Socially Disadvantaged Farmers and NRCS Agency United for Sustainable Conservation Methods

Project Summary

In 2016 Operation Spring Plant received a NRCS Conservation Innovation Grant to illustrate to socially disadvantaged producers the benefits of adopting and implementing innovative proven NRCS conservation measures and technologies to address, nutrient management, on-farm energy management, water quality, conservation and cover issues, and developing pollinator habitats. The project set out to access the needs of the farmer, and decide how to begin incorporating conservation practices into their farming operation. We partnered with NRCS Agency personnel to bring much needed conservation information to the farmers in North Carolina through outreach meetings. The project also funded three solar well projects, barnyard practices implementation for the demonstration site and four pollinator habitats and pollinator education. We knew that given an opportunity to see the NRCS conservation practices in action farmers would see for themselves the benefits. The overall objective was to bring information and innovation to the farmer, so that they could implement measures and work towards sustainability for their farm operation.

Impact

The project facilitated 12 outreach meetings which were held in the comfort zones of NC minority farmers in the project demographic areas which included 10 NC counties. Over 300 farmers attended outreach meetings to learn about NRCS Programs and Services and Conservation Practices along with Farm Bill issues, Heir Property, Pollinators and the EQIP Program. In January we held our Annual Conference and hosted 125 farmers and landowners to learn about NRCS Programs & Services, Farm Bill, Heir Property, and other issues concerning the farmer.

Making Safe Soil

Operation Spring Plant's outreach programs were held in a manner only possible with healthy established relationships with trusted farmers, maintained through met expectations over decades. Operation Spring Plant staff met with farmers, one-on-one throughout the grant period. They accessed the farmer's needs and made suggestions on conservation practices and USDA programs and services they might be eligible to receive. They shared their stories of success and gave the farmer a starting point to make change. Farm Technicians I and II demonstrated conservation practices including no-till sod drill, solar technology, making safe soil, pollinator habitats, and provided organic fertilizer for farmers to evaluate. There were approximately 250 one-on-one meetings or inquires held by the staff members with farmers, landowners, interested in NRCS programs.

Successes

Through our outreach, we have learned that from no-till planting to rotational grazing, hoop house operation, solar technology, pollinator habitats, safe soil, and organic fertilizers, small farmers are looking for ways to make their operation more sustainable. We have found farmers very receptive to change in light of the very serious affects they have seen in their own backyard from climate change. They have seen a rise of water issues, wind and storm damage to infrastructure. In year 1 hurricane Matthew brought to the forefront the need for practices to preserve soil from erosion and protect water and soil quality for our eastern NC farmers. They know that they need to be proactive to mitigate future damage. We see an increased interest in renewable energy projects such as watering and lighting systems. Small farmers are interested in diversification of products and multiple small scale enterprises. The desire is to use safe soils, limited or no herbicides and pesticides and natural fertilizers where possible. Our farmers are beginning to see the environmental benefits of conservation and pollination, as well as, the personal benefits which serve to protect them directly as they limit their exposure to harmful chemicals.

The new and beginning and young farmers are interested in returning to the land and are looking for quality, organic foods for their families' consumption and herbs to compliment and heal. They know that they are not alone in this search for nutritious whole foods. They see this as an opportunity to bring quality foods to a more informed consumer wanting fresh, organic, local, nutritious whole foods and herbs. Our young mentees have created a buzz around on-farm sales and are working to develop the farm gate market. They held their first event on August 17, 2019 around a pollinator habitat, aka, U-PICK Sunflower event, which included pollinator education, while providing farm fresh produce, plants, crafts and plan to continue every Saturday until the end of the growing season.

Left to right*: Farm Tech I, Farmer, Technician - *Greensboro, GA

Three solar well systems were installed to expose socially disadvantaged farmers to the implementation and use of solar technology for farm use. Farmer A was able to fence his hogs out of the creek and pump water to a trough for his pasture pork operation. Farmer B uses his solar watering system to pump water to irrigate the vegetables in his hoop house. Farmer C uses his solar watering system to irrigate the plants in his nursery / greenhouse operation. This energy management practice reduced the cost of electricity for well pumps and lighting. Demonstrations were held and exposed approx. 160 persons to date, to this solar technology in practice. There is increasing interest in using this technology, as farmers have learned how versatile and useful it is.

Operation Spring Plants demonstration site has now implemented barnyard practices to manage nutrients to protect the land and local water quality. The farm is located on a hill 750 ft. from a river

feeding stream. A shed was built in compliance with conservation rules and regulations to channel all the water back onto concrete and then into a lagoon. A roof was installed to complete the dry stack facility providing 30 x 40 sq. ft. of drying capacity. The dry stack installation will manage solid waste collection and disbursement. This water quality and nutrient management practice ensures that the soil and air are healthy and the local waterway is protected.

The practice of developing pollinator habitats has provided a source for crop production pollinators and serves to reduce soil erosion. Pollinator education was shared with farmers through one-on-one meetings, workshops and our U-Pick Event and Newsletter. Four pollinator plots were installed with much success. All four sites reported pollinator activity with more and new pollinators observed. One farmer reported an increase in crop sales including grapes from his organic vineyard in 2017 and all planned to continue the practice.

