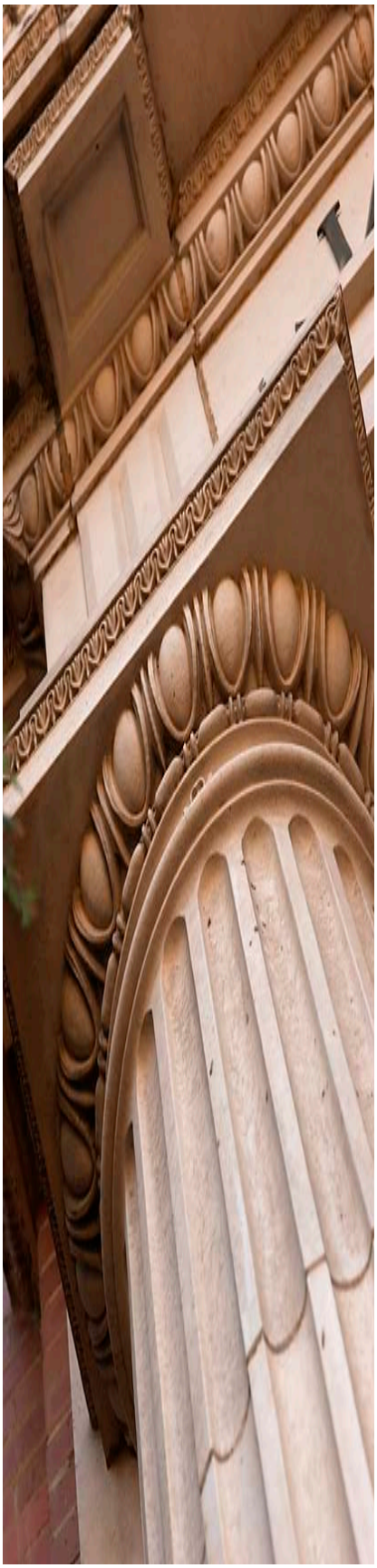

Evaluating Western Sustainable Agriculture Research and Education (SARE) Farmer/Rancher and Agricultural Professional + Producer Grant Programs

2011 Survey Results from Grant recipients reflecting on their grant experience

Report 11-045

October 2011

Prepared for

Western Sustainable Agriculture Research and Education Program
Utah State University
4865 Old Main Hall
Logan, UT 84332

Submitted by

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On behalf of SESRC

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REPORT 11-045
Project SC0503

October 2011

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Western Sustainable Agriculture Research and Education (SARE) Program
Utah State University
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Logan, UT 84322

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Project Profile

Title: **Evaluating the Western SARE Farmer/Rancher and AP Grant Programs: 2011 Survey Results from Grant recipients reflecting on their grant experience**

Abstract: In January 2011-May 2011, grantees of two grant programs in the Western SARE region were contacted for an internet/mail survey. Respondents were given the survey website and a unique survey access code along with a paper questionnaire so that they had the option of completing either the online or paper version of the survey. The completion rate for the survey was 73% or 88 completed or partially completed surveys out of 121 eligible respondents. This report summarizes the main findings from the survey results. When appropriate the current results are compare to results from a similar survey of Farmer/Rancher grantees conducted for the Western SARE in 2005.

Contract with: Western Sustainable Agriculture Research and Education (SARE) Program
Utah State University
4865 Old Main Hall
Logan, UT 84322

Co-Principal Investigators: Danna Moore, Ph.D.
Rose Krebill-Prather, Ph.D.

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All of the work conducted at the Social & Economic Sciences Research Center is the result of a cooperative effort made by a team of dedicated research professionals. The research in this report could not have been conducted without the efforts of interviewers and part-time personnel not listed.

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SESRC is committed to high quality and timely delivery of project results. The following list identifies the SESRC team members responsible for particular elements of this project.

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EXECUTIVE SUMMARY

The Sustainable Agriculture Research and Education (SARE) aims ***to advance sustainable agriculture knowledge and increase the adoption of sustainable agriculture practices.*** Each of four SARE regions works towards accomplishing the goals primarily through grants and support for educational projects and activities. Periodic assessments are conducted in each region in order to measure how well the various grant programs are meeting the short, medium, and long-term outcomes. This report summarizes evaluation results for two grant programs implemented in the Western Region. The **Western SARE Farmer/Rancher Grant Program** was established to support farmers and ranchers seeking to test, adapt and adopt sustainable agriculture production or marketing approaches. The **Western SARE Agricultural Professional plus Producer Grant Program** was established to support agricultural professionals seeking to coordinate with farmers or ranchers to test, adapt and adopt sustainable agriculture production or marketing approaches directly on farms or ranches.

In 2011, the Western SARE worked collaboratively with the Social and Economic Sciences Research Center (SESRC) to conduct a regional assessment to determine the impacts of these two Western SARE grant programs and the reach or diffusion of the grantees' efforts to farmers and ranchers in the general locale of the grantee. Western SARE grantees of the ***Farmer/Rancher (FR) Grant Program*** and the ***Agricultural Professional plus Producer (AP) Grant Program,*** who received grants in 2004-2008, were asked to reflect on project implementation and outcomes and to assess the impacts and reach of their project. They were also asked to provide feedback on the Western SARE grant process. Furthermore, the current FR survey results are compared to the evaluation results obtained from FR grantees in a 2005 survey. In February 2011-May 2011, grantees were contacted and given the option of completing the evaluation survey online, or by filling out a paper questionnaire and mailing it in. The completion rate for the survey was 73% or 88 completed or partially

completed surveys out of 121 eligible respondents. Of these 88 cases, 59 were FR grantees and 29 were AP Grantees.

◆ **<u>FR grantees and AP grantees reported success in how their grants were implemented.</u>**

► A majority of grantees from both grant programs indicated the ***hoped for results*** of their project were achieved to a "great extent," 61% of FR grantees and 59% of AP grantees. None of the FR or AP grantees reported the hoped for results were not at all achieved. Most of the remaining grantees said "to some extent" and less than 10% said "to a slight extent".

► Well over half of AP grants had ***farmers or ranchers cooperatin*g** in one or more of the following ways in the implementation of their project:

- ♦ 90% of projects had a farmer or rancher who was actively involved in on-farm research or demonstration;
- ♦ 79% of projects had a farmer or rancher who provided land for the test plots or provided a site for a tour;
- ♦ 79% of projects had a farmer or rancher who served on the project planning team;
- ♦ 72% spoke about the project at a meeting.

► FR grantees implemented their projects with the guidance and support of a technical advisor—or an agricultural professional and 71% of FR grantees said their **technical advisors** were "very helpful" (compared to 63% in 2005) and another 24% said "somewhat helpful" (35% in 2005):

- ♦ 49% of FR grantees had technical advisors who helped conduct tests and measurements (55% in 2005);
- ♦ 47% of FR grantees had technical advisors who helped publicize the project (55% in 2005);
- ♦ 34% of FR grantees had technical advisors who helped organize a field day for the project (44% in 2005);
- ♦ 34% of FR grantees had technical advisors who helped to write a grant proposal (59% in 2005).

► Conducting ***educational events and developing materials for outreach*** was an important outcome of both grant programs.

- ♦ Among FR grantees:
  - 72% gave a presentation at a workshop, conference or other event;
  - 65% had a news article for the agricultural press or other media outlet;
  - 64% hosted a farm tour.

♦ Among AP grantees:
82% gave a presentation at a workshop, conference or other event;
57% had a news article for the agricultural press or other media outlet.

► Grantees ***received different forms of public recognition*** for their project:

♦ 42% of FR grantees and 52% of AP grantees had an article in a newsletter;

♦ 41% of FR grantees and 41% of AP grantees had an article in a local newspaper;

♦ 19%, of FR grantees and 24% of AP grantees had an article in a magazine;

♦ Less than 10% in each grantee group got awards;

♦ 2005 FR results were similar except more FR grantees had an article in a magazine (29%).

◆ **Farmers or ranchers and others attended field day tours, presentations, workshops, or had personal visits with grantees to learn about Western SARE projects (Reach).**

► Across both grant programs, nearly 6,202 individuals ***learned about one of the projects through a farm tour.***

♦ Among the 34 reporting **FR projects,** just over 3,481 individuals learned about the project ***through a farm tour:***

2227 farmers or ranchers, averaging 65 per project;
253 university or extension staff, averaging 8 per project;
124 agency staff, averaging 4 per project;
877 others, averaging 26 per project.

♦ Among the 25 reporting **AP projects**, over 2721 individuals learned about the project ***through a farm tour***:

1446 farmers or ranchers, averaging 58 per project;
231 university or extension staff, averaging 9 per project;
233 agency staff, averaging 9 per project;
811 others, averaging 32 per project.

► Across **both grant programs**, over 12,224 individuals learned about one of the projects through ***a presentation at a workshop or conference.***

♦ Among the 34 reporting ***FR projects,*** over 5,820 learned about the project ***through a presentation at a workshop or conference:***

3068 farmers or ranchers, averaging 148 per project;
523 university or extension staff, averaging 14 per project;
372 agency staff, averaging 10 per project;
1857 others, averaging 54 per project, with one grantee estimating an additional 4000 other individuals.

♦ Among the 27 reporting ***AP projects,*** at least 6,404 individuals learned about the project ***through a presentation at a workshop or conference:***

3691 farmers or ranchers, averaging 148 per project;
607 university or extension staff, averaging 24 per project;
474 agency staff, averaging 19 per project;
1632 others, averaging 65 per project.

► 98% of **FR grantees** and similarly 97% of **AP grantees** indicated they had ***visited individually with farmers or ranchers*** regarding their project.

♦ Across the 53 reporting FR projects, grantees visited individually with 1665 farmers or ranchers with an average of 31 per project. The highest number for any one project was 500.

♦ Across the 29 reporting AP projects, grantees visited individually with 700 farmers or ranchers with an average of 24 per project. The highest number of any one project was 200.

◆ **Farmers or ranchers who learned about one of the FR or AP projects also tested or adopted the idea, approach, or technology put forth in the project (Reach).**

► 77% of **FR grantees** and 89% of **AP grantees** indicated one or more farmers or ranchers tried out the idea, approach, or technology put forth in their project.

♦ Among the 48 reporting FR projects, 790 farmers or ranchers tried the idea, approach, or technology with an average of 16 per project. The highest number for any one project was 200.

♦ Among the 27 reporting AP projects, 456 farmers or ranchers tried the idea, approach, or technology with an average of 17 per project. The highest number for any one project was 150.

► 78% of FR grantees and 83% of AP grantees indicated that the idea, approach or technology tested by their project continues to be used (compared to 82% of FR grantees in 2005).

♦ Among the 22% of FR projects and 17% of AP projects where the idea, approach or technology has been discontinued, grantees reported that in some cases the implementation costs were too high; or there was a lack of interest; or sometimes the idea, approach, or idea did not work as intended; or unforeseen factors interfered with implementation.

► 52% of FR grantees and 56% of AP grantees indicated there were problems or extenuating circumstances that limited the impact and effectiveness of their project's ability to use the results.

♦ Extenuating circumstances included unforeseen obstacles, high costs, general lack of interest, or misjudgment of what was needed to successfully implement the idea, approach, or technology.

◆ **FR grantees reported various positive impacts the main idea, approach, or technology had on aspects of their farm or ranch operation (Impact).**

► Among aspects of costs related to production inputs, a majority of FR grantees, between 62% and 92%, indicated fertilizer, fuel, pesticide, weed control, and/ or seed costs have decreased or stayed the same.

► Among aspects of various other operating costs, a majority of FR grantees, between 48% and 71%, indicated hired labor, management, machinery and equipment, and/or on-farm processing costs decreased or stayed the same.

► Among various measures of production outcomes, a majority of FR grantees, between 72% and 93%, indicated yields, production per unit, market or consumer recognition of crops or livestock, and/or sales increased.

► Among aspects of environmental quality, an overwhelming majority, between 79% and 91%, indicated conditions had improved or stayed the same, including soil erosion, soil quality, air quality, water quality, and/or quantity of wildlife habitat.

► 64% of FR grantees indicated they experienced an increase in net income on their farm or ranch as a result of their project (compared to 52% in 2005).

- **AP grantees observed improvements on those farms and ranches that tried their project idea, approach, or technology (Impact).**

  ► 67% indicated they observed "increased farm/ranch efficiencies".

  ► 42% said they observed "improved quality of life", though nearly a fifth, 19%, said "unsure".

  ► 56%, observed an "increase net income" while nearly a quarter, 24%, were unsure.

  ► 42% observed "improved soil quality" but a fifth, 21%, were unsure.

  ► 33% observed "increased access to locally grown food" and 17%, were unsure.

- **FR grantees and the cooperating farmer or rancher on AP grants made changes in their farming behavior as a result of participating on the grant (Impact).**

  ► 71% of **FR grantees** "*sought more information on the use of the approach or technology tested*" and 93% **AP grantees** indicated they observed this among farmers or ranchers cooperating on their project (compared to 70% of FR grantees in 2005).

  ► 58% of **FR grantees** "*expanded use of this approach or technology on other parts of their farm/ranch*" and 73% of **AP grantees** indicated they observed this among farmers or ranchers cooperating on their project (compared to 48% of FR grantees in 2005).

  ► 52% of **FR grantees** indicated they *"changed other operations on their farm/ranch"* and 65% of **AP grantees** indicated they observed this among farmers or ranchers cooperating on their project (compared to 43% of FR grantees in 2005).

  ► 40% of **FR grantees** (compared to 32% of FR grantees in 2005) "*obtained new markets for the crops or livestock raised*" and 43% **AP grantees** indicated they observed this among farmers or ranchers cooperating on their project.

  ► 34% of **FR grantees** (compared to 28% of FR grantees in 2005) indicated they "*added a new enterprise on their farm/ranch"* and 48% of **AP grantees** indicated they observed this among farmers or ranchers cooperating on their project.

  ► **FR grantees** indicated their project positively influenced their agricultural outlook.

♦ 64% of FR grantees indicated that their "satisfaction with farming" had increased while another 27% indicated it has stayed the same as a result of the project (only 5% said "not applicable").

♦ 44% of FR grantees indicated their spouse's satisfaction with farming increased and another 32% indicated it has stayed the same (15% said "not applicable").

♦ 58% of FR grantees indicated their "level of cooperation with other farmers increased while 34% indicated the cooperation had stayed the same (only 5% said "not applicable").

♦ 34% of FR grantees indicated "quality of life conditions for farm labor" had increased, while 29% said "stayed the same" (31% said "not applicable").

♦ 39% of FR grantees indicated there has been an increase in the "favorable options for farm succession" while 24% said favorable options have stayed the same (22% said "not applicable").

♦ 24% of FR grantees indicated an increase in the "likelihood that your children will stay in farming", while 20% indicated it had stayed the same (29% said "not applicable").

► When a new approach comes along that might be ***financially beneficial*** on their farm or ranch, 79% of **FR grantees** indicated they would "try it out right away", while 16% indicated they would tend to "wait and see if others try it out first then test it myself". The remaining 5% indicated they tend to "wait until an approach is proven and used by lots of neighbors before trying it out myself." (compared to 72% who said "try it out right away" in 2005).

► When asked about a new approach that might be ***environmentally beneficially*** to their farm or ranch, 74% of **FR grantees** indicated they would "try it out right away", whereas only 23% indicated they would tend to "wait and see if others try it out first then test it myself". The remaining 3% indicated they tend to "wait until an approach is proven and used by lots of neighbors before trying it out myself" (compared to 71% who said "try it out right away" in 2005).

◆ **Grantees from both grant programs identified important results and new ideas generated from their project.**

► The most important results from FR and AP grantees were described as:

- ♦ Successfully demonstrated or implemented the idea, approach, or technology;
- ♦ Modified or expanded how the idea, approach, or technology was used;
- ♦ Explored an idea, approach, or technology and improved understanding and future prospects for use; and
- ♦ Had project outcomes that surpassed what was expected.

► 79% of **FR grantees** indicated the information they gained from their project was "very useful" and another 19% indicated the information has been "somewhat useful" (82% of FR grantees said "very useful" in 2005).

► 97% of **AP grantees** indicated that they are or will be "extending information on the idea, approach, or technology that was tested with their project."

► 79% of **FR grantees** and 93% of **AP grantees** reported their project triggered or inspired new ideas (86% of FR grantees in 2005).

♦ For some projects, the research is ongoing and grantees continue to work on the idea, approach, or technology. On several projects, enhancements of or additional applications of the practice were explored and others made refinements or adjustments on the practice. Some projects developed new value added products. Other grantees felt their perspective had changed and/or they changed the way they do things as a result of the project. Finally, some grantees felt their project led to greater dissemination of the idea, approach, or technology.

► 78% of those **FR grantees** who indicated their project triggered or inspired new ideas reported they tested the new ideas on their farm/ranch (compared to 73% in 2005) and 78% of those who have tested those ideas on their farm/ranch said that they have continued to use those new ideas on their farm/ranch.

► 34% of **AP grantees** reported their SARE project led them to "leverage additional funds to continue or expand this project".

► 41% of **AP grantees** reported that their SARE project led them to "secure funding for a new but related project".

► 28% of **AP grantees** described a wide range of other advantages they had as a result of their AP project including enhanced knowledge and understanding, led to new directions for research, inspired farmers and ranchers to use new or alternative practices, established partnerships and developed careers.

◆ **Overall, FR grantees and AP grantees felt favorable about the Western SARE grant program and gave overall positive ratings to aspects of the Western SARE grant-making and administration process (Customer Service).**

► Three quarters or more of FR grantees and AP grantees rated nearly all aspects of the Western SARE grant-making and administration process as either "excellent" or "good." Overall, FR grantees gave higher ratings to aspects of Western SARE staff interactions, whereas AP grantees gave overall higher ratings to aspects of applying for Western SARE funds.

