrate 4 • Protein 4	



FOOD PROCESSING

If you decide to start a food processing business, you will be required to obtain state and possibly even federal licensing to do so. With the exception of the South Carolina Cottage Food Law, all food processors must do their work in a certified kitchen facility. Some of the requirements for a commercial kitchen include washable floors, walls, and ceilings, as well as lighting and ventilation requirements. You must easily be able to clean all equipment and it must be in good shape in order for the facility to be in regulation. These facilities also need a three-compartment sink or NSF-approved dishwasher and a separate hand sink. For more information on food processing facility requirements, contact SC DHEC and the SCDA to be kept up to date on regulations. A guideline for food processors can be found at agriculture.sc.gov/foodsafetyandcompliance.

There are also regulations in place for labeling food products with accurate information so that the customer can be fully aware of what they are purchasing. Some of the specific label requirements

INGREDIENTS: Vinegar, Sugar, Worcestershire Sauce (Vinegar, Molasses, Water, Sugar, Onions, Anchovies, Salt, Garlic, Cloves, Tamarind Concentrate, Natural Flavorings and Chili Pepper Extract), Ketchup, Mustard, Seasoning salt, Black Pepper, Spices, Artificial Smoke Flavor.

CONTAINS ANCHOVIES

for packaged products include the name of the product, a list of ingredients in order from most predominant to least, the net weight or volume of the product, contact information for the manufacturer/distributor/packer, and nutritional information. The following labeling requirements were extracted from the South Carolina Department of Agriculture and can be found at www.scsfa.org/getting_started.pdf.

The Four Basic Label Requirements (Fair Packaging and Labeling Act)

Statement of Identity (Product Name) shall be in BOLD print, type size must be comparable to the most prominent printed matter (larger than other type). Must be placed on Principle Display Panel.

List ingredients in descending order of predominance by weight (the ingredient that weighs the most is first and the ingredient that weighs the least is last). Must expand ALL sub-ingredients. Font size shall be at least 1/16 inch (based on lower case “o”) and easy to read on a conspicuous place on the label. Lower case must be the proper size...1/16 inch.

Name and address of the manufacturer, packer, or distributor shall be added. Address shall include a street address (if not in a local directory), city or town, state, and zip code. Use the phrases “manufactured by”, “manufactured for”(if company is not the original manufacturer), or “distributed by”.

Net Weight shall be placed at the bottom 1/3 of the Principle Display Panel, shall be in both customary (pound, ounce, fluid ounce, etc.), and shall be in metric (kilogram, gram, milliliter, etc.) weights, and have a minimum font size of (see chart) based on the area of the principle display panel.

Minimum Font Size (inches)	Area of Display Panel (sq. in.)
1/16	5 sq. inches or less
1/8	5-25 sq. inches
3/16	25-100 sq. inches
1/4	100-400 sq. inches

8 pt. Font size (ALL CAPS) will normally be 1/16 inch; 13 pt. or 14 pt. (ALL CAPS) Font size will normally be 1/8 inch; 20 pt. (ALL CAPS) Font size will normally be 3/16 inch. Reference to FPLA and FALCPA can be found at www.fda.gov.

Nutritional Fact Panel is required for firms with 100+ employees and over 100,000 unit sales.

CONCLUSION

Hopefully now that you have read this agricultural guide, you will feel more equipped to handle all stages of the food business. You should now have a more complete understanding of value-added agricultural opportunities, business planning, marketing, product development, and regulatory considerations, which will enable you to successfully enter the agricultural industry and thrive.



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