Challenges & Lessons Learned

One of our early challenges was the cost of lumber for the shed and dry stack construction. We were unable to proceed with our initial plan which was to use recycled lumber. It was harder to find and more expensive than we had budgeted for. After much research we decided to cut and mill our own lumber for the project. We were able to cut lumber from the farm and mill it with the use of a portable lumber mill. It was a lot of work, but in the end, we were able to accomplish our goal. The weather proved to be a challenge in the winter months and the cold and rains slowed our progress in January and February. If we had it to do again, we would have the milled wood ready before beginning the project.

One important and pleasant lesson learned was how versatile the renewable energy project is. We have used the energy to pump water for animals and plants, to power lights for hoop houses and power tools for farm use, all at a cost saving to the farmer. All our project recipients love the solar. It has been a real winner!

Milling wood for dry stack and barnyard practices

Next Steps

Operation Spring Plant feels that the direction we are taking is the right path forward as we navigate in an environment of increasing uncertainty. Our eastern North Carolina counties have been impacted by Floyd in 1999 and now for three years, Matthew in Oct. of 2016, Florence in 2018 and Dorian in 2019 have damaged infrastructure, crops, flooded homes and cropland and left down trees and storm debris in pastures and on fence lines, for the farmer and landowner to clean up. Our outreach work uncovers lots of stories of barriers, ineligibility and slow moving service programs. We want to carry the ball to the finish line as we follow up and assist farmers to get certifications, qualify for programs services, and get into new markets. We will continue to monitor and evaluate our solar projects for efficiency and productivity and demonstrate their benefits. We will continue to promote NRCS Programs and Services, because we feel that they are not just good for the environment, but when implemented, increase yields, conserve time, labor, supplies and energy, which translates into hard earned dollars saved, for the socially disadvantaged farmer. Going forward farmers are interested in getting more information on conservation easements and ways to make family land profitable.

LETTERS FROM THE FARMER

To the staff of Operation Spring Plant:

The owners of Sun and Rain Farm want to extend our gratitude for the work that was done here in Greensboro, GA. on our farm. The setup of the solar system in order to create the power needed for the flow of water from the well, to the High Tunnel house was indeed a treat to view. Members from the company Organic High Yield were also present during the installation of the solar system. In conclusion Mr. Willie E. Adams and his staff, say thank you for your professionalism and patience.

Respectfully yours,
Mr. Willie E. Adams
Sun and Rain Farm

To Operation Spring Plant,

We had to work on projects in all kinds of weather. These innovative projects will serve this farm for many years to come. Barnyard practices around black farmers are becoming more important than ever. Conservation practices make it easier to maintain barnyard and control surface water at Olusanya Farm. We had the opportunity to take part in this project installing a 600 watt solar system and inverter that changes D.C. power to A.C. power usable to power other innovative projects in the barnyard, such as wells or shop and electric equipment. We have long tried to do more composting but we did not have access to a dry stack barn. Having access to this facility will make it possible to do even more innovation demonstrations and educational projects that usually aren't applied in black farmers grass-roots communities. This project keeps giving back. Thank you!

Phillip Barker
Farm Manager
Olusanya LLC Farms

LETTERS FROM THE FARMER *, cont'd.*

To Operation Spring Plant:

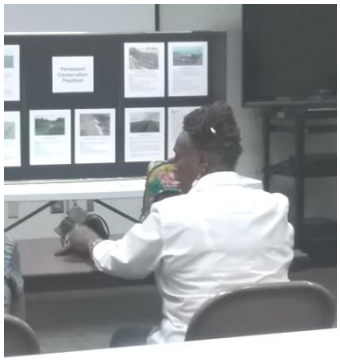
I am a beginning farmer from Warren County, NC. I grow grain and pasture pork on a rotational grazing system. Having a solar system makes it possible to keep my cows and hogs out of the creek on my farm. The cost of putting in an electric line would have cost me more than $6000 had Duke Power installed it. When you have never seen solar work you don't know the possibility. I feel very good about my system and it works every day.

Sincerely,
Montez Alston

Warren County Solar Project

Olusanya LLC Farm Solar Project

U-PICK Sunflower Event



Outreach Meeting

Conservation Practices

Visiting our Farmers

S O P

Since 1987

Who is Operation Spring Plant ?

Operation Spring Plant is a 32 year old non-profit grass-roots community-based organization created to develop and implement activities and programs to improve the social wellbeing of socially disadvantaged and small family farmers ranchers landowners and veterans. Finding ways to support the minority farmer has been a life mission for Phillip and Dorathy Barker, co-founders of Operation Spring Plant, Inc. As farmers themselves, they understand the struggles associated with making a living at working the land. Their farm serves as the demonstration site and is the training ground for farming mentees. As small farmers they were always looking for ways to improve the quality of their farm products, and increase efficiency and productivity. They began to experiment with practices that limited the use of chemical pesticides and herbicides. NRCS conservation practices were a good fit for their operation. Working with the Natural Resource Conservation Service, they implemented measures on their farm and began to see the benefits. As always, they wanted to share the information with others.