♦ **Applying for Western SARE funds,** *% excellent or good rating from FR grantees/ AP Grantees*

Ease of finding information about Western SARE funding opportunities	83%	100%
Ease of finding information on Western SARE grant policies and procedures	75%	100%
Ease of finding information on Western SARE-funded projects	76%	97%
Ease of obtaining grant application forms	85%	91%
Clarity of grant application forms and instructions	81%	86%
Adequate time between announcement and deadline to submit proposals	82%	90%

♦ **Western SARE's provision of information,** *% excellent or good rating from FR grantees/ AP Grantees*

Keeping applicants informed on the status of their application and the funding decision	81%	97%
Allowing adequate time for applicants to respond to additional requests for information	72%	52%
Providing official notification and explanation of the outcomes of the review process in a timely manner	80%	89%

♦ **Western SARE's overall grant process,** *% excellent or good rating from FR grantees/ AP Grantees*

Reasonable grant requirements and provisions	83%	90%
Timeliness of distributing funds for awarded projects	78%	97%
Streamlined reporting requirements that eliminate redundancy	71%	93%
Responding to your post-award requests in a timely manner	69%	100%

♦ **Western SARE's staff interactions,** *% excellent or good rating from FR grantees/ AP Grantees*

Courteousness	93%	100%
Timeliness in responding to requests or information and assistance	89%	100%
Ability to direct you to the right person	83%	90%
Responsiveness to your questions	90%	96%
Accuracy of responses	89%	86%

► The majority of **FR grantees** (58%) and **AP grantees** (69%) indicated their expectations about Western SARE programs and services were somewhat to greatly exceeded. Another 38% in each grantee group indicated their expectations were met.

► Suggestions for improving the Western SARE program service included increasing the amount of money available to fund projects and/or fund specific types of projects, modify or extend the time period for projects, make improvements in the granting process, and facilitate ways of disseminating information about the projects.

► 93% of **FR grantees** and 97% of the **AP grantees** indicated they would consider seeking another grant from the Western SARE. Furthermore, all but one FR grantee and all AP grantees would recommend seeking a grant from the Western SARE to others. A majority or 63% of FR grantees said they would not have pursued the idea, approach, or technology of their project without the having received the grant.

◆ **FR and AP grantees have preferred formats for obtaining sustainable agriculture information and grantees use SARE materials in a variety of ways.**

► Both FR and AP grantees highly prefer a variety of ways of obtaining sustainable agriculture information.

♦ A half or more of **FR grantees** *highly prefer* the following ways of obtaining sustainable agriculture information: the Internet (56%); and farm tours, field days, workshops, or conferences (54%).

♦ 42% of **FR grantees** *most prefer* the Internet and another 25% *most prefer* farm tours, field days, workshops, or conferences.

♦ A majority of **AP grantees** *highly prefer* the following ways of obtaining sustainable agriculture information: the Internet (86%); consultation with

peers (69%); farmers and ranchers you work with (69%) professional conference or workshop (59%); and in-service training (54%).

♦ 46% of **AP grantees** *most prefer* the Internet and 11% most prefer in-service training.

► Over three quarters of both **FR and AP grantees** have read a SARE publication, 80% and 90% respectively.

► 42%of **FR** and **5**7% o**f AP grantees** have sought more information from the resources listed in a SARE publication.

► 36% of **FR grantees** have been inspired by a SARE publication to explore new production or marketing ideas and 38% said they have passed a SARE publication to others.

► 41% of **FR grantees** and 62% of **AP grantees** have passed a SARE publication on to others.

► 51% of ***FR grantees*** heard about the FR grant program through an extension agent or educator (57% in 2005).

► 30%, heard about the FR grant program through the SARE website and nearly a fifth, or 19%, did through a SARE newsletter or publication (15% said SARE website in 2005).

► 62% of ***AP grantees*** heard about the AP grant program through a colleague, 45% through the SARE website.

Conclusion

Projects funded by both Western SARE grant programs reached a considerable number of producers through the projects' educational events. The projects tended to encourage learning and change among the majority of participants. Grantees reported positive changes in economic and environmental indicators associated with their projects. Both FR and AP grantees gave high ratings to Western SARE on customer service indicators. Overall, grantees in both programs had a positive experience with Western SARE and the grants they received.

I have had good experiences and would share with others. (FR grantee)

You have a great program -- more people need to know about it. (FR grantee)

I would like to thank the SAREs for giving me the opportunity in receiving this grant to help implement new ideas for farming. (FR grantee)

SARE is a very user-friendly and farmer-friendly program! (FR grantee)

Thank you SARE for providing the opportunity to conduct much needed applied research and demonstration in site-specific initiatives! (AP grantee)

SARE is probably the most user friendly and producer connected portion of the USDA network. I firmly believe it has done an invaluable service for the American (and global) small farmer. (AP grantee)

This grant afforded us the opportunity to work on a project that was practical and interesting; we are still learning from the use of this technology and will continue to work with it in the future. We appreciate the opportunity. Thank you! (AP grantee)

My experience with SARE was entirely positive, from the initial discussion of my project ideas through the final report stage. THANK YOU! (AP grantee)

Evaluating the Western SARE Farmer/Rancher and Agricultural Professional + Producer Grant Programs

OVERVIEW

Introduction and Background

The Sustainable Agriculture Research and Education (SARE) encourages research and education designed to increase knowledge and extend information about Sustainable Agricultural production systems. SARE works to increase knowledge about and help farmers and ranchers adopt practices that improve profits, environmental stewardship, and quality of life. SARE does this primarily through grants and support for educational projects and activities. There are four SARE regions in the United States and each region works toward accomplishing the SARE goals. Periodic assessments are conducted in each region in order to measure how well the SARE is meeting the short, medium, and long-term outcomes for each of the grant programs as outlined in the SARE Logic Model. Two of the Western SARE grant programs are the focus for this evaluation, the **Farmer/Rancher Grant Program** and the **Agricultural Professional plus Producer Grant Program**.

In 1994, the **Western SARE Farmer/Rancher Grant (FR) Program** was established to support farmers and ranchers seeking to test, adapt and adopt sustainable agriculture production or marketing approaches. Since its beginning 17 years ago, the program has funded nearly 350 projects on farms and ranches throughout the West. Those Farmer/Rancher Grantees (now referred to as Producer Grants) awarded in 2004-2008 are the respondents for this evaluation.

The **Western SARE Agricultural Professional plus Producer Grant (AP) Program** was established in 2004 to support agricultural professionals seeking to coordinate with farmers or ranchers to test, adapt and adopt sustainable agriculture production or

marketing approaches directly on farms or ranches. Since its beginning, the program has funded 63 projects throughout the West. Those AP Grantees awarded grants in 2004-2008 also are the respondents for this evaluation.

Evaluation Objectives

The main purpose of this evaluation study was to determine the impacts of these two Western SARE grant efforts and the reach or diffusion of the grantees' efforts to other farmers and ranchers in the general locale of the grantee. The primary research objectives were to:

- ► Determine if farming behavior of grantees (on FR grants) or their cooperating farmer or rancher (on AP grants) has indeed changed as a result of participating in the grant program (Impact);
- ► Determine what impact adopting the change may have had on some facet of the grantee's farming operation (e.g., profitability, increase or decrease in labor or management) (Impact);
- ► Determine how many other farmers or ranchers attended a field day tour or had personal visits with grantees (Reach);
- ► Estimate how many of those visiting farmers or ranchers also tested or adopted a practice or technology (Reach);
- ► Determine if changes in the grant-making, contracting or reporting process or requirements are necessary to make the program more user-friendly, based on the comments of grantees (Customer Service).

Evaluation Methodology and Implementation

In 2011, the Western SARE PDP worked collaboratively with the Social and Economic Sciences Research Center (SESRC) to conduct a regional assessment of two of the Western SARE grant programs: The ***Farmer/Rancher Grant Program (FR)*** and the ***Agricultural Professional + Producer Grant Program (AP).*** The grantees of these two programs in the Western SARE region were asked to reflect on project implementation and outcomes and to assess the impacts and reach of their project.

They were also asked to provide feedback on their experience with the Western SARE grant process.

Western SARE and the SESRC worked collaboratively on developing two survey questionnaires, one version for each grant program. In the development of the FR grantee survey some questions from the 2005 survey were replicated. Once the 2011 questionnaires were finalized, each was formatted into a paper booklet form and programmed into a web survey format. Each respondent was assigned a unique identification/access code for the survey. This number provided a way to track returns and follow-up with non-responders. It also limited access to the internet survey to those who were specifically asked to participate. Throughout the data collection period, respondents in each grant group had the option of completing the survey using the paper version or the web version.

The Western SARE regional office provided the names and contact information for the eligible grantees in their states or protectorates who received grants in 2004-2008. The SARE grantees were surveyed in winter and spring 2011 and the data collection was completed in May 2011. The same contact strategy was used for respondents in each grant program though survey materials were tailored to each grant program. A total of 125 grantees were contacted, 83 in the FR program and 42 in the AP program.

Western SARE FR and AP grantees were contacted through a series of postal mailings including an introductory letter from the Western SARE regional office, an initial mailing of the paper questionnaire, postcard reminder, and final mailing with a replacement questionnaire. Postal contacts were augmented with email invitations and reminders to participate in the survey. In each of the postal and email contacts, the webpage link and unique access code were provided (Table 1A). As an incentive to participate, grantees in both grant groups were offered a free Sustainable Agriculture Research and Education (SARE) publication of their choice that would be mailed to them after their completed survey was received.

Table 1A. Sequence of Contacts

Type of Contact	Date
Letter from Western SARE introducing the survey	February 4, 2011
Pre-notice letter from SESRC with web link	February 11, 2011
Personalized introductory email with web link	February 16, 2011
First mailing of paper questionnaire and web link	February 28, 2011
Second email with web link	March 8, 2011
Postcard reminder	March 11, 2011
Second/replacement questionnaire and web link	March 31, 2011
Third reminder email with web link	April 18, 2011
Third/replacement questionnaire with web link	May 6, 2011
Final reminder email with web link	May 23, 2011

Response Rates

From the initial list of 125 grantees compiled by the Western SARE regional office, two grantees in each grant program were not eligible to participate. Eighty-eight SARE grantees completed the survey, 30 through the postal mail and 55 via the internet with another 3 partially completed the survey via the internet. A 73% *response rate* was obtained, or the percent of those who completed the survey out of the whole list who were contacted and eligible to participate. Since the entire population of grantees was surveyed, there is no ***sampling error*** for this study. Furthermore, the results from this 2011 survey are compared to results of the 2005 survey of the population Western SARE FR grantees.

Each state in the western region was represented in the FR results by one or more projects except for Colorado (Table 1C). Furthermore, all of the US protectorates in the western region were also represented except for Federated States of Micronesia. Among the AP projects several states were not represented in the results: Alaska, Arizona, and Nevada. Among US Protectorates, all were represented except for American Samoa.

Table 1B. Survey disposition and response rate

Survey Disposition	Farmer Rancher Grantees	Ag Professional + Producer Grantees
Number of mail completes	25	5
Number of web completes	32	23
Number of partial completes	2	1
Refusal	0	0
Non response	22	11
Ineligible	2	2
TOTAL	83	42
Response rate	73%	72.5%

Table 2. State or protectorate where you farm or ranch? *(FR Q52 AP Q38).*

State/Protectorate	FR %	FR N	AP %	AP N
AS	3%	2	0%	0
AK	2%	1	0%	0
AZ	5%	3	0%	0
CA	8%	5	17%	5
CO	0%	0	7%	2
FM	0%	0	7%	2
GM	3%	2	3%	1
HI	8%	5	3%	1
ID	7%	4	7%	2
MP	3%	2	3%	1
MT	8%	5	10%	3
NM	5%	3	3%	1
NV	3%	2	0%	0
OR	22%	13	10%	3
UT	3%	2	10%	3
WA	14%	8	10%	3
WY	2%	1	7%	2
Palau	2%	1	0%	0
TOTAL	100%	59	100%	29

SURVEY RESULTS AND FINDINGS

Hoped for results achieved

When FR and AP grantees were asked the extent to which their grant achieved the hoped for results, a majority of grantees in both groups indicated hoped for results were achieved "to a great extent," 61% among FR grantees and 59% among AP grantees (Table 3). About another third in both grantee groups said results were achieved "to some extent," 32% among FR grantees and 38% among AP grantees. None of the grantees in either group indicated hoped for results were achieved "not at all." In 2005, FR grantees were asked if the "hoped for" results were achieved and 84% indicated "yes." This percent is slightly less than the 93% of 2011 FR grantees that indicated the hoped for results were achieved at to some or to a great extent.

Table 3. Extent the results hoped for with the Western SARE Grant were achieved *(Farmer/Rancher (Q2) / AP (Q16))*

	FR %	FR N	AP %	AP N
To a great extent	61%	36	59%	17
To some extent	32%	19	38%	11
To a slight extent	7%	4	3%	1
Not at all	0%	0	0%	0
	100%	59	100%	29

2005 results: 84% indicated "hoped for" results were achieved.

Main Idea, Approach, or Technology Tested

Both FR and AP Grantees were asked to describe the main idea, approach, or technology tested in their project, which revealed a number of main topic areas among projects in both grant programs. First, a number of projects tested ideas or approaches related to ***agricultural marketing and production***. While some projects assessed current marketing strategies and/or expanding markets for key products or

commodities, others focused more specifically on niche markets or new markets and/or markets for new or different commodities or products, including value added products. Another set of projects focused on ***ecology and sustainability*** including waste management and water quality issues. Others focused on ecological weed management while a number of others dealt with sustainable grazing systems or issues in range management. Several projects specifically focused on forage production issues. A third set of projects focused on ***sustainable agricultural systems or farm efficiency*** with some pertaining to small-scale farms and others on organic agriculture more generally. Several projects focus primarily on ***education and outreach*** including computer/internet applications. Within these main topics, there were several projects related to ***aquaculture and/or fisheries*** and several related to ***tropical agriculture***. The complete text responses to the question about main idea, approach, or technology are presented in Appendix B.

Project Implementation

The FR grant program is set up so that the FR grantees, who are all agricultural producers, conduct their projects with support and guidance from a technical advisor, or an agricultural professional. One consideration in the evaluation of the grant implementation of the FR grants was to find out the FR grantees' experience with their technical advisor. A majority of the FR grantees, 65%, had a technical advisor from Extension or through a land grant university and 4% had an advisor from NRCS. Thirty-one percent indicated their advisor was from another background (Table 4).

Table 4. The technical advisor on FG project (FR Q15)

	FR %	**FR N**
Extension/Land grant university	65%	36
NRCS	4%	2
Other	31%	17
TOTAL	100%	55

Technical advisors helped on FR projects in a variety of potential ways. About half of FR grantees reported that their technical advisor "conducted tests and measurements" (49%) and/or "publicized the project" (47%) (Table 5). About a third of FR grantees indicated their advisor "organized a field day for the project" (34%) and/or "wrote a grant proposal" (34%). When comparing these results to the 2005 findings, technical advisors helped in higher proportions in previous years in every way except for "other" ways. In 2005, only 24% indicated "other". By 2011, that percent doubled; 51% of grantees indicated technical advisors helped in other ways. Technical advisors provided advice and consultation on projects in general; they also promoted projects, provided contacts, and made site visits. Technical advisors offered professional skills by assisting and/or commenting on the design and technical details of the research and in reviewing, analyzing, proofreading, and editing reports and other project related documents (e.g. curriculum). Only 7% of FR grantees did not report any ways in which technical advisors helped on projects.

In terms of overall helpfulness, 71% of FR grantees reported that their technical advisor was "very helpful" which is higher than the 63% that indicated "very helpful" in 2005 (Table 6). In 2011 about quarter, or 24%, indicated their technical advisor was "somewhat helpful" and only 5% said "not helpful."

Table 5. Ways technical advisor helped on project (FR Q16)

None 7% (4) 2005 none 7%

(multiple response)	*2005*	***FR % Yes***	***FR N Yes***
Write the grant proposal	59%	34%	20
Organize a field day for the project	44%	34%	20
Publicize the project	55%	47.5%	28
Conduct tests and measurements	55%	49%	29
Other	24%	51%	30

Table 6. Helpfulness of Technical Advisor on Project (FR Q17)

	2005	***FR %***	***FR N***
Very helpful	63%	71%	41
Somewhat helpful	35%	24%	14
Not helpful	2%	5%	3
TOTAL	100%	100%	58

In the AP Grant program, while an agricultural professional such as someone with a position in Extension or with the Natural Resources Conservation Service coordinates the project, each project has a farmer or rancher who serves as the "cooperating farmer or rancher." AP Grantees were asked about the involvement of farmers/ranchers with whom they worked. All of the AP grantees had cooperating farmers/ranchers involved in their project in one or more ways (Table 7). Ninety percent of AP grantees had a cooperating farmer/rancher "actively involved in on-farm research or demonstration." Four-fifths of AP grantees (79%) had a cooperating farmer/rancher serving on the project planning team and the same proportion (79%) had a cooperating farmer/rancher who provided land for the test plots or provided a site for a tour. Nearly three-fourths, 72%, had a cooperating farmer/rancher who spoke about the project at a meeting. Only 3% (or one AP grantee) had a cooperating farmer/rancher co-author a paper or other product. AP grantees did not indicate any "other" ways in which cooperating farmers/ranchers were involved.

Table 7. Involvement of one or more cooperating farmers or ranchers on Ag Professional + Producer Grant funded project. *(AP Q2)*

None, no cooperating farmer or rancher was involved: 0% 0

(multiple response)	**%**	**N**
Served on project planning team	79%	23
Actively involved in on-farm research or demonstration	90%	26
Provided land for the test plots or provided site for a tour	79%	23
Spoke about the project at a meeting	72%	21
Co-authored a paper or other product	3%	1
Other	0%	0

When asked in what year the idea, approach or technology was first used, among FR grantees, 36% indicated it was in use on their farm/ranch before the start of the project and 54% indicated it was put to use in the year of the project or later (Table 8). Six FR grantees (10%) did not give a response and because of how the question was asked for these grantees, it could not be determined whether that meant the idea, approach, or technology was not used, or whether these cases were just missing data.

Among AP grantees, 86% implemented the idea, approach, or technology during the first project year or later. None of the AP grant practices were started before the start of the project. The remaining 10% of AP grantees indicated the idea, approach, or technology did not get put into use on a farm or ranch as part of their project implementation.

Table 8. Use of main idea, approach, or technology on your farm/ a farm or ranch that cooperated on this project)? *(FR Q4/ AP Q4)*

	FR %	FR N	AP %	AP N
Yes, before project start	36%	21	0%	0
Yes, after project start	54%	32	86%	25
No			10%	3
No answer given	10%	6	3%	1
	100%	59	100%	29

Educational Events and Materials and Audiences Reached

When asked about educational events or materials that were part of the FR outreach effort, 72% of FR grantees indicated they gave a presentation at a workshop, conference, or other event (Table 9). Sixty-five percent indicated they had a news article for the agricultural press or other media outlet; 64% hosted a farm tour; and only 28% contributed to an academic paper. Twenty-one percent of FR grantees indicated that “other” educational events or materials were part of their project outreach effort. Some of these other events or materials included some kind of web or internet application such as website postings or blogs. Reports and curriculum were developed

for some projects and media attention was noted for other projects. In one project, the grantee indicated his/her project has been used as the poster child for other projects.

When asked about educational events or materials that were part of the AP outreach effort, 82% of the AP grantees gave a "presentation at a workshop, conference or other event" and/or 89% had a "farm tour hosted by a cooperating farmer/rancher," 93% (Table 10). Over half, 57%, had a news article for the agricultural press or other media outlet, while 46% of AP grantees indicated they had an extension publication. Only 18% had a journal article. A quarter, 25%, indicated they had "other" educational events or materials. These included flyers, brochures, posters and/or videos or pictures.

Table 9. Educational events or materials that were part of FR project outreach effort *(FR Q18)*

Events and Materials *(multiple response)*	***% Yes***	***N Yes***
Farm tour that you hosted	64%	37
Presentation you gave at a workshop, conference or other event	72%	42
Contributed to an academic paper	28%	16
News article for the agricultural press or other media outlet	65%	38
Other	21%	12

Table 10. Educational events or materials that were part of Ag Professional + Producer Project outreach effort *(AP Q9)*

Events and Materials *(multiple response)*	***% Yes***	***N Yes***
Farm tour hosted by cooperating farmer or rancher	89%	25
Presentation you gave at a workshop, conference or other event	82%	23
Extension publication	46%	13
Journal article	18%	5
News article for the agricultural press or other media outlet	57%	16
Other	25%	7

One aspect of this evaluation was to find out the reach of the events and materials developed by the projects. Grantees in both groups were asked how many people from various audiences (e.g. farmers and ranchers, university extension staff, agency staff, etc.) learned about their project through a farm tour and/or a presentation. Based on grantees' responses, it was clear that project information was disseminated through farm tours and/or presentations at workshops and conferences (Table 11).

Thirty-four of the FR grantees (58%) and twenty-five of the AP grantees (86%) reported information about the numbers reached through a farm tour. However, 14% of FR grantees and 3% of AP grantees indicated this question was "not applicable" to their project; furthermore, 8% of FR grantees and 3% of AP grantees indicated they did not know how many people were reached through a farm tour. The remaining 20% of FR grantees and 7% of AP grantees left this question blank.

Similar reporting patterns occurred on the question about number of farmers or ranchers who learned about the project through a presentation at a workshop or conference. Thirty-seven of the FR grantees (63%) and twenty-five of the AP grantees (86%) reported information about the numbers reached through a farm tour. However, 8% of FR grantees and 3% of AP grantees indicated this question was not applicable to their project; furthermore, 5% of FR grantees and 3% of AP grantees indicated they did not know how many were reached through a presentation at a workshop or conference. The remaining 24% of FR grantees and 7% of AP grantees left this question blank.

In those cases where this set of questions about audiences reached was left completely blank, there is no way to know if the grantee meant "none" or whether they chose not to answer these questions and left them blank. However, in those cases where grantees filled in some of the numbers, but left other fields blank, the blanks are assumed to be zeros, as the "zero" is implied. Because a proportion of grantees did not answer this set of questions, either because the data were missing or they indicated they did not know or felt the question was not applicable, the numbers

reached reported for each audience represent conservative estimates of the numbers reached by these grants overall.

Reach to Farmer/Rancher Audience. Overall, among reporting FR grantee projects, 2227 farmers or ranchers learned about a FR project through a farm tour, averaging 65 per FR project, while even more, or 8068 farmers or ranchers, heard about a FR project through a presentation at a workshop or conference, representing about 218 per FR project. Among reporting AP grantee projects, 1446 farmers or ranchers learned about an AP project through a farm tour, averaging 58 per AP project. Meanwhile, even more, or 3691 farmers or ranchers, heard about an AP project through a presentation at a workshop or conference, or 148 per AP project.

Reach to University or Extension Staff Audience. Overall, among reporting FR grantee projects, 253 university or extension staff learned about a FR project through a farm tour, averaging 7 per FR project; while 523 university or extension staff heard about a FR project through a presentation at a workshop or conference, or 14 per FR project. Among reporting AP grantee projects, 231 university or extension staff learned about an AP project through a farm tour, averaging 9 per AP project. Meanwhile, 607 university or extension staff heard about an AP project through a presentation at a workshop or conference, or 24 per AP project.

Reach to Agency Staff Audience. Overall, among reporting FR grantee projects, 124 agency staff learned about a FR project through a farm tour, averaging 4 per FR project; while 372 agency staff heard about a FR project through a presentation at a workshop or conference, or 10 per FR project. Among reporting AP grantee projects, 233 agency staff learned about an AP project through a farm tour, averaging 9 per AP project. Meanwhile, 474 agency staff heard about an AP project through a presentation at a workshop or conference, or 19 per AP project.

Reach to Others. Overall, among reporting FR grantee projects, 877 others learned about a FR project through a farm tour, averaging 26 per FR project, while 1,857 others heard about a FR project through a presentation at a workshop or conference, or 51 per FR project. In addition, one FR grantee indicated that 100,000 others were reached through a presentation at a workshop or conference. Among reporting AP grantee projects, 811 others learned about an AP project through a farm tour, averaging 32 per AP project. Meanwhile, 1632 others heard about an AP project through a presentation at a workshop or conference, or 65 per AP project.

In addition to farm tours and presentations, grantees were asked about how many farmer or ranchers they visited with individually regarding their FR project. While only one FR grantee indicated they did not visit individually with any farmers or ranchers, over half, or 51%, visited with between 1-10 farmers or ranchers and another two-fifths of FR grantees, or 42%, visited with 11-100 farmers or ranchers each (Table 12). The remaining 6% indicated they visited individually with over 100 farmers or ranchers, with the highest being 500. Overall, across 53 FR projects reporting, grantees visited individually with 1665 farmers or ranchers with an average 31 per FR project.

While only one AP grantee indicated they did not visit individually with any farmers or ranchers, a little over a third, or 35%, visited with between 1-10 farmers or ranchers and another 38% of AP grantees visited with 11-20 farmers or ranchers each and one fifth, or 21%, visited individually with 21-100 farmers or ranchers (Table 12). One AP grantee (3%) indicated he/she visited individually with over 100 farmers or ranchers, with that number being 200. Overall, across 29 AP projects reporting, grantees visited individually with 700 farmers or ranchers with an average 24 per FR project.

Table 11. Number of people from various audiences who learned about the project through a farm tour and/or a presentation you gave *(FR Q19 / AP Q11)*

Number who learned about your project:	**Through a farm tour**	**Your presentation at workshop or conference**
Farmers or Ranchers	FR Range: 4-500 *(n=29)* *Implied/specified zero: 5 projects* Sum=2227/Mean=65 AP Range: 5-250 *(n=24)* *Implied/specified zero:* *1 project* Sum=1446/Mean=58	FR Range: 5-5000 *(n=34)* *Implied/specified zero: 3 projects* Sum=8068/Mean=218 AP Range: 10-600 *(n=23)* *Implied/specified zero* *2 projects* Sum=3691/Mean=148
University or Extension Staff	FR Range: 2-80 *(n=28)* *Implied/specified zero: 6 projects* Sum=253/Mean=8 AP Range: 1-50 *(n=23)* *Implied/specified zero:* *2 projects* Sum=231/Mean=9	FR Range: 2-150 *(n=27)* *Implied/specified zero: 10 projects* Sum=523/Mean=14 AP Range: 4-200 *(n=23)* *Implied/specified zero:* *2 projects* Sum=607/Mean=24
Agency Staff	FR Range: 1-16 *(n=20)* *Implied/specified zero: 14 projects* Sum=124/Mean=4 AP Range: 1-100 *(n=18)* *Implied/specified zero:* *7 projects* Sum=233/Mean=9	FR Range: 1-100 *(n=19)* *Implied/specified zero: 18 projects* Sum=372/Mean=10 AP Range: 2-150 *(n=16)* *Implied/specified zero:* *9 projects* Sum=474/Mean=19
Others	FR Range: 5-300 *(n=16)* *Implied/specified zero: 18 projects* Sum=877/Mean=26 AP Range: 1-500 *(n=17)* *Implied/specified zero:* *8 projects* Sum=811/Mean=32	FR Range: 25-100,000 *(n=14)* *Implied/specified zero: 23 projects* Sum=101,857/Mean=2752 Adj Sum=1857/Adj Mean=51 AP Range: 2-500 *(n=17)* *Implied/specified zero:* *8 projects* Sum=1632/Mean=65

(% N)	***FR***		***AP***		***FR***		***AP***	
Projects reporting numbers	58%	(34)	86%	(25)	63%	(37)	86%	(25)
Not Applicable	14%	(8)	3%	(1)	8%	(5)	3%	(1)
Don't know	8%	(5)	3%	(1)	5%	(3)	3%	(1)
Missing (no information)	*20%*	*(12)*	*7%*	*(2)*	*24%*	*(14)*	*7%*	*(2)*
TOTAL	*100%*	*(59)*	*100%*	*(29)*	*100%*	*(59)*	*100%*	*(29)*

Table 12. Number of farmers or ranchers visited with individually about the project *(FR Q20 / AP Q12)*

Number *(% N)*	**FR Projects**		**AP Projects**	
Zero	2%	1	3%	1
1-5	28%	15	28%	8
6-10	23%	12	7%	2
11-20	23%	12	38%	11
21-100	19%	10	21%	6
Over 100	6%	3	3%	1
	100%	53	100%	29
Missing	*6*		*0*	
Range		0-500		0-200
Mean		31		24
Median		10		15
Mode		10		5[a]
Std. Deviation		76.51		38.62
Sum		1665		700

[a] *Multimodal, smallest given.*

Use of Idea, Approach, or Technology on Farms or Ranches

Over three quarters of FR grantees, or 77%, reported that one or more farmers or ranchers tried out the idea, approach, or technology put forth in their project; an even higher percentage of AP grantees, 89% reported that one or more farmers or ranchers tried out the project idea, approach, or technology (Table 13). One third of FR grantees, 35%, indicated that 1-5 farmers or ranchers tried out the idea, approach, or technology and another quarter, 25%, indicated 6-20 farmers or ranchers tried it out. The remaining 14% of FR grantees indicated that 21 or more farmers or ranchers tried out the idea, approach, or technology on their agricultural operation. The highest number reported by any FR project was 200 farmers or ranchers. The average number of farmers or ranchers trying the idea, approach, or technology across the 48 reporting FR projects was 16 farmers or ranchers per project. The total number of farmers or ranchers trying the idea, approach, or technology from one of 48 reporting FR projects was 790 farmers or ranchers.

A majority of the AP projects, or 63%, had between 1 and 10 farmers and ranchers who did try it out (Table 13). More specifically a little over one third, 37%, indicated that 1-5 farmers or ranchers tried out the idea, approach, or technology put forth in their project and another quarter or 26% indicated 6-10 farmers or ranchers tried it out. Then another fifth, 22%, indicated 11-100 farmers or ranchers tried out the idea, approach, or technology. Only one AP grantee indicated that more than 100 farmers or ranchers tried out the idea, approach, or technology on their agricultural operation, and the number he/she reported was 150. The average number of farmers or ranchers trying the idea, approach, or technology across the 27 reporting AP projects was 17 farmers or ranchers per project. The total number of farmers or ranchers trying the idea, approach, or technology from one of 27 reporting AP projects was 456 farmers or ranchers.

Table 13. Number of farmers or ranchers that tried out the idea, approach or technology on their own agricultural operation *(FR Q21 / AP Q13)*

Number *(% N)*	**FR Projects**		**AP Projects**	
Zero	23%	11	11%	3
1-5	35%	17	37%	10
6-10	15%	7	26%	7
11-20	10%	5	7%	2
21-100	12%	6	15%	4
Over 100	4%	2	4%	1
	100%	48	100%	27
Missing	*11*		*2*	
Range	0-200		0-150	
Mean	16		17	
Median	3.50		6	
Mode	0		0[a]	
Std. Deviation	35.10		31.47	
Sum	790		456	

[a] *Multimodal, smallest given.*

Seventy-eight percent of FR grantees indicated the idea, approach, or technology tested in the grant was still being used, while 83% of AP grantees indicated it was still in use on a farm or ranch (Table 14). Similarly in the 2005 survey, 82% of FR grantees indicated the idea, approach or technology was still being used. Among FR grantees, 81% of those that were using the idea, approach, or technology *before* the start of the project continued to use it (17 out of 21 projects); similarly, 81% of those who started using the idea, approach, or technology in the project year or later were still using it (26 out of 32 projects) (Table 14B).

Two-thirds or more of FR project ideas, approaches, or technologies were still being used regardless of the year in which the project was funded (Table 15A). Within project years for AP grants, between 60% and 100% of cooperating farmers continued to use the idea, approach, or technology put forth (Table 15B).

Table14. The idea, approach or technology tested still being used *(FR (Q5) / AP (Q6))*

	2005	**FR %**	**FR N**	**AP %**	**AP N**
Yes	*82%*	78%	46	83%	20
No	*18%*	22%	13	17%	4
	100%	100%	59	100%	24

Table 14A. Year stopped using this main idea, approach, or technology *(FR Q6 / AP Q7)*

Year	**FR %**	**FR N**	**AP %**	**AP N**
2004	17%	2	0%	0
2005	8%	1	0%	0
2006	17%	2	0%	0
2007	8%	1	25%	1
2008	0%	0	0%	0
2009	17%	2	75%	3
2010	17%	2	0%	0
2011	17%	2	0%	0
	100%	12	100%	4

Table 14B. FR Project Year, Year Practice first used, and Continued use

Project year	*Number of projects starting*	*Started using practice before project year*	*Practice still in use?*	*Started during or after project year*	*Practice still in use?*	*missing*
2004	*19*	*8*	*6*	*8*	*5*	*3*
2005	*9*	*3*	*3*	*5*	*5*	*1*
2006	*10*	*2*	*1*	*6*	*5*	*2*
2007	*10*	*7*	*6*	*3*	*3*	*0*
2008	*11*	*1*	*1*	*10*	*8*	*0*
2009	--					
2010	--					
2011	--					
	59	*21*	*17*	*32*	*26*	*6*

Table 15A. FR Grantee continue to use of idea, approach or technology by project year

		Project Year					
		2004	**2005**	**2006**	**2007**	**2008**	**Total**
Yes	Count	13	8	7	9	9	46
	%	68%	89%	70%	90%	82%	78%
No	Count	6	1	3	1	2	13
	%	32%	11%	30%	10%	18%	22%
Total	Count	19	9	10	10	11	59
	%	100%	100%	100%	100%	100%	100%

Table 15B. AP Grant Cooperating Farmer use of idea, approach or technology by project year

Cooperating FR use		Project Year -- Sample					
		2004	**2005**	**2006**	**2007**	**2008**	**Total**
Yes	Count	6	3	3	3	5	20
	%	100%	60%	60%	100%	100%	83%
No	Count	0	2	2	0	0	4
	%	0%	40%	40%	0%	0%	17%
Total	Count	6	5	5	3	5	24
	%	100%	100%	100%	100%	100%	100%

Reasons for discontinuing main idea, approach, or technology

On seventeen projects, thirteen FR projects and four AP projects, the main idea, approach, or technology was discontinued. The FR and AP grantees of these projects were asked to explain the main reason (*FR Q7) / AP Q8)*. On four FR projects and one AP projects, the practice did not work as intended and was unsuccessful. On one FR project and three AP projects, unforeseen factors interfered with the implementation,. On three of the FR projects, the practice was altered in some way in order to make it work better. On two FR projects, the lack of interest or support in the practice led to the discontinuation and on one FR project the need for continued supplies was a challenge (e.g. fish feed). On the one FR project, the grantee indicated the project was completed. And one FR grantee did not provide a reason.

- ***Idea, approach or technology did not work.***

Seed production wasn't good enough in planted, turned out to be short lived, 3 years maximum (some only 2 years). (FR grant)
I wasted 600,000 feet of drip hose by fertigating with what I made and promoting fire ants. (FR grant)
We sold chickens through a CSA program but storage for customer pick up was a problem. (FR grant)
Won't work with our current machinery compliment (FR grant)
The tested practice did not work. (AP grant)

- ***Unforeseen factors interfered with project implementation.***

The retail price of diesel came back down into the $3 range. It was easier to buy it than make it. (FR grant)
Due to bacterial soft rot infection in the 2006 onion crop and loss of the entire 35 acres of onions for marketing, the farmer did not want to gamble on onions in the following years. He continued to use the tillage methods used in 2005 and 2006 when onions were grown on the area. (AP grant)
The main PI accepted a job on main land and was unable to follow up with the producers. (AP grant)
Importers are not ordering high Protein pre-mix supplies and no local substitute has been identified. Possibly the importers recognize that use of local feed base reduces their market and income. (AP grant)

The idea, approach, or technology was altered in some way to make it work better.

Switched to cattle as the grazing animals. (FR grant)
More feasible to construct stationary poultry processor facility. (FR grant)
We have developed organizational documents for aspects related to design. We have had to simplify crops according to labor availability. (FR grant)

There was a lack of interest or support for the practice

Lack of support from the weed board. Home owners loved it. The weed board was the group I worked with to test the projects, And of course the weed board was made up of people who make a living spraying weeds. My mistake. (FR grant)
Upgraded the web site didn't receive a lot of the survey responses (FR grant)

Problems and Extenuating Circumstances

About half of FR grantees (52%) and AP grantees (56%) indicated that there were problems or extenuating circumstances that limited the impact and effectiveness of their project's ability to use the results (Table 16). A number of grantees misjudged what it would take to implement fully their idea, approach, or technology. Other grantees encountered obstacles or unforeseen factors that made it difficult to implement their idea, approach, or technology. Some grantees simply did not have enough money to see the project through and/or they needed more time. A couple of grantees encountered a general lack of interest the idea, approach, or technology.

Table 16. Any problems or extenuating circumstances that limited the impact and effectiveness of this project or ability to use the results *(FR Q13 / AP Q18)*

	FR %	***FR N***	***AP %***	***AP N***
Yes	52%	30	56%	15
No	48%	28	44%	12
	100%	58	100%	27

Factors limiting the impact *(FR Q14 / AP Q18)*

♦ ***A number of grantees misjudged what it would take to fully implement their idea, approach, or technology.***

To process the fish waste, the skeletal parts were too hard to be macerated with a small machine. A larger machine will be quite expensive to be installed. (FR grant)
We thought there was going to be a market for native but found that we were going to have to create the market and didn't have the resources to do it all. (FR grant)
Learning curve for how to place tubes and other detail could be better researched. (FR grant)
State regulations regarding processing of poultry. (FR grant)
Redworms tended to disappear in the pasture (we were hoping they'd stay there) and we couldn't add them to fresh manure/bedding because the temperature was too high. (FR grant)
Increasing the Duckweed production as greatly enhanced the wildlife (wild ducks) visiting farm... limits available harvest for animal feed. Will need to look to some form of deterrent (possible propane cannon) during peak production. (FR grant)
Fish food (FR grant)
Pests especially diseases were more resilient and resourceful than anticipated. The weather has grown more unpredictable and more detrimental to plants. Success is dependent more on variety than method. We are geographically and resource disadvantaged. We have no plant pathologists or 'tomato' experts. (FR grant)
Machinery compliment, this was something we wanted to know.
After we started expanding the sales of our flavored nuts we found out that we needed to have a handlers license. Without this we are not able to sell off the farm or over the internet. To become a handler we need upgrade our bagging facilities and pay permit fees and assessment taxes. At this time we are working on the upgrades. (FR grant)
Very difficult to monitor the number of acres and producers that were ultimately involved in the project. (AP grant)
The sheep grazing portion of the project we hoped to implement did not happen due to difficulty in getting a sheep herder in the area. (AP grant)
We felt that the attraction of molasses was not strong enough to overcome the attraction of other desirable forage plants growing in the rangeland. Fencing may be the best method to concentrate livestock in order to impact medusahead. (AP grant)
The first effort of fermenting breadfruit showed that raw breadfruit contained too much water and the end result was very watery. Subsequent efforts included sun drying for 6 hours. As an experimental effort it produced results but the replication was not usable in the final analysis. Importers are reluctant to bring in High Protein premix when this limits their market for regular grades of pig feed. (AP grant)
Scheduling was difficult, and we didn't reach the audience we were aiming for (adolescents). However, we did have a range of younger children and young adults, and whole families participated in our tours. Time is always a problem with farming families! (AP grant)

Finding native products to extract and compare to grown varieties. (AP grant)
This was on-farm research. Coordinating routine farming practices without experimental design is very time-consuming and sometimes results in mistakes. (AP grant)
Not able to get grasses established at the original site and thus having to move the study to another site that already had some of the same grasses established but no alfalfa. In addition, only one year of data limits the usefulness of the information. (AP grant)

♦ *A number of grantees encountered obstacles or unforeseen factors that made it difficult to implement their idea, approach or technology.*

The weed board, that's "the Sanpete County Weed Board". They declared my project too expensive. They said they could spray cheaper so they did. The next day they had three lawsuits from landowners. (FR grant)
Sheep were attacked and one killed by coyote, so had to curtail grant research prematurely. (FR grant)
The person - orthopedic store - I was working with did not work out like he said he would. I learned to ask loads of questions. (FR grant)
The size of the trees caused a great concern due to the impact of rabbits eating the small vegetation. (FR grant)
No help from extension service I was on my own and received no education from no one Extension Department of Agriculture or University of Guam. (FR grant)
Huge change in glyphosate prices from year to the next. (FR grant)
Vandalism, Coconut crab is one of the main dish here in the Pacific (Rota)and people crave for this food. On occasions, my ranch will be vandalized and will cause me set back on inventory and production. I tried to improve the security and put fencing of the pen to avoid vandalism. I wanted to get into commercial level reproduction of coconut crab; I would need water line from the ocean to provide for ponds which mimics the reef which is most ideal for reproduction environment. I am yet to be approved with the Department of Environmental Quality agency and the coastal resources management. (FR grant)
The recession - Despite increasing production for a couple of years, customers were not willing to pay the higher price that I wanted to charge at my farmer's market. Also, one year I lost one of my restaurant customers, so I had more squash than I could sell. Still, I was grateful to know just what the impact of these changes was on my operations, which I would not have known if I hadn't done the project. *In the last year I have taken a job teaching at a community college (which pays better than the farmers' market, though not great), so my production and farm income last year was down. But I did continue growing mini squash, and selling it to restaurants. (FR grant)*
The rise in fuel prices has limited the ability to connect with other beekeepers- make the necessary visits to initiate new breeding contenders and their testing and review. (FR grant)
Tire damage on tractor. (FR grant)

High winds make it difficult to have mobile structures. (FR grant)
One year the excessive rain in spring made mud and limited the use of the rotary tiller to kill weeds. (FR grant)
Natural disasters- typhoons, invasive pests, limited research. (AP grant)
The Livestock Extension Agent working with me took another job in a distant state and left before we were able to complete the work. One of our major farmer cooperators lost all of his production data when his hired hand left taking the knowledge and production records on the 30 +/- center pivot circle acres planted to irrigated grass. As a result we couldn't include that farmer's information to the project report. (AP grant)
Yields and returns from onions in 2005 were excellent but the loss of the onions in 2006 to bacterial soft rot discouraged any farmers in that area from growing onions in 2007. With an investment of approximately $2000 per acre, the loss of the onion crop was a financial disaster. (AP grant)
My leaving for another position. More farmers became interested in the concept but after moving to main land I was unable to follow up with additional training. (AP grant)
I lost my job at Utah State University (denied tenure) and had to terminate this interesting project with an outstanding cooperator early in the course of the project. (AP grant)
Insufficient administrative support from university. (AP grant)

♦ ***Other grantees indicated that they simply did not have enough money to see the project through and/or they needed more time in order to fully implement the project idea, approach, or technology***.

The project needed phase 2, which was denied in the next SARE grant application. (FR grant)
The project approval timing was a little late for the start of the project thereby limiting the amount of data that we were able to obtain in one of the regimens (growing the ryegrass, plowing under and planting beans). We had to plow the grass under before it was as mature as we would have wanted. (FR grant)
There are always problems and that's the problem with a study of short duration. In farming, there are so many changeable factors from year to year that practices really need to be monitored for a long time to judge effectiveness. (FR grant)
Money. I needed to buy more long-term infrastructural improvements, frankly. I used electric netting to keep predators from my ducks, but it doesn't work. I battle predation constantly. (FR grant)
Timeliness in getting the recipe from WSU. It came at the last moment before grant reports were due, which also was right before winter started. This is not a cold weather fuel. Project lost momentum and retail diesel was cheaper. (FR grant)
We were able to solve 6 of 7 major obstacles to the successful design of a small-scale biogas reactor. However, we will need additional research to effectively overcome the 7th obstacle (improved microbial populations that perform well in cold temperatures) to make the technology ready to be widely adopted. We have yet to find a source of funding to adequately address this last obstacle -- as it requires expensive microbial biology and there aren't existing sources of funding that are interested in this "non-commercial" type of application. It may require "investor funding".(AP grant)

Time.....change in small communities takes time, helps to have time for initial cooperators time to learn and then time to share with their neighbors. We have more interest today than at the close of the grant. (AP grant)
In the first year of the project funds were delayed due to Congressional delays. (AP grant)

♦ **Two grantees encountered a lack of interest in the idea, approach, or technology put forth in their project.**

Lack of interest of ranchers. (FR grant)
Not much demand for fingerlings due to not enough famers with Tilapia farms. Lack of feeds on island. (FR grant)

Impact of main idea, approach, or technology on FR grantee farm or ranch

FR grantees reported on the impact the main idea, approach, or technology of their project had on various aspects of their farm or ranch, whether there were increases, decreases or whether the aspect remained the same. On each of these aspects, respondents could also indicate "Don't know" or "Not applicable." For interpretive purposes, the "Not applicable" were excluded in the calculation of the percents and the subsequent discussion (Table 17A). For some aspects, an increase was desirable (e.g. yields) and for other aspects a decrease is desirable (e.g. costs). On a few aspects an increase/decrease represents an "improvement' in the situation. The direction of the desired change is shown in Table 17B. Overall, the various impacts are in the desired direction—costs stayed about the same or decreased, yields or sales stayed about the same or increased; and impacts to the environment stayed the same or decreased.

Among aspects of costs related to production inputs such as fertilizer, fuel, pesticides, weed control, and seed costs; a majority of FR grantees, between 62% and 92%, indicated these costs either stayed the same or decreased. Weed control costs received the highest percent indicating the costs had stayed the same or decreased (92%) and "pesticide costs" and "fertilizer and/or soil amendments" being second and

third highest, 86% and 82% respectively (Table 17A). Similarly when asked about various operating costs such as hired labor costs, management costs, machinery and equipment costs, and on-farm processing costs, between 48% and 71% indicated these various costs had stayed the same or decreased. In this category, management costs received the highest percent indicating “stayed the same” or “decreased”, or 71%, and hired labor costs having the second highest percent in this category, 62%.

A majority indicated that farm and ranch production outcome aspects related to yield, production per unit, and/or sales increased as a result of the project. “Overall gross sales” received the highest percent indicating so, or 73%, and “Total animal production per year” receiving the second highest at 70% (Table 17A). Increases were also observed in terms of value of crops or livestock per unit (59%), customer recognition (57%), and diversification (45%). When asked about “Costs of direct-to-consumer sales,” 46% indicated this aspect has stayed the same, but 26% indicated it has increased.

Finally, grantees were asked about impacts on aspects related to the environment. Forty-three percent indicated soil erosion stayed the same and another 48% indicated it decreased. With regard to soil quality, 42% indicated it stayed the same and another 47% indicated it has increased or “improved”. Sixty-one percent indicated air quality stayed the same and another 19% indicated it has increased or “improved”. Fifty-two percent indicated water quality has stayed the same and another 27% indicated it has increased (“improved”). Lastly, 41% indicated “quantity of wildlife habitat” stayed the same and 47% indicated it had increased, or “improved.”

The 2011 results were compared to the 2005 results to see if there are differences in the impacts of the grant idea, approach or technology on the farms or ranches of the grantees. Several aspects listed in the 2011 survey were not included in the 2005 survey (specifically, types of crops or livestock raised, value of crops or livestock per unit, and market or customer recognition of commodities. Among production costs

such as fertilizer, fuel, pesticides, weed control, and seed costs there was a 5 percentage point or less difference in the percent in either direction of those who indicated the costs “decreased” on each of these production aspects in 2005 compared to 2011, except for “weed control costs” (Table 17B). This suggests that the impact of the idea, approach or technology on production costs remained roughly the same from 2005 to 2011 except for weed control costs. By 2011 there were more FR grantees indicating weed control costs had decreased due to the idea, approach or technology being tested, 50% in 2011 compared to 38% in 2005, a 12 percentage point difference (Table 17B). Similarly, when asked about operation costs such as hired labor costs, management costs, machinery and equipment costs, and on-farm processing costs, there was a 5 or less percentage point difference in 2011 compared to 2005 in the percent indicating these kinds of costs had decreased.

With regard to impacts on yield, production per unit, and sales, more of the 2011 grantees indicated that total animal production per year had increased, 70% in 2011 compared to 54% in 2005. On overall gross sales, 73% of the 2011 grantees indicated this aspect increased compared to 64% in 2005. The percent indicating yields per acre have increased were roughly the same in 2011 (55%) and in 2005 (56%). When asked about costs of direct-to-consumer sales, only 14% in 2011 indicated this aspect had increased, whereas twice that, or 33%, in 2005 indicated it had increased.

Finally, with regard to impacts on aspects related to the environment, significantly fewer grantees in 2011 reported improvements compared to 2005, a 10 to 32 percentage point differences on the various aspects. In 2005, 58% of grantees indicated soil erosion had decreased, whereas 48% indicated so in 2011. Even more dramatic differences are noted on the percent indicating improvements in soil, air and water quality when comparing 2005 to 2011: 79% versus 47% on soil quality; 47% versus 19% on air quality, and 54% versus 27% on water quality. Similarly, 69% of 2005 grantees indicated “quantity of wildlife habitat” increase whereas 47% indicated so in 2011.

These more noticeable differences, with the more positive results in 2005 compared to 2011, may be related to differences in the overall topic areas that were funded prior to the 2005 survey versus those that were funded in 2004-2008. Environmental issues may have been a greater focus in projects represented in the previous evaluation (more analysis is needed in order to verify this conjecture).

For reference purposes, the percents with “not applicable” included are given in Table 17C. On two aspects, a majority of FR grantees indicated it was “Not applicable”: Pesticide costs (62%) and “Seed costs” (52%). On five more aspects around two-fifths indicated it was “not applicable”: “air quality” (45%), “Total animal production per year” (44%), “Quantity of wildlife habitat” (41%), “Water quality” (40%), “Fertilizer and/or soil amendments costs” (40%), “Costs of direct-to-consumer sales” (37.5%), and “Soil erosion” (37.5%). All other aspects had between one-fifth and one third not applicable.

Table 17A. Impact of main idea, approach or technology tested on farm or ranch *(excluding "Not applicable")* *(FR Q8; N ranged from53-58 across items)*

Aspects of Farm or Ranch *(% N)*	***Decreased***		***Stayed the same***		***Increased***		***Don't know***	
Fertilizer and/or Soil Amendments Costs	41%	13	41%	13	6%	2	12%	4
Fuel Costs	32%	13	40%	16	17%	7	10%	4
Pesticide Costs	38%	8	48%	10	9%	2	5%	1
Weed Control Costs	50%	18	42%	15	5%	2	3%	1
Seed Costs	8%	2	54%	14	31%	8	8%	2
Hired Labor Costs	25%	10	37%	15	32%	13	5%	2
Management Costs	26%	11	45%	19	21%	9	7%	3
Machinery and Equipment Costs	24%	10	24%	10	39%	16	12%	5
On-Farm Processing Costs	13%	5	38%	14	38%	14	11%	4
Costs of Direct-to-Consumer Sales	14%	5	46%	16	26%	9	14%	5
Yields Per Acre	5%	2	17%	7	55%	22	22%	9
Total Animal Production Per Year	7%	2	17%	5	70%	21	7%	2
Overall Gross Sales	4%	2	14%	6	73%	32	9%	4
Types of crops or livestock you raise	0%	0	48%	20	45%	19	7%	3
Value of crops or livestock per unit	5%	2	31%	13	59%	25	5%	2
Market or customer recognition of crops or livestock you raise	5%	2	27%	11	57%	23	10%	4
Soil Erosion	48%	17	43%	15	3%	1	6%	2
Soil Quality	3%	1	42%	15	47%	17	8%	3
Air Quality	3%	1	61%	19	19%	6	16%	5
Water Quality	6%	2	52%	17	27%	9	15%	5
Quantity of Wildlife Habitat	3%	1	41%	13	47%	15	9%	3

Other Aspects mentioned

Opportunity for extra income and employment opportunity
Name recognition in market.
Beauty of the property enhanced a great deal.
Showed further research needed to be done.
After the project ended, I increased production for a couple of years, but because of the recession, could not increase the price of squash at the farmer's market.
Decrease cost of pesticide use.
Promote crop and enterprise diversification; witnessing innovative marketing to visitors; effective marketing
May start using in our farm equipment if fuel gets to $5 per gallon
Use of scale-appropriate technology

Table 17B. Impact of main idea, approach or technology tested on farm or ranch: Percent Indicating Desired Change

Aspects of Farm or Ranch	*Desired change*	*2005*	*2011*
Fertilizer and/or Soil Amendments Costs	Decrease	39%	41%
Fuel Costs	Decrease	37%	32%
Pesticide Costs	Decrease	43%	38%
Weed Control Costs	Decrease	38%	50%
Seed Costs	Decrease	8%	8%
Hired Labor Costs	Decrease	23%	25%
Management Costs	Decrease	25%	26%
Machinery and Equipment Costs	Decrease	21%	24%
On-Farm Processing Costs	Decrease	16%	13%
Costs of Direct-to-Consumer Sales	Decrease	33%	14%
Yields Per Acre	Increase	56%	55%
Total Animal Production Per Year	Increase	54%	70%
Overall Gross Sales	Increase	64%	73%
Types of crops or livestock you raise	Increase	---	45%
Value of crops or livestock per unit	Increase	---	59%
Market or customer recognition of crops or livestock you raise	Increase	---	57%
Soil Erosion	Decrease	58%	48%
Soil Quality	Increase	79%	47%
Air Quality	Increase	47%	19%
Water Quality	Increase	54%	27%
Quantity of Wildlife Habitat	Increase	69%	47%

Table 17C. Impact of main idea, approach or technology tested on farm or ranch *(including "No applicable")* *(FR Q8; N ranged from53-58 across items)*

Aspects of Farm or Ranch *(% N)*	***Decreased***		***Stayed the same***		***Increased***		***Don't know***		***Not applicable***	
Fertilizer and/or Soil Amendments Costs	24.5%	13	24.5%	13	4%	2	7%	4	40%	21
Fuel Costs	24%	13	30%	16	13%	7	7%	4	26%	14
Pesticide Costs	14.5%	8	18%	10	4%	2	2%	1	62%	34
Weed Control Costs	33%	18	27%	15	4%	2	2%	1	34.5%	19
Seed Costs	4%	2	26%	14	15%	8	4%	2	52%	28
Hired Labor Costs	18%	10	27%	15	24%	13	4%	2	27%	15
Management Costs	21%	11	36.5%	19	17%	9	6%	3	19%	10
Machinery and Equipment Costs	18%	10	18%	10	29%	16	9%	5	25.5%	14
On-Farm Processing Costs	9%	5	25.5%	14	25.5%	14	7%	4	33%	18
Costs of Direct-to-Consumer Sales	9%	5	29%	16	16%	9	9%	5	37.5%	21
Yields Per Acre	4%	2	13%	7	40%	22	16%	9	27%	15
Total Animal Production Per Year	4%	2	9%	5	39%	21	4%	2	44%	24
Overall Gross Sales	3.5%	2	10.5%	6	56%	32	7%	4	23%	13
Types of crops or livestock you raise	0%	0	36%	20	34%	19	5%	3	25%	14
Value of crops or livestock per unit	4%	2	23%	13	45%	25	4%	2	25%	14
Market or customer recognition of crops or livestock you raise	3%	2	19%	11	40%	23	7%	4	31%	18
Soil Erosion	30%	17	27%	15	2%	1	4%	2	37.5%	21
Soil Quality	2%	1	27%	15	31%	17	5.5%	3	34.5%	19
Air Quality	2%	1	34%	19	11%	6	9%	5	45%	25
Water Quality	4%	2	31%	17	16%	9	9%	5	40%	22
Quantity of Wildlife Habitat	2%	1	24%	13	28%	15	6%	3	41%	22

Just under two-thirds of FR grantees, or 64% indicated that they experienced an increase in net income on their farm or ranch as a result of the FR project (Table 18) and this is an increase of 12 percentage points compared to the percent reporting an increase in net income in 2005, or 52%. Grantees measured that increased income in a number of different ways, using different economic units (Table 19). On a per acre

basis, the increased income ranged from as low as $3 per acre to as high as $50 per acre. On a per animal basis (though what animal was not specified), incomes increased from a low as $3 per animal to has high as $50 per animal. Other grantees reported per farm increases, ranging from $500 to $5,000. Finally, on a per year basis, incomes increased from $6,000 to $30,000.

Table 18. Increase in net income on farm or ranch as a result of this Farmer/ Rancher Grant-funded project (FR Q10)

	FR %	FR N	2005
Yes	64%	37	52%
No	36%	21	48%
	100%	58	(N=114)

Table 19. Estimate of the increase per unit (FR Q11)

Amount	Per Area Unit	Amount	Per Livestock Unit
$5	acre	$3	animal
$10	acre	$5	animal
$14	acre	$25	animal
$50	acre	$38	animal
$50	acre	$50	animal
$800	acre	$25	calf sold
$3,000	acre	$10	head
$10,000	acre	$40	head
		$20	hundred weight of animal (beef).
$2	sq ft		
$35	1000 sq ft	$5,000	30x30 crab pen
		$2	dozen
		$8	queen
		$4	bird
Amount	**Per Structure Unit**	**Amount**	**Per Time Unit**
$5,000	farm	$500	month
$1,560	farm per year	$8,000	year
$500	farmstand	$30,000	year
$1,000	greenhouse	$7,000	year gross sales

Public recognition received for project

Both groups of grantees received various types of public recognition for their projects (Table 20). Two fifths, or 42%, of FR grantees had an article in a newsletter, while just over half of AP grantees, 52%, indicated they had an article in a newsletter. Forty-one percent in each grantee group indicated they had an article in a local newspaper. A fifth, 19%, of FR grantees had an article in a magazine while nearly a quarter, 24%, of AP grantees did. Less than 10% in each grantee group got awards, 8% for FR grantees and 3% for AP grantees.

The proportion of FR grantees reporting various types of public recognition in 2005 were very similar to what FR grantees reported in 2011 in terms of awards, articles in local newspapers, and articles in newsletters. However, in 2005 a higher proportion of FR grantees reported they had articles in magazines compared to 2011 FR grantees, 29% versus 19%. A higher proportion of 2011 FR grantees, 25%, reported "other" public recognition compared to 16% of 2005 FR grantees.

Table 20. Public recognition received for project *(FR Q22 / AP Q10)*

	FR % Yes	**FR N Yes** *(N=59)*	*2005*	**AP % Yes**	**AP N Yes** *(N=23)*
Award	8.5%	5	*10%*	3%	1
Article in local newspaper	41%	24	*46%*	41%	12
Article in newsletter	42%	25	*42%*	52%	15
Article in magazine	19%	11	*29%*	24%	7
Other	22%	13	*16%*	28%	8
Don't know	20%	12		14%	4
None (no answer)		*6*			

Other kinds of public recognition reported by FR and AP grantees in 2011 included speaking engagements and conferences; abstracts, posters, or conference proceedings, national media attention or an Associated Press article; inquiries or public

acknowledgements; networking, public events or interactions; and web, radio, or book activities (full text provided below).

Other public recognition comments

Invitation to SARE conferences (FR grantee)
Speaking engagements (FR grantee)
WSU Innovator Lecture (AP grantee)
Presented at events by invitation (AP grantee)
Abstract and poster accepted by American Society for Horticultural Science annual meeting in September 2011. (AP grantee)
Publication in conference proceedings. (FR grantee)
Poster at a western SARE conference in Hilo, HI. (FR grantee)
National media (see previous list) (FR grantee)
Associated Press article (FR grantee)
Received a lot of inquiries. Web page is linked to many sites and frequently visited. (FR grantee)
Good Public Relations in state and region. (AP grantee)
Recognized and mentioned during co-op meeting (FR grantee)
Our presentation is always complimented on, award for best of farmer market (FR grantee)
Recognition in the Board of Regents meeting of the COM-land Grant Program (AP grantee)
Local grant funded afterwards(AP grantee)
County fair booth (FR grantee)
Shared the knowledge with other producers (AP grantee)
Tourist site(AP grantee)
Radio (FR grantee)
Web (FR grantee)
A chapter in a book is being written. (FR grantee)

Actions taken as a result of the project

With regard to other actions grantees may have taken as a result of their Western SARE project, 71% of FR grantees indicated they "sought more information on the use of the approach or technology tested" and just over half, or 58%, indicated they "expanded use of this approach or technology on other parts of their farm/ranch" (Table 21). About half, 53%, indicated they "changed other operations on their farm/ranch" and 39% indicated they "obtained new markets or the crops or livestock raised on their farm/ranch". Only a third, 34%, indicated they "added a new enterprise on their farm/ranch".

The results are very similar to the 2005 survey with regard to "sought more information on use of the approach or technology used". On other actions, a higher proportion of 2011 FR grantees, at least 6 percentage points or more, reported taking the actions. On two of the actions "expanded use of this approach or technology to other parts of your farm or ranch" and "change other operations on your farm or ranch" each increased 10 percentage points in 2011, to 58% and 53% respectively. However 8% of 2011 FR grantees compared to 11% of 2005 FR grantees reported taking some "other action" as a result of their project.

AP grantees reflected on the same actions they may have observed from farmers/ranchers who cooperated on their project. Nearly all, 93%, AP grantees observed that a cooperating farmer/rancher "sought more information on the use of the approach or technology tested" and almost three-fourths, or 73%, indicated a cooperating farmer/rancher "expanded use of this approach or technology or other parts of their farm/ranch" (Table 24). About two-thirds, 65%, indicated the cooperating farmer/rancher "changed other operations on their farm/ranch," and 48% indicated a cooperating farmer/rancher "added a new enterprise on their farm/ranch". Lastly, 43% indicated a cooperating farmer/rancher "obtained new markets or the crops or livestock raised on their farm/ranch".

Table 21. Actions as a result of this project *(FR Q12 / AP Q14)*

	FR % Yes	FR N Yes *(N=59)*	*2005*	AP % Yes	AP N Yes *(N=23)*
Sought more information on use of the approach or technology tested	71%	42	*70%*	93%	26
Expanded use of this approach or technology to other parts of your farm or ranch	58%	34	*48%*	73%	19
Changed other operations on your farm or ranch	52.5%	31	*43%*	65%	17
Obtained new markets for the crops or livestock raised on your farm or ranch	39%	23	*32%*	43.5%	10
Added a new enterprise to your farm or ranch	34%	20	*28%*	48%	11
Other	8%	5	*11%*	0%	0

With regard to what other actions may have been taken as a result of their project, several FR grantees described actions that could be categorized as one of those already listed in the question. In other cases, grantees from both groups described other actions relating to environmental quality or structural actions. Others described actions related to educating or contributing to general understanding. Finally, two AP grantees gave reasons why other actions were not yet taken.

♦ ***"Other" actions that are examples of those listed in question***

Developed new on-farm processing (FR grantee)
Marketing our product (FR grantee)
Added wine grapes and olive trees for olive oil (FR grantee)
Greater diversification (FR grantee) (FR grantee)
Increased fertility earlier conception (FR grantee)

♦ ***Other actions not already listed in the questions***

Maintained and enhanced the quality and productivity of the soil; protected the health of the farm family and farm hands by using organic fertilizers and by using screening to 'screen out' pests (FR grantee)
Product could be used to fuel a pivot pump in a location where power is not available. (FR grantee)

Suggested repeat of test on more than one farm (AP grantee)
Observed a better understanding by many throughout the state about the regulations and which agency has authority to administer programs. (AP grantee)
Have been interested in hosting a youth farm tour - other actions are N/A (AP grantee)
Workshop topics were varied, so this question is hard to answer, hopefully they changed several practices (AP grantee)

♦ ***Why actions have not been taken***

Too early to tell. (AP grantee)
Gamble too great to grow high valued crop like onions. (AP grantee)

Most important result of Western SARE project

Grantees in both grant programs reflected on what was the most important result of their Western SARE funded project (FR Q23 / AP Q19). The vast majority described how the grant funding allowed them to successfully demonstrate or implement the idea, approach, or technology proposed by the project. In some cases the proposed idea, approach, or technology was modified and/or expanded based on the project work. For others, the grant allowed them to explore an idea, approach, or technology so that more could be learned or known about it. In a few cases, grantees described outcomes that far surpassed what they expected and/or spin off effects that were also positive outcomes. Selected responses are presented here and the full text comments are provided in the Appendix.

♦ ***Successfully demonstrated or implemented the idea, approach, or technology*** *(selected comments)*

That farmers in our area learned that they could use the technology, and the more they use it the better they get at understanding the data and how to make decisions based on it. (AP grantee)
We proved to a very skeptical crowd that goats love to eat Russian Knapweed and thrive. No they won't die, and yes they can still reproduce and even gain weight on noxious weeds. (FR grantee)
Proved the validity of using cell grazing to increase calf weights and improve pasture health. (FR grantee)

That it demonstrated the concept is feasible. (FR grantee)
Developing a market for a new crop that helps a large number of growers in the community and contributes to their sustainability. (FR grantee)
The most important result was it utilize small areas for farming. It can provide for daily needs and easy to maintain. (FR grantee)
Able to built and raised Tilapia. Provided fish to my community and church in many occasion. Also, providing of fingerlings to my Tilapia farmers. (FR grantee)
I was able to stimulate oak sprouting on a large enough scale to prove that this unused resource had significant value to both livestock and wildlife. (FR grantee)
Tropical Tomato Production through Shade Netting and Other Methods was demonstrated and tomato production by other producers increased. (FR grantee)
Our product line has increased and losses have decreased. We are now able to offer a variety of products during the off season and thus increase winters sales. Our marketing skills and tools have improved greatly. (FR grantee)
Farmers and ranchers in our region are now more likely to share information about technology and management. (FR grantee)
The opportunity the grant afforded the farmers to try a new way of growing crops during a period where certain crops are not grown due to diseases and pest. Because there are sources like the grant that allow these farmers to improve growing methods and to share that information with other farmers, ranchers and gardeners is a valuable plus for and island that is too reliant on imported goods. (AP grantee)
The livestock producers (farmers and ranchers) learned a lot about the various regulations for clean water and were able to put into perspective what they could do to correct management activities and learn about the water quality testing that could be designed to fit their property and activities. Non point source contributions are understood better and the cooperative working relationships were improved between agencies and ranchers through this proactive approach to keeping the water clean. (AP grantee)
A large group of growers with who we have had contact, both organic and conventional, are now familiar with, and are using, the techniques we have tested. (AP grantee)

♦ *Modified and expanded how the idea, approach or technology was used*

(selected comments)

We were planning to build a mobile poultry processor and compared it to building a stationary unit. From this we found stationary more feasible and therefore built a stationary unit. (FR grantee)
Learned that we did not want to pursue no till on hay land renovation on our operation, trying no till on grain land on operation this year. (FR grantee)

♦ ***Explored an idea, approach, or technology and improved our understanding and future prospects for use*** *(selected comments)*

I had a much better understanding of the economics of growing crops at the market garden level, and have been able to help others understand the costs as well. (FR grantee)
Most important result was to give validity to the idea of sampling for pears. Also, that by sampling you can increase consumer awareness and willingness to try pears when they might not have. The grocery chain that I worked with saw a dramatic increase in their sales of pears. It would peak during and right after a sampling period but then decrease at a higher level each time. They increased their sales of pears 150%. They were very happy with the outcome. (FR grantee)
Showed that impact was not a problem. (FR grantee)
We have a 5 year baseline of vegetation monitoring and trend against which we can evaluate future changes. This resulted in better relations with the Forest Service on our allotment. (FR grantee)
The project allowed us to test and verify an alternative growing regimen that allows us to grow dry beans for sale directly to consumers; all without the need for mineral supplementation. We have since discovered that the grass can be grazed prior to plow down while still giving the benefits to the bean crop. That is two crops on the same ground in the same growing year. Not something we get to do very much on the high plains. (FR grantee)
It helped us gain important data to assess how our weed management strategy was effective. (FR grantee)
It allowed me to try something out that I might not have otherwise. (FR grantee)
We were able to ID varieties that do well enough to recommend them to commercial growers. Some of these varieties are being used to replace older varieties. (AP grantee)

♦ ***Project outcomes surpassed what was expected*** *(selected comments)*

Producers met together and talked about weed control in a region-wide basis rather than just an on-farm basis. (AP grantee)
A new enterprise has emerged, duck production on Rota island, an exciting new venture during this time of economic downturn. It's a win win situation of benefit to the farmers and the environment. More and more farmers are now raising ducks for controlling Cuban slugs and for meat and egg production. Our collaborators from the region were impressed by our predator ducks and would like to use this venture in their respective places. This will prevent further Cuban slug spread and prevent lung worm diseases carried by Cuban slugs which is fatal to human beings. (AP grantee)
It has changed the way many vineyards manage their weeds, leading to cost savings, reduced pesticide use, reduced tractor use, reduced erosion particularly on hillsides. The project has also been started now in New Zealand with a 1000 hectare vineyard who read about my research. And I am also consulting with a few other sheep ranchers to help them expand grazing to other vineyards throughout the US. (FR grantee)

Usefulness of information and changes to agricultural outlook

Almost four-fifths of FR grantees, 79%, indicated the information they gained from their SARE funded project was "very useful" and the remaining fifth, 21%, indicated the information has been "somewhat useful" (Table 22). None said that the information was "not very useful." The 2011 results are very similar to what grantees reported in 2005, where 82% indicated "very useful." All but one of the AP grantees indicated that they are or will be "extending information on the idea, approach, or technology that was tested with their project, or 97% (Table 23).

Table 22. Usefulness of the information gained from the funded project *(FR Q24)*

	2005	**%**	**N**
Very useful	*82%*	79%	47
Somewhat useful	*17%*	21%	12
Not very useful	*1%*	0%	0
	100%	100%	59

Table 23. Extending information on the idea, approach, or technology you tested with this Ag Professional + Producer project? *(AP Q20)*

	AP %	**AP N**
Yes	97%	28
No	3%	1
	100%	29

FR grantees reflected on how aspects of the agricultural outlook may have changed as a result of their involvement with the SARE funded project (Table 24). A majority of FR grantees indicated that their "satisfaction with farming" had increased (64%) while another 27% indicated it has stayed the same. Somewhat fewer indicated their spouse's satisfaction with farming increased (44%) or stayed the same (32%) A majority of FR grantees indicated their "level of cooperation with other farmers increased (58%) while another third indicated the cooperation had stayed the same (34%). About a third or 34% indicated "quality of life conditions for farm labor" had increased, while 29% said "stayed the same" (31% said not applicable). Similarly, 39%

indicated “favorable options for farm succession” had increased while 24% said favorable options have stayed the same (22% said not applicable). With regard to “Likelihood that your children will stay in farming”, only 20% indicated that likelihood had increased and 27% indicated it had stayed the same (24% said don’t know and 29% said not applicable).

Table 24. Changes in agricultural outlook experienced as result of your involvement with this Western SARE funded project *(FR Q9; N= 58-59)*

Agricultural Outlook *(% N)*	***Decreased***		***Stayed the same***		***Increased***		***Don’t know***		***Not applicable***	
Your satisfaction with farming	2%	1	27%	16	64%	38	2%	1	5%	3
Your spouse’s satisfaction with farming	0%	0	32%	19	44%	26	8.5%	5	15%	9
Level of cooperation with other farmers	0%	0	34%	20	58%	34	3%	2	5%	3
Likelihood that your children will stay in farming	0%	0	27%	16	20%	12	24%	14	29%	17
Quality of life conditions for farm labor	0%	0	29%	17	34.5%	20	5%	3	31%	18
Favorable options for farm succession	0%	0	24%	14	39%	23	15%	9	22%	13

Observed changes on farms and ranches

Two-thirds of AP grantees (67%) indicated they observed “increased farm/ranch efficiencies” on farms or ranches that tried out the main idea, approach or technology from their project (only 4% said “unsure) (Table 25). Just over half, 56%, observed an “increase net income” on farms or ranches that tried out the main idea, approach or technology while nearly a quarter (24%) were unsure. About two-fifths (42%) observed “improved soil quality” (4% said “unsure”), and similarly two-fifths (42%) said they observed “improved quality of life” (though 19% said “unsure) on farms or ranches that tried out the main idea, approach or technology. One third (33%) observed “increased access to locally grown food” and 17% were unsure. About one quarter (24%) observed improved surface water quality, though 28% were unsure. Finally, only 14% observed “improved wildlife habitat and increased wildlife population” on farms or ranches that tried out the main idea, approach or technology and 23% were unsure.

Table 25. Improvements have you observed on farms or ranches that tried out the main idea, approach or technology from your project? *(AP Q15).*

(% N)	Observed		Not observed		Not sure	
	%	N	%	N	%	N
Increased farm/ranch efficiencies (e.g. net grazing efficiency)	67%	16	29%	7	4%	1
Increased net income	56%	14	20%	5	24%	6
Improved soil quality	42%	10	37%	9	21%	5
Improved quality of life/increased satisfaction with quality of life	42%	11	39%	10	19%	5
Increased access to locally grown food	33%	8	50%	12	17%	4
Improved surface water quality	24%	6	48%	12	28%	7
Improved wildlife habitat and increased wildlife populations	14%	3	64%	14	23%	5

Other changes noted by AP grantees

Our program increased people's satisfaction that their management was protecting water quality and also improved their satisfaction that problems could be easily resolved.
Due to the efforts of education and prevention, we have observed very few new weed infestations.
Overall, become better land manager.
Increase animal welfare, use of veterinary practices, breeding management.
Learned that they could use new technologies, that it wasn't beyond what they could do.
Increased relationships with new customers who otherwise wouldn't be able to visit, and thus might not be as apt to purchase via internet.
Reduced pesticide use, increased marketability of fruit.
Too early to tell.

New ideas and surprising results

More than three-quarters in each grantee group indicated their project triggered or inspired new ideas, 79% of FR grantees and 93% of AP grantees (Table 26). In 2005, slightly more FR grantees indicated their project triggered a new idea with 86% saying yes. Grantees described those new ideas (FR Q26 / AP Q22) and selected text comments are given here; full text provided in Appendix B.

Table 26. Project triggered or inspired new ideas *(FR Q25 / AP Q21)*

	2005	***FR %***	***FR N***	***AP %***	***AP N***
Yes	*86%*	79%	45	93%	26
No	*14%*	21%	12	7%	2
	100%	100%	57	100%	28

♦ ***For some projects, the research is ongoing and grantees continue to work on the idea, approach, or technology.*** *(Selected comments)*

Need for more research on post-harvest use of bamboo. (FR grantee)
Would like to continue and complete. (FR grantee)
Mostly with regards to greater diversification of crops and joint marketing. Doing the project research helped me to understand some of the other needs that growers have that revolve around new crop or product development. (FR grantee)
1. Test the replicability of the test results on multiple sites *2. Test the relevance of the test results in mitigating greenhouse gases by limiting carbon emissions* *3. Evaluate the test results on the context of overall farm sustainability (AP grantee)*
Although not necessarily a new idea but further look at optimum mixtures of grasses and legumes, especially since the cost of N fertilizer is so high and with concerns about nitrates leaching into ground water. This study was to have had each grass planted with alfalfa as one of the N rate treatments but as mentioned earlier a site change to existing plots of these grasses had to be done and thus this treatment was not available. (AP grantee)

♦ ***On several projects, enhancements of or additional applications of the practice were explored.*** *(Selected comments)*

Develop a community kitchen to process these traditional foods; I would be the supplier. (FR grantee)
No till for hay ground renovation(FR grantee)
I want to do another project called "Meet a farmer". This would be working with a grocery chain again. The grocery chain would promote a weekly or monthly farmer and her produce. The farmer would sample his produce, have recipes, and talk to consumers. (FR grantee)
How to make farm interns legal. How to best educate the next generation of farmers. (FR grantee)
Using techniques to have goats consume brush species not normally eaten. (FR grantee)
Trying alternate chemicals in the WeedSeeker sprayer(FR grantee)
We are now experimenting with ways to incorporate grazing into vegetable production grounds giving us better weed control, more income per acre, "free" fertilizer placement in the vegetable fields (less cost), and a very rapid increase in OM levels in the soils. (FR grantee)
Other untested organic pest control using other available plant materials. (FR grantee)
I put up a greenhouse/hoop house in conjunction with my sheep barn to use the sheep's body heat to warm the greenhouse at night in the winter. I am planting strawberries in one greenhouse for early crops for market. I am going to teach children in the 4-H program how to grow food in greenhouses. (FR grantee)
5 years later we are now expanding the survivor stock concept to establish Breeding Companions that are available to other queen producers/rearers virtually nationwide. Sharing of quality, diverse stock is essential for the survival and ability to interact positively with our changing environment. Our efforts have attracted collaborations with various University researchers and USDA Bee laboratories. Establishing a pedigree and certified rearing process are some future ideas for the continued actualization of this breeding philosophy. (FR grantee)
The project helped us identify practical ways to estimate total N from cover crops in the field. Since then we have developed an N mineralization model for cover crops. Now we are working on estimating N mineralization from soil in vegetable crops. We hope to combine all of these findings into a site-specific N budgeting strategy for organic farmers and other farmers who build soil organic matter and use legume cover crops. (AP grantee)
We think that this technology could be useful in other crops grown in the area such as seed alfalfa, in fact we are currently waiting on a small grant application to fund the installation of one set of sensors. It is a project in conjunction with a local seed company. There are many places in growing season of seed alfalfa that the water available to the plant makes a big difference in the yields at harvest. (AP grantee)

♦ ***On several of projects, new value added products were developed.*** *(Selected comments)*

The major things that could be made from the waste product -- fish meal, fish fertilizer was feasible just on a small scale since it was difficult to macerate the large bones and other materials from the carcass. However while working with the disposed materials, we found interesting materials from the fins, tails, and body parts that could be made into earrings, flower arrangement materials, additions to hair adornments, fishing lures, . . . (FR grantee)
Use felted wool for garden use. (FR grantee)
Subsequent grant request (Butcher Waste as Bio-fuel) was a result of the success we experienced with this original grant. We realized that a second valuable product could be derived from the process and began researching the possibility of extracting oils from the butcher waste - through the composting process - and turning those oils into bio-diesel for the tractors that are used in the composting process. (FR grantee)
We decided to continue to seek ideas for using our eggs in value added products. (FR grantee)

On other projects, adjustments and refinements were made and then tested on their idea, approach, or technology. *(Selected comments)*

Adjusting times of nitrogen application based on weather. (FR grantee)
Feeding forage winter wheat to replacement heifers(FR grantee)
Build a stationary processing unit. (FR grantee)
Putting prescribe grazing to use, new rangeland plans, revision of current plans, using natural material from land for erosion practices and prevention. Creating catchments during rain and snow seasons. (FR grantee)
Developed timing of growing that was most beneficial. (FR grantee)
Using the fuel to power a pivot pump in a location too far from electricity to be feasible. Will utilize the heat from the diesel engine to preheat the fuel and keep it above its gelling point. A high gelling point is the fuels limiting factor. (FR grantee)

♦ ***Some grantees explained that through their project, their perspective changed and/or the way they do things changed.*** *(Selected comments)*

Since this project I have received a grant for 2 Skystream Wind Turbines on 50 foot towers which greatly reduce my electric bill for the alfalfa. It also inspired me to plant 1100 hybrid olive trees to add to my production. (FR grantee)
Work on weed control in my field (i.e. change direction). (FR grantee)
It has made me more interested to get more engage in coconut crab farming and I had taken the initiative to improvised into modern technology to farm the crab. especially in the habitat design as well as the reproduction sites. (FR grantee)

We built a covered area for composting both chicken manure/bedding and cow manure/bedding. We now produce all of our own compost for our vegetable enterprise from our own livestock. Being able to say that we DON'T import compost from CAFO operations is an important marketing distinguisher for our vegetable CSA program, and our customers really appreciate it! (FR grantee)
The producer is now researching how to compost his vine pruning's and use them on the farm to reduce off farm inputs. I was inspired to become more connected with others in our local table grape association and start working on other issues related to table grape production, including value added products, marketing, and cooperation between growers. (AP grantee)

♦ ***Some project lead to greater dissemination of idea, approach, or technology.***
(Selected comments)

We trained a local nurseryman (Cooperative Extension Range Specialists trained him) in the techniques for the collection of vegetation monitoring data. He is now available for the other ranchers in the community. Forest service and NRCS hired him in the fall to do our ranch and several others in the area. (FR grantee)
Inspired an increased interest in nutrition and genetics in beef animals. (FR grantee)
Focus on small landowners who might be more likely to try new ideas. (FR grantee)
Encouraging and sharing with the community how to raise Tilapia in your back yard. (FR grantee)
We've formalized training for new farmers in the areas of equipment, technology and management. (FR grantee)
New handouts for landowners to use with visitors to their property. Using GPS's to monitor weed locations over extended time periods. (AP grantee)
Creating a DVD of workshops and sending to producers who couldn't attend is worth the time and expense. DVD is still best way for rural producers to get information. (web is too hard still in many areas). Regional newsletter was accepted and good way to disseminate DVDs. Collaborating with sale people of animal equipment and care products was worth it, as rural producers don't get exposure to new product readily. (AP grantee)
The use of Neem must be promoted to the farmers as a source of organic pesticides. More economic opportunities being created, diversification of Agriculture in the CNMI, Stability of slug pellets due to weather, use of recyclable materials in Agriculture. Sustainability in Crop production, Invasive species, no more. Healthy Crops. (AP grantee)

Of those FR grantees who indicated their project triggered new ideas, 78% indicated they tested the new ideas on their farm/ranch (Table 27). Furthermore, of those who tested the new ideas, 78% have continued to use those new ideas on their farm/ranch (Table 28). In 2005 only 63% of FR grantees indicated they tested the new ideas on their farm or ranch; however, after adjusting for those for whom the new idea was applicable 73% indicated they tested the new idea on their farm or ranch, which is more similar to the 2011 results.

Table 27. Tested those new ideas on FR grantee farm or ranch *(FR Q27)*

	2005	*2005 adj*	***FR %***	***FR N***
Yes	*63%*	*73%*	78%	35
No	*23%*	*26%*	22%	10
	14%			
	100%	*100%*	100%	45

Table 28. Continued to use those new ideas on your farm or ranch? *(FR Q28)*

	FR %	***FR N***
Yes	78%	29
No	22%	8
	100%	37

AP grantees described what surprising or unintended results, if any, came from their project (Q23). One grantee indicated the surprising result was that the tested practice did not work. For three grantees, they did not get far enough with the research, it was too soon to tell, or there were no surprises. The remaining 20 of 29 grantees described one or more surprising results from their project (5 grantees did not respond to the question).

♦ ***AP Grantees description of surprising and/or unintended results***

The size of some of the crops that were grown in the water barrier. Tomatoes especially had grown very tall in a short amount of time as well as the production numbers achieved by one farmer also growing tomatoes in the rainy season was not typical during the same growing period.
There was a statistically significant increase in forage protein in plots treated with the soil stimulants tested.
High level of public awareness and interest in the tilapia problem.
Cattle still found the grass palatable even after we spread manure on it.
The interest throughout the state from the agencies about the work and workshops we provided to the ranchers and farmers. Pro-active action was noticed more than I expected. The ranchers were especially interested in the science of water quality, and took part in the testing procedures.
The support from the participants and their neighbors.

Not all cooperating farmers stayed with irrigated pastures. The farm with the largest acreage of irrigated pastures converted them all to corn production the year after the project ended. That cooperating farmer was not able to convince his family partners of the benefits that this system gave to them. Among the farmers who were influenced to plant grass (with or without legumes) pastures for grazing. All others have remained committed to this farming system.
Even though we were not able to implement the sheep grazing as a part of the project, we did offer quite a bit of education about how grazing could be utilized to reduce leafy spurge infestations. Producers who were previously unwilling to even have sheep on their operation were more open-minded and accepting of this method of control.
Unintended results was the loss of an excellent yield potential on the onions due to the bacterial soft rot caused excessive rain when the crop was ready to harvest.
Agricultural professionals (i.e. SWCD staff) have responded very well to this line of work. They are including our tools in their programs and working directly with farmers to help them use the tools.
Enjoyed working with the families on their family-based business discussions.
The color quality of certain plants.
I was (and continue to be) most surprised by the sheer enthusiasm people display for what is really a very simple concept. I still, several years later, receive approximately 3 requests per month for information on the technology -- and it was the "highlight" of our WSU Innovator's Lecture in May and numerous tours / field days and presentations. Many people believed that biogas digesters were only relevant to large-scale, confined animal feeding operations - and I think that people are just excited to learn that it can work in small operations as well.
There has been significant interest in this model program from people in the US and even abroad.
We continue to be pleased by the level of control of lygus bugs on the organic strawberry farms with long-term commitment to these techniques.
Even producers who have been raising goats for many years could learn how to do something new with hoof care.
So many little things in the course of the two years as far as learning about the equipment. One field in particular was surprising in how much the soil moisture holding capacity varied across the field. We won a national award from AEM/NACD for excellence in conservation equipment and technology use.
Ducks as slug busters, people who saw the video was amazed by ducks frenzy over slugs file, slugs never feed on neem leaves.
The nearly twice as much soil nitrate-nitrogen (NO3-N) within the 'NewHy' hybrid and 'Hycrest' crested wheatgrass plots compared to the other six grasses in April but by July there was little difference in the NO3-N amount among all the grasses regardless of N rate treatment. This would indicate these two grasses are less efficient in N use as they used more soil N and did not produce any more forage compared to the other grasses.
The confidence and leadership skills that our cooperating producer demonstrated as the project progressed.

Advantages of the Project

Two-fifths of AP grantees reported that their SARE project lead them to “secure funding for a new but related project” (41%) and 34% reported that their SARE project lead them to “leverage additional funds to continue or expand this project” (Table 29). AP grantees described a wide range of other expanding advantages they had as a result of their AP project including knowledge enhancement, new directions for research, inspiring farmers or ranchers to use new/alternative practices, establishing partnerships, and career development (full text comments listed below). Nine AP grantees indicated their project did not lead to either leveraging additional funds or securing related funds, or to other expanding actions.

Table 29. Ag Professional + Producer project lead to expanding actions *(AP Q24)*

	AP % Yes	***AP N Yes***
Leverage additional funds to continue or expand this project.	34.5%	10
Secure funding for a new but related project.	41%	12
Other types of advantages	28%	8

Other expanding actions

Stimulated peer-reviewed case study of farm sustainability forthcoming in the journal, Agricultural Systems (AP grantee)
Provide result and justification for a new and related project (AP grantee)
Allow me to enhance my knowledge to other disciplines (i.e. nematology, soil ecology and weed science. (AP grantee)
Inspired the farmers' market which will be an added marketing venue for small farms (AP grantee)
Gave a very creative and energetic producer some new options to integrate into his operation (AP grantee)
An evolution of the program to now partnering with a local distributor (AP grantee)
Use of ducks as tractors, Organic transitional farms (AP grantee)
Was a great start for me as a new faculty in demonstrating ability to secure funds, establish a great relationship with local growers, and produce scholarly products; led to additional grants for our cooperating producer. (AP grantee)

Tendency toward new approaches

When asked what they tend to do on their farm or ranch when a new approach comes along that might be ***financially beneficial***, nearly four-fifths, or 79%, of FR grantees indicated they would "try it out right away" themselves (Table 30). Only 16% indicated they would tend to "wait and see if others try it out first then test it myself". The remaining 5% indicated they tend to "wait until an approach is proven and used by lots of neighbors before trying it out myself."

When asked about a new approach that might be ***environmentally beneficial*** to their farm or ranch, nearly three quarters of FR grantees, 74%, indicated they would "try it out right away" themselves (Table 31) whereas only 23% indicated they would tend to "wait and see if others try it out first then test it myself". The remaining 3% indicated they tend to "wait until an approach is proven and used by lots of neighbors before trying it out myself."

Table 30. When a new approach to farming or ranching comes along that might be of financial benefit to my farm or ranch *(FR Q29)*

I tend to:	*2005*	***FR %***	***FR N***
Try it out right away myself.	72%	79%	46
Wait to see if others try it out first then test it myself.	25%	16%	9
Wait until an approach is proven and used by lots of neighbors before trying it out myself.	3%	5%	3
	100%	100%	58

Table 31. When a new approach to farming or ranching comes along that might be of environmental benefit to my farm or ranch (FR Q30)

I tend to:	*2005*	***FR %***	***FR N***
Try it out right away myself.	71%	74%	42
Wait to see if others try it out first then test it myself.	24%	23%	13
Wait until an approach is proven and used by lots of neighbors before trying it out myself.	5%	3%	2
	100%	100%	57

Feedback and Ratings on the Western SARE Grant Process

The evaluation of the FR grants and the AP grants included a section where grantees were asked to reflect on their experience with the Western SARE grant process. Grantees were asked about the various ways they have heard about the Western SARE grant program (Table 32). Grantees were also were asked to rate nineteen aspects of the grant process. These included aspects related "applying for Western SARE funds" (Table 33), Western SARE's "provision of information on the grant application status" (Table 34), the "grant process" (Table 35), and "interactions with Western SARE staff" (Table 36). The rating scale used was: excellent, good, fair, poor, very poor, or no opinion.

About half of FR grantees heard about the FR grant program through an extension agent or educator, 51%, and second most often through the SARE website, or 30% and nearly a fifth, 19%, through a SARE newsletter or publication (Table 32). Other ways include 12% through other growers and 8% through a news article. These results are similar to the 2005 survey with the exception of the SARE website and news article. The proportion indicating they heard of the FR grant program through the SARE website doubled by 2011, 15% in 2005 to 30% in 2011. On the other hand, fewer heard about the FR grant program through a news article in 2011, 8%, compared 16% in 2005.

"Other" ways that FR grantees heard about the grant program were through the Natural Resources Conservation Service (NRCS), their soil and water conservation district or other professional contacts (university faculty, conservationists, farmers market managers), at a conference, mailing, or internet search.

The majority of AP grantees heard about the AP grant program through a colleague, 62%, and second most often through the SARE website, or 45% (Table 33). All other

ways were less than 20%. "Other" ways AP grantees heard of their grant program was through their various experiences with SARE or a general search for grants.

Table 32. How did you hear about the Western SARE Farmer/Rancher / AP Grant Program? *(Q1)*

Source	*2005 FR %*	**2011 FR %**	**2011 FR** N=59	**AP %**	**AP** N=29
A colleague				62%	18
Extension agent/educator	*57%*	51%	30		
Other growers	*15%*	12%	7		
SARE website	*15%*	30.5%	18	45%	13
News article	*16%*	8.5%	5	7%	2
SARE newsletter or publication	--	19%	11	17%	5
Other	*19%*	19%	11	14%	4
Don't know	*3%*	2%	1	3%	1

Applying for Western SARE funds (Table 33). When it came to "*ease of finding information about SARE funding opportunities*" 62% of AP grantees and 40j% of FR grantees rated this aspect "excellent." Approximately another two-fifths in each group, 38% of AP and 43% of FR, said "good." None of the AP grantees gave this aspect a rating of fair, poor, or very poor. Only 10% of FR grantees said "fair" while none said poor or very poor.

When rating "*ease of finding information on SARE grant policies and procedures*" a similar pattern emerged. The majority of AP grantees, or 62%, and a third of FR grantees, or 34%, rated this aspect "excellent." Approximately another two-fifths in each group, 38% of AP and 41% of FR, said "good." None of the AP grantees gave this aspect a rating of fair, poor, or very poor. However, 15% of FR grantees said "fair" and 7% said poor or very poor; the remaining 2% (or one grantee) said "no opinion".

While a majority of AP grantees, or 52%, rated "*ease of finding information on SARE-funded projects*" excellent, only a quarter (26%) of FR grantees said "excellent." However, 45% of AP grantees and 50% of FR grantees rated this aspect "good".

Fifteen percent of FR grantees said “fair” and 5% said poor or very poor and 2 grantees (3%) had no opinion. Only one AP grantee (3%) rated this aspect fair and none said poor or very poor or no opinion.

Nearly two-thirds of AP grantees (66%) rated “*ease of obtaining grant application forms*” excellent, while two fifths of FR grantees (40%) gave an excellent rating. Thirty-one percent of AP grantees said “good” and the remaining grantee said “fair” (or 3%). Slightly more FR grantees, or 45%, rated this aspect “good” while 9% said “fair.” Then one FR grantee each gave a poor and very poor rating and two grantees had no opinion.

With regard to “*clarity of grant application forms and instructions*” about a third in each grantee group, 31% of FR grantees and 38% of AP grantees, said “excellent” and about half in each group, 50% of FR grantees and 48% of AP grantees said “good.” Twelve percent of FR grantees said “fair” and the remaining 14% of AP grantees said fair. Finally 4%, or 2 FR, grantees said poor or very poor and 2 said “no opinion.”

On the final aspect of applying for Western SARE funds, “*adequate time between announcement and deadline to submit proposa*l”, 38% of AP grantees and only 23% of FR grantees said “excellent.” A majority in each grantee group, 59% of FR grantees and 52% of AP grantees, gave a “good” rating. Finally, while 5% of FR grantees rated this aspect fair, another 7% said poor or very poor. The remaining 3 FR grantees had no opinion (5%). Among AP grantees, only 7% said “fair” and none said poor to very poor or no opinion.

Western SARE’s provision of information (Table 34). Grantees rated three aspects of “*Western SARE’s provision of information on the grant process*”. For FR grantees, about a third, or 36%, gave an excellent rating on two aspects, “*keeping you informed on the status of your application*” and “*providing official notification and explanation of outcomes of review process in a timely manner*.” On the third item, “*allowing adequate*

time for applicants to respond to additional requests for information," only one quarter of FR grantees said "excellent." Meanwhile, a little over two-fifths of FR grantees rated each of the three aspects "good", ranging from 44%-47%. Between 12% and 17% of FR grantees rated each of the three aspects "fair". Across the three items, less than 5% gave a rating of "poor" to "very poor."

For AP grantees, two fifths gave each of the aspects of Western SARE's provision of information an "excellent" rating (45%-48%) and about the same proportion (38% to 41%) gave a "good" rating with slightly more (52%) giving a "good" rating for "keeping you informed of the status of your application and funding decision." Between 1 and 3 grantees (3%-10%) gave a "fair" rating to each of these aspects and none gave any of the three aspects a "poor" or "very poor" rating.

Western SARE Grant Process (Table 35). Grantees were asked to rate the Western SARE grant process. One third of FR grantees rated "*reasonable grant requirements and provisions*" and/or "*streamlined reporting requirements*" "excellent" and even more AP grantees gave an excellent ratings to one or both of these aspects, 45% each. Nearly half of FR grantees, 47%, gave "*timeliness of distributing funds for awarded projects*" an "excellent" rating while even more AP grantees gave an excellent rating, or 59%. Two fifths of FR grantees, 40%, gave "*responding to your post-award requests in a timely manner*" an "excellent" rating while slightly more AP grantees gave an excellent rating, or 48%. Between 12% and 17% of FR grantees gave fair ratings to these items while between 3% and 10% of AP grantees gave fair ratings on these items. Less than 5% of FR grantees gave "Poor" to "Very poor" ratings on any item. However, none of the AP grantees gave either "poor" or "very poor" ratings.

Western SARE's staff interactions (Table 36). Two thirds or more of grantees in each group gave "excellent" ratings to "*courteousness*" of Western SARE staff interactions, 68% of FR grantees and 83% of AP grantees. Similarly "*timeliness in responding to requests for information and assistance*" received a high percentage of

"excellent" ratings in both grantee groups, 64% of FR grantees and 79% of AP grantees. On the remaining aspects of staff interactions, a majority of grantees in both groups gave excellent ratings on each one: "*Ability to direct you to the right person*" (FR: 58%, AP 62%); "*responsiveness to your questions*" (FR: 61%, AP: 65%); and "*accuracy of responses*" (FR: 59%, AP: 68%).

Table 33. Aspects of applying for Western SARE funds *(FR Q31 / AP Q25)*

(% N)		Excellent	Good	Fair	Poor	Very Poor	No Opinion
Ease of finding information about SARE funding opportunities	**FR**	40% 23	43% 25	10% 6	3% 2	2% 1	2% 1
	AP	62% 18	38% 11	0% 0	0% 0	0% 0	0% 0
Ease of finding information on SARE grant policies and procedures	**FR**	34% 20	41% 24	15% 9	5% 3	2% 1	2% 1
	AP	62% 18	38% 11	0% 0	0% 0	0% 0	0% 0
Ease of finding information on SARE-funded projects	**FR**	26% 15	50% 29	15% 9	3% 2	2% 1	3% 2
	AP	52% 15	45% 13	3% 1	0% 0	0%	0% 0
Ease of obtaining grant application forms	**FR**	40% 23	45% 26	9% 5	2% 1	2% 1	3% 2
	AP	66% 19	31% 9	3% 1	0% 0	0% 0	0% 0
Clarity of grant application forms and instructions	**FR**	31% 18	50% 29	12% 7	2% 1	2% 1	3% 2
	AP	38% 11	48% 14	14% 4	0% 0	0% 0	0% 0
Adequate time between announcement and deadline to submit proposals	**FR**	23% 13	59% 33	5% 3	5% 3	2% 1	5% 3
	AP	38% 11	52% 15	7% 2	0% 0	0% 0	0% 0

Table 34. Aspects of Western SARE's provision of information on grant application status *(FR Q32 / AP Q26)*

(% N)	Excellent	Good	Fair	Poor	Very Poor	No Opinion
Keeping you informed on the status of your application and the funding decision **FR**	36% 21	45% 27	12% 7	2% 1	2% 1	3% 2
AP	45% 13	52% 15	3% 1	0% 0	0% 0	0% 0
Allowing adequate time for applicants to respond to additional requests for information **FR**	25% 15	47% 28	12% 7	0% 0	2% 1	14% 8
AP	14% 13	38% 11	7% 2	0% 0	0% 0	10% 3
Providing official notification and explanation of the outcomes of the review process in a timely manner **FR**	36% 21	44% 26	17% 10	0% 0	2% 1	2% 1
AP	48% 14	41% 12	10% 3	0% 0	0% 0	0% 0

Table 35. Aspects of Western SARE's Farmer/Rancher Grant process *(FR Q33 / AP Q27)*

(% N)	Excellent	Good	Fair	Poor	Very Poor	No Opinion
Reasonable grant requirements and provisions **FR**	33% 19	50% 29	12% 7	0% 0	2% 1	3% 2
AP	45% 13	45% 13	10% 3	0% 0	0% 0	0% 0
Timeliness of distributing funds for awarded projects **FR**	47% 27	31% 18	17% 10	2% 1	2% 1	2% 1
AP	59% 17	38% 11	3% 1	0% 0	0% 0	0% 0
Streamlined reporting requirements that eliminate redundancy **FR**	33% 19	38% 22	21% 12	0% 0	2% 1	7% 4
AP	45% 13	48% 14	3% 1	0% 0	0% 0	3%1
Responding to your post-award requests in a timely manner **FR**	40% 23	29% 17	9% 5	2% 1	2% 1	19% 11
AP	48% 14	52% 15	0% 0	0% 0	0% 0	0% 0

Table 36. Aspects of Western SARE's staff interactions*(FR Q34 / AP Q28)*

(% N)		Excellent		Good		Fair		Poor		Very Poor		No Opinion	
Courteousness	**FR**	68%	40	25%	15	3%	2	0%	0	2%	1	2%	1
	AP	83%	24	17%	5	0%	0	0%	0	0%	0	0%	0
Timeliness in responding to requests for information and assistance	**FR**	64%	38	25%	15	5%	3	2%	1	2%	1	2%	1
	AP	79%	23	21%	6	0%	0	0%	0	0%	0	0%	0
Ability to direct you to the right person	**FR**	58%	34	25%	15	7%	4	0%	0	2%	1	8%	5
	AP	62%	18	28%	8	7%	2	0%	0	0%	0	3%	1
Responsiveness to your questions	**FR**	61%	36	29%	17	7%	4	0%	0	2%	1	2%	2
	AP	65%	19	31%	9	0%	0	0%	0	0%	0	3%	1
Accuracy of responses	**FR**	59%	35	30%	18	7%	4	0%	0	2%	1	2%	2
	AP	68%	19	18%	5	11%	3	0%	0	0%	0	4%	1

Expectations about Western SARE programs and services (Table 37). When asked the extent to which Western SARE programs and services have met their expectations, the majority of FR grantees (58%) and AP grantees (69%) indicated their expectations were somewhat to greatly exceeded. Furthermore, a majority of AP grantees (52%) said "greatly exceeds expectations." About an additional 30% of FR grantees (29%) and AP grantees (31%) said that their expectations were met. There remaining 10% of FR grantees (or 6 individuals) indicated the programs and services fell short of their expectations, either somewhat or greatly. However, none of the AP grantees said their expectations were not met.

Table 37. Extent have the Western SARE programs and services met your expectations? *(FR Q35 / AP Q29)*

	FR %	***FR N***	***AP %***	***AP N***
Greatly falls short of expectations	7%	4	0%	0
Somewhat falls short of expectations	3%	2	0%	0
Meets expectations	29%	17	31%	9
Somewhat exceeds expectations	36%	21	17%	5
Greatly exceeds expectations	22%	13	52%	15
No Opinion	2%	1	0%	0
	100%	58	100%	29

Suggestions for Western SARE to improve its program service

Grantees were asked to describe those things that the Western SARE could do to improve its program service *(FR Q36 / AP Q30).* Over two-thirds of grantees gave suggestions, 70% of FR grantees and 69% of AP grantees. Some grantees would like the Western SARE to increase the amount of money available to fund projects and/or to fund types of projects. Other grantees would like to see modifications in the timing of project and/or allow the project time periods to be extended. Suggestions were also made about ways to improve the granting process. Some grantees would like to see greater dissemination of information about projects. One FR grantee was very disgruntled and would choose to never work with the Western SARE again. Finally, quite a few grantees from both programs indicated that everything was fine and they were satisfied with the Western SARE program service.

♦ ***Grantees would like increased funding available for projects and/or continue to direct those funds to farmers and ranchers***

Maybe help to purchase equipment to make this project work more efficiently. (FR grantee)
Reduce administrative costs to put more money in the field. (FR grantee)
Allow adequate funds for individual project completion. (FR grantee)
Continue to seek additional funding for farmers and ranchers in the western U.S. (FR grantee)
Should fund producer's ideas not just producers using Cooperative Extension/Univ ideas. (FR grantee)
Larger budget. (FR grantee)
Distribute more resources to ranchers and farmers (FR grantee)
Fund highly innovative programs. (FR grantee)
I would like to see more funding directed in Farmer/Rancher grants, more to advancing new ideas or techniques and less on improving conventional systems. (FR grantee)
Provide more fund (FR grantee)
Increase the reward amount for each of the categories. (AP grantee)
Provide funds for new Advisory Council members to periodically tour the far reaches of the Western Region. (AP grantee)
Get more money from USDA for more projects. (AP grantee)
Offer more grant opportunities that fund food systems work that is not necessarily on-farm research. (AP grantee)

- ***Some grantees would like the timing on projects to be extended or modified.***

Move application deadline to February so busy farmers and ranchers can write their proposals during the slower winter months. (FR grantee)
Speed up results. (FR grantee)
Biggest problem: Money tends to become available after planting time is over, so it's sometimes difficult to get the project started the year the grant starts. (FR grantee)
Look at taking a longer-term approach to grants 3 to 5 years. (FR grantee)
Fund community educational projects on farming processes for longer than 3 years. (FR grantee)
Offer long term grants over 5 or even 10 years -- It's not a matter of money as much as the time it takes to develop some crops. Sometimes for growers its better to have $1000. a year for 10 years to work with some tree crops than it is to have 10,000 at one time. This should be an option. Obviously extension is an important component of the WSARE objectives but producer involvement needs to be a larger part of the R&E formula. (FR grantee)

- ***Grantees made suggestions for ways to improve the granting process.***

Create a calendar of important dates related to SARE grant proposals. (FR grantee)
The questions that you answer for the essay part are the same every year. It seems like you have to jump through the same hoops. (FR grantee)
Mandate extension service to follow through any project so that portion can succeed. (FR grantee)
The grant application process was cumbersome and a little hard to navigate through. (FR grantee)
Simplify the application process. (FR grantee)
Allow for farmer-based research to continue- and for appropriate applied research. Perhaps rolling submission deadlines. (FR grantee)
Organize and sponsor every third year sub regional producer conferences in Guam for Western SARE's most geographically disadvantaged producers. Mentor at these conferences the development of joint project proposals. (FR grantee)
Provide more support for site-specific projects especially in the Western Region where there is a wide diversity of conditions. The remoteness of the islands indicate project and initiatives tend to be site-specific. (AP grantee)
Not requiring so many participants in the Professional-Producer program. This changed after 2005 and required 3 to 5 producers limiting the funding to each producer or project. (AP grantee)
Have employees all on the same page, unfortunately we were told two different things about having NRCS personnel as Technical Advisor and the Conservation District responsible for handling the money and grant reporting. (AP grantee)
To continue the programs and services especially to our Islands needs in the Pacific. We are situated in a less advantaged area where transportation costs is ten times the mainland USA and the cost of fuel is $5.80/gallon. (AP grantee)

Correct record-keeping mistakes. (AP grantee)
Let your staff make site visits to see all the good work you are doing in the field! (AP grantee)

♦ ***Grantees want to improve and expand the ways project information is shared.***

Using news industry communications and publications to make other farmers/ ranchers aware of the results. (FR grantee)
Create more news releases about completed or ongoing projects for media consumption. (FR grantee)
Press local newspaper to inform the locals what is happening within their own community. Farmers\producers won't push their own PR. (FR grantee)
Require results and recommendations from tech advisor bulletin. (FR grantee)
Improve website, put final reports as pdf's so we can access them easier. Cross reference or combine efforts with ATTRA's website. (FR grantee)
Progress and final reports could not be downloaded to the WSARE reporting site. Not sure if this problem has been solved. (AP grantee)
Perhaps make it easier to search findings from previous projects. (AP grantee)
Perhaps hold an annual educational meeting for non-participating producers to hear from participating producers about farm management improvements that have resulted from knowledge and experience they gained during their projects. (AP grantee)
More conferences where sharing of ideas, projects, success stories, etc. could be presented. (AP grantee)

One FR grantee was disgruntled about his Western SARE grant experience.

I have no intention of ever getting involved in any SARE projects in the future and I would have to advise other against it also. We used the SARE funds to partially pay for some of the supplies we needed on this project. The small amount of funds SARE contributed to the project was simply not worth the hassle. If the SARE "dingbat" I was dealing with in Utah had contacted me one more time with one more stupid question I would have told her to "go shove it". It was bad enough that my county extension agent that got me into the deal has tried for years to deny that he was the one that got me into it. What we did and what we found out and what we have promoted from this project was not because of any involvement of SARE but in spite of it. What I have concluded after my experience in this project is that the SARE program is basically a sick joke. (FR grantee)

♦ ***Many grantees were satisfied with their Western SARE grant experience.***

I feel that what has been offered was adequate. I was very satisfied. (FR grantee)
It seemed fine. (FR grantee)

I would say that the system in place is way beyond adequate and it will be counterproductive for SARE to attempt to silver platter everything, then people will not be ingenuous because they rely everything from the government. It will be best if we leave the farmers or ranchers to be constantly be a scientist themselves. (FR grantee)
Presently okay! (FR grantee)
I have no suggestions for improvement (FR grantee)
Excellent as it is. Thank you. (FR grantee)
The process went well. (FR grantee)
Excellent help. (FR grantee)
Can't think of anything. (FR grantee)
Nothing. It is a great program! (FR grantee)
I think you do a great job. Thank You! (AP grantee)
Keep up the good work. This is one of the best grant programs I have seen and really thought the reporting and open approach to submitting information was admirable. This survey may be the worst part of participating, but I am almost done and do not seem to have suffered too much. (AP grantee)
Program has been great and I cannot suggest anything to improve it. (AP grantee)
My experience was so positive that I cannot think of any suggestions for improvement! (AP grantee)
Not sure. (AP grantee)
I can't think of anything. I have only gratitude and good things to say. (AP grantee)

All but four of the FR grantees said they would consider seeking another grant from the Western SARE, or 93% said yes; similarly, all but one of the AP grantees said they would consider seeking another grant from the Western SARE, or 97% said yes (Table 38A). All but one of the FR said they would recommend seeking a grant from Western SARE to others (98%) and all (100%) of AP grantees said they would recommend seeking a grant from Western SARE to others (Table 38B). Sixty-three percent indicated they would still have pursued their project without the FR grant and the remaining 37% said they would not have (Table 38C).

Table 38A. Would you consider seeking another grant from Western SARE? *(FR Q37 / AP Q31)*

	FR %	***FR N***	***AP %***	***AP N***
Yes	93%	54	97%	28
No	7%	4	3%	1
	100%	58	100%	29

Table 38B. Would you recommend seeking a grant from Western SARE to others? *(FR Q37 / AP Q31)*

	FR %	***FR N***	***AP %***	***AP N***
Yes	98%	58	100%	29
No	2%	1	0%	0
	100%	59	100%	29

Table 38C. Without a Farmer/Rancher Grant, would you still have pursued your project? *(FR Q37)*

	FR %	**FR N**
Yes	63%	35
No	37%	21
	100%	56

Sustainable agriculture information needs and preferences

Both FR and AP grantees evaluated what sustainable agriculture information would be helpful to them on their farm or ranch (FR Q40) or to their position (AP Q33) (Table 39).

FR grantee sustainable agriculture information needs. Across topic areas (including the "not applicable" on each item), at least half to a majority FR grantees indicated the information on the topic area would be "very helpful" on five specific areas.

FR grantees indicating information in this area would be:	***"very helpful"***
Producing renewable energy on-farm or on-ranch (solar, wind, hydro)	*60%*
Alternative marketing approaches	*56%*
Value-added processing of agricultural products on the farm or ranch	*54%*
Water use efficiency in irrigation	51%
Ecologically-based weed management strategies	*50%*

On another set of topics, at least two-fifths but less than half of FR grantees, indicated information on topics would be “very helpful”.

FR grantees indicating information in this area would be:	***“very helpful”***
Energy efficiency measures for farms and ranches	*48%*
Organic agriculture	*47%*
Soil building practices including cover crops and rotations	*45%*
Economics of alternative farming systems, such as organics	*44%*
Ecologically-based insect and disease management strategies	*44%*
Sustainable livestock management or production systems	*44%*
Alternative methods for maintaining livestock health	*40%*

A moderate proportion of FR grantees expressed moderate interest in five of the topic areas by indicating sustainable agriculture information in these areas would be “somewhat helpful”:

FR grantees indicating information in this area would be:	***“somewhat helpful”***
Soil building practices including cover crops and rotations	*39%*
No-till/direct seeding	*39%*
Energy efficiency measures for farms and ranchers	*38%*
Ecologically-based insect and disease management strategies	*36%*
Water use efficiency in irrigation	*34%*

Fewer than 10% of FR grantees indicated “not helpful” on a majority of topic areas. However, on four topic areas, a comparatively higher proportion--a fifth--of FR grantees indicated “not helpful”.

FR grantees indicating information in this area would be:	***“not helpful”***
Organic agriculture	*20%*
Economics of alternative farming systems, such as organics	*20%*
Agro forestry	*20%*
Producing biofuel for on-farm or on-ranch use	*18%*

On most of the sustainable agriculture information areas, 15% or fewer of FR grantees felt the topic areas were not applicable. The information areas with relatively high

proportions indicating “not applicable” were related to livestock, 32% to 39% \; also “agroforestry” (38%), “no-till/direct seeding” (28%).

AP grantee sustainable agriculture information needs. Across topic areas (including the “not applicable” on each item), at least half to a majority AP grantees indicated the information on the topic area would be “very helpful” on five specific areas.

AP grantees indicating information in this area would be:	***“very helpful”***
Ecologically-based weed management strategies	*65%*
Sustainable livestock management or production systems	*63%*
Ecologically-based insect and disease management strategies	*56%*
Economics of alternative farming systems, such as organics	*56%*
Soil building practices including cover crops and rotations	*54%*
Raising grass-fed or natural meats	*50%*

On another set of topics, at least two-fifths but less than half of AP grantees, indicated information on topics would be “very helpful”.

AP grantees indicating information in this area would be:	***“very helpful”***
No-till/direct seeding	*46%*
Energy efficiency measures for farms and ranches	*46%*
Water use efficiency in irrigation	44%
Value-added processing of agricultural products on the farm or ranch	*42%*
Organic agriculture	*42%*
Producing renewable energy on-farm or on-ranch (solar, wind, hydro)	*40%*

A moderate proportion, or more than a third but less than half, of AP grantees expressed moderate interest, in five of the topic areas by indicating sustainable agriculture information in these areas would be “somewhat helpful”:

AP grantees indicating information in this area would be:	***“somewhat helpful”***
Value-added processing of agricultural products on the farm or ranch	*46%*
Alternative marketing approaches	*42%*
Alternative methods for maintaining livestock health	*40%*
Producing renewable energy on-farm or on-ranch (solar, wind, hydro)	*40%*
Energy efficiency measures for farms and ranchers	*38%*
Organic agriculture	*35%*

Fewer than 20% of AP grantees indicated “not helpful” on a majority of topic areas. However, on four topic areas, a comparatively higher proportion--a fifth or more--of AP grantees indicated “not helpful”.

AP grantees indicating information in this area would be:	***“not helpful”***
Water use efficiency in irrigation	*28%*
Agro forestry	*25%*
Raising grass-fed or natural meats	*23%*
Producing biofuel for on-farm or on-ranch use	*23%*
Alternative methods for maintaining livestock health	*20%*

On most of the sustainable agriculture information areas, 16% or fewer of AP grantees felt the topic areas were not applicable. The information areas with relatively high proportions indicating “not applicable” were No-till/direct seeding (21%) and Agroforestry (21%).

Table 39. Sustainable agriculture information needs (FR Q40 / AP Q33)

Sustainable Agricultural Information Areas *(% N)*		**Very Helpful**		**Somewhat Helpful**		**Not Helpful**		**Not applicable**	
Soil building practices including cover crops and rotations	*FR*	45%	25	39%	22	2%	1	14%	8
	AP	54%	14	27%	7	4%	1	15%	4
Ecologically-based weed management strategies	*FR*	50%	28	32%	18	9%	5	9%	5
	AP	65%	17	23%	6	4%	1	8%	2
Ecologically-based insect and disease management strategies	*FR*	44%	24	36%	20	9%	5	11%	6
	AP	56%	14	24%	6	4%	1	16%	4
No-till/direct seeding	*FR*	31%	17	39%	21	2%	1	28%	15
	AP	46%	11	21%	5	12.5%	3	21%	5
Sustainable livestock management or production systems (e.g. management intensive grazing)	*FR*	44%	25	23%	13	2%	1	32%	18
	AP	63%	17	15%	4	15%	4	7%	2
Alternative methods for maintaining livestock health	*FR*	40%	22	16%	9	7%	4	36%	20
	AP	28%	7	40%	10	20%	5	12%	3
Raising grass-fed or natural meats	*FR*	39%	22	13%	7	9%	5	39%	22
	AP	50%	13	23%	6	23%	6	4%	1
Alternative marketing approaches	*FR*	56%	32	25%	14	9%	5	10%	6
	AP	35%	9	42%	11	15%	4	8%	2
Value-added processing of agricultural products on the farm or ranch	*FR*	54%	30	27%	15	9%	5	9%	5
	AP	42%	11	46%	12	4%	1	8%	2
Organic agriculture	*FR*	47%	26	21%	12	20%	11	11%	6
	AP	42%	11	35%	9	15%	4	8%	2
Economics of alternative farming systems, such as organics	*FR*	44%	24	24%	13	20%	11	11%	6
	AP	56%	15	33%	9	4%	1	7%	2
Water use efficiency in irrigation	*FR*	51%	28	34%	19	4%	2	11%	6
	AP	44%	11	12%	3	28%	7	16%	4
Producing renewable energy on-farm or on-ranch (solar, wind, hydro)	*FR*	60%	34	28%	16	9%	5	3%	2
	AP	40%	10	40%	10	16%	4	4%	1
Energy efficiency measures for farms and ranches	*FR*	48%	27	38%	21	9%	5	5%	3
	AP	46%	12	38.5%	10	11.5%	3	4%	1
Agro forestry	*FR*	24%	13	18%	10	20%	11	38%	21
	AP	21%	5	33%	8	25%	6	21%	5
Producing biofuel for on-farm or on-ranch use	*FR*	33%	18	24%	16	18%	10	20%	11
	AP	38.5%	10	27%	7	23%	6	11.5%	3

Other information needs

Value added strategies for bamboo goods. Available low technology solutions to bamboo processing. (FR grantee)
Study of resale of true grass fed animals (FR grantee)
SMALL biogas\methane generation plants... costing less than 20K for direct heating cost (FR grantee)
Creating a livestock/crop ratio to care for all the nutritional needs of the soils and the livestock on the small-farm footprint. (FR grantee)
Permaculture, community supported agriculture, water harvesting, agro-tourism, producer & chefs and other buyers alliances, promotion of farming as a noble vocation (FR grantee)
Aquaculture (AP grantee)
Crop-livestock integration strategies. (AP grantee)
I have changed my position and now work in FCS in Extension, so no longer as AG-related (AP grantee)
Soil carbon status and sequestration responses to pasture and grazing management (AP grantee)
Feasibility studies, case studies (AP grantee)

Information preferences. Both FR and AP grantees were asked in what ways do they prefer getting sustainable agriculture information (Table 40). The majority of FR grantees "highly prefer" to get sustainable agriculture information through the Internet (56%) and/or through "farm tours, field days, workshops, or conferences" (54%). A moderate proportion of FR grantees "highly prefer" getting sustainable agriculture information from "sustainable agriculture group" (47%), "extension agent or educator" (43%) or "farm publications" (42%). A majority of FR grantees "moderately prefer" getting information through "other farmers or ranchers" (58%) or "farm or commodity group" (52%). Interestingly, a quarter of FR grantees *do not prefer* "farm or commodity group" (26%). All other ways are "not preferred" by 15% or fewer.

Among AP grantees, two thirds or more "highly prefer" the Internet (86%), "consultation with peers" and/or "farmers or ranchers you work with" (69%). A majority of AP grantees "highly prefer" getting information through a "professional conference or workshop" (59%) and/or an "in-service training" (54%). A majority of AP grantees "moderately prefer" to get information through "farm publications" (67%) and/or "journal

articles" (56%). With regard to ways AP grantees do not prefer, 15% indicated they do not prefer "in-service training" and/or 11% indicated "farm publications" and/or 11% indicated journal articles.

When grantees were asked "among their preferred ways" which one way of getting sustainable agriculture information they prefer the most, the highest proportion of both FR and AP grantees indicated the internet, 42% and 46% respectively (Table 41). Among FR grantees, 25% indicated "extension agent or educator" and 14% indicated "farm tours, field days, workshops, or conferences". All other ways were most preferred by less than 10% of FR grantees. Among AP grantees the second highest proportion indicated "in-service training" with 18%. Two additional ways each had 11% of AP grantees indicating it was their most preferred way: "professional conferences/workshops" and "other". The remaining ways were most preferred by 7% or less of AP grantees. "Other ways" specified by AP grantees include email, research and demonstration, and all ways are useful.

FR and AP grantees were also asked to reflect on the ways they may have used SARE information that is disseminated through print and electronic media (Table 42). While 15% of FR grantees and 3% of AP grantees indicated they were "not familiar with SARE publications", the vast majority indicated they have read a SARE publication, 80% of FR grantees and 90% of AP grantees. Two fifths of FR grantees and a majority of AP grantees have "passed SARE publication on to others", 41% and 62% respectively; and/or have "sought more information from the resources listed in the SARE publications", 42% and 57%. Over a third of both FR grantees (36%) and AP grantees (38%) indicated they have been "inspired by a SARE publication to explore new production or marketing ideas". Finally, one fifth of FR grantees (20%) and just under half of AP grantees (48%) indicated they have "adopted new production or marketing techniques as a result of a SARE publication.

Table 40. Preferred ways of getting sustainable agriculture information?
(FR Q41 / AP Q34)

Ways to get information *(% N)*		Highly preferred		Moderately preferred		Not preferred	
Internet (the Web)	*FR*	56%	33	32%	18	10.5%	6
	AP	86%	24	14%	4	0%	0
Extension agent or educator	*FR*	43%	23	41%	22	15%	8
Consultation with peers	*AP*	69%	18	31%	8	0%	0
Other farmers or ranchers	*FR*	38%	21	58%	32	4%	2
Farmers and ranchers you work with	*AP*	69%	18	31%	8	0%	0
Farm publications	*FR*	42%	22	50%	27	9%	5
	AP	22%	6	67%	18	11%	3
Farm tours, field days, workshops, conferences	*FR*	54.5%	30	34.5%	19	11%	6
Professional conference or workshop	*AP*	59%	16	41%	11	0%	0
Sustainable agriculture group	*FR*	47%	24	39%	20	14%	7
	AP	--	--	--	--	--	--
Farm or commodity group	*FR*	22%	11	52%	26	26%	13
	AP	--	--	--	--	--	--
	FR	--	--	--	--	--	--
Journal Articles	*AP*	33%	9	56%	15	11%	3
	FR	--	--	--	--	--	--
In-service training	*AP*	54%	14	31%	8	15%	4

Other ways

Direct mail. (FR grantee)
Email (FR grantee)
Books....older farming practices books from around the world (FR grantee)
Interactive CD/DVDs, question and answer email service, a disadvantaged producers service center, a local Western SARE resources center (FR grantee)

Presentations from grantors at agri-conferences (AP grantee)
Through research and demonstration. (AP grantee)

Table 41. Most preferred way of getting sustainable agriculture information *(FR Q42 / AP Q35)*

	FR %	***FR N***	***AP %***	***AP N***
Internet (the Web)	42%	24	46%	13
Extension agent or educators	25%	14		
From consultations with my peers			7%	2
Farmers or ranchers	9%	5	0%	0
Farm or commodity group	0%	0		
Journal articles			4%	1
Farm publications	7%	4	4%	1
Farm tours, field days, workshops, or conferences	14%	8		
Professional conferences/workshops			11%	3
Sustainable agriculture group	2%	1		
In-service training			18%	5
Other	2%	1	11%	3
	100%		100%	

Other ways

Books (FR grantee)
Local (in Palau) Western SARE Resource Center. This center would have on-hand all SARE, ATTRA and other sustainable agriculture publications and other resources. Also grant formulation and writing services would be available. (FR grantee)

Email address (AP grantee)
Research and demonstration. (AP grantee)
I do not prefer one the most.....the have all proved equally useful (AP grantee)

Table 42. Use of SARE printed and electronic media. *(FR Q43 / AP Q36)*

	FR % Yes	***FR N***	***AP % Yes***	***AP N***
I am not familiar with SARE publications.	15%	9	3%	1
I read a SARE publication.	80%	47	90%	26
I was inspired by a SARE publication to explore new production or marketing ideas.	36%	21	38%	11
I adopted new production or marketing techniques as a result of a SARE publication.	20%	12	48%	14
I passed SARE publication(s) on to others.	41%	24	62%	18
I sought more information from the resources listed in SARE publication(s).	42%	25	57%	17

Grantee Characteristics

FR grantee characteristics. While 29% of FR grantees were less than 50 years old, 29% were 60 years or older. The remaining 42% were between the ages of 50 and 59 years of age with an average age of 55 years. The youngest FR grantee was 32 and the oldest was 88.

A third, 33%, of FR grantees have been farming or ranching less than 20 years and another quarter, 25%, have been farming or ranching for 20-29 years (Table 43). About one fifth, or 21%, have been farming or ranching for 30-39 years and the remaining 21% have been farming or ranching 40 years or longer. The FR grantees have been farming or ranching for an average of 26 years with the least being 4 years and the most being 65 years.

FR grantees grew or produced a variety and multiple commodities and/or livestock (Table 44). Around two-fifths of FR grantees grew vegetables (39%) and/or fruit (37%) and just over a quarter, 27%, grew grains and/or hay, or 25%. A fifth grew seed (20%) and/or 17% grew green manure or cover crops. Only 10% grew legumes, 8% grew nuts, but none grew cotton. Among livestock categories, about a third produced beef cattle (32%) and quarter, 25%, produced poultry. Fifteen percent produced sheep and/or 14% produced goats and/or 14% produced hogs. Fewer than a tenth produced either dairy cattle or aquaculture.

Among “other” commodities grown or produced, forest products, timber, and wood fuel were mentioned by four FR grantees. Four FR grantees mentioned several tropical crops such as coffee, taro, cassava, bananas, roselle and bamboo. Bees or honeybees were mentioned by three grantees; and flowers or ornamental plants were mentioned by three FR grantees. Two grantees mentioned greenhouse crops. One

grantee mentioned horses and alpaca and one grantee mentioned pasture. Other commodities mentioned were Navajo traditional corn, wine grapes, and olive trees for oil.

Seventeen percent of FR grantees produced one commodity, and another 30% produced two commodities, while another 17% produced three commodities (Table 44A). About one fifth, 19%, produced 4-5 commodities and the remaining 22% produced 6-10 commodities. One FR grantee did not specify any. The average of number of commodities grown or produced is 3 and the most was 11.

The total number of acres owned and actively farm or leased by FR grantees represented in this study was 135,973 acres with an average of 2344 acres per FR grantee (Table 45). The median acres was 69 and the mode was 15. About a fifth, 22%, farmed or ranched less than 10 acres and besides the one grantee that did not farm or ranch any, the smallest number of acres farmed or ranched is 0.5. Another 21% farmed or ranched 10-25 acres and 19% farmed or ranched 26-100 acres. Another 16% farmed or ranched 201-1,500 acres and 12% farmed or ranched 1501-5000. The remaining 10% farmed or ranched more than 1000 acres with the highest number of acres being 45,000 acres and four more farmed 10,000 or more. The distribution of owned and actively farmed versus leased acres are presented in Tables 45A and 45b.

FR grantees belonged to a variety and multiple farm or natural resource organizations (Table 43). Forty-six percent belonged to the Farm Bureau and about a third belonged to an Organic Farmers Group (32%) and/or a commodity group (32%). Thirty percent belonged to a board or commission and even fewer, 17%, belonged to the Farmers Union. Only 3% belonged to a direct seeding group.

Table 43. FR Grantee Demographic Characteristics

Age (*FR Q45).*	***FR % Yes***	***FR N***
Less than 40 years	14%	8
40-49 years	15%	9
50-59 years	42%	25
60-69 years	22%	13
70 or older	7%	4
TOTAL	100%	59
Univariate statistics		
Mean	55	
Median	55	
Mode	55	
Range	32-88	
Standard deviation	11.6	
Years farming or ranching (*FR Q46)*	***FR % Yes***	***FR N***
Less than 10 years	12%	7
10-19 years	21%	12
20-29 years	25%	14
30-39 years	21%	12
40 or longer	21%	12
TOTAL	100%	57
Univariate statistics		
Mean	26	
Median	26	
Mode	30	
Range	4-65	
Standard deviation	14.97	

Table 44. FR grantee farm/ranch characteristics

Crops or livestock produced on farm or ranch *(FR Q47)*

Crop	%	N	Livestock	%	N
Vegetables	39%	23	Poultry	25%	15
Fruit	37%	22	Goats	14%	8
Nuts	8.5%	5	Sheep	15%	9
Grains	27%	16	Hogs	14%	8
Seed	20%	12	Dairy cattle	5%	3
Hay	25%	15	Beef cattle	32%	19
Legumes	10%	6	Aquaculture	2%	1
Green manure or cover crops	17%	10	Other	29%	17
Cotton	0%	0			

Other Crops

Coffee, orange avocado	*Pasture*
Timber	*Year round greenhouse crops*
Fiber, wood fuel	*Honeybees- queen honeybees, and honey*
Greenhouse	*Honey, honeybees*
Plants, ornamental plants	*Flowers*
Horses, alpaca	*Taros, bananas.*
Navajo traditional corn	*Root crops i.e. cassava, taro, sweet potato; roselle*
Bamboo	*Honey*
Bamboo	*Sawlogs, firewood, other forest products*
Herb and flowers	*Wine grapes, olive trees for oil*

Table 44A. Number of commodities or livestock grown or produced

	Producer %	***Producer N***
None	2%	1
One	17%	10
Two	30%	18
Three	17%	10
4-5	19%	11
6-11	15%	9
TOTAL	100%	59

Table 45. Total Producer grantee acres own and leased *(Producer Q49+Q50)*

Acres	***FR %***	***FR N***	***Univariate statistics***	
Less than 10	22%	13	Mean	2344
10-25	21%	12	Median	69
26-200	19%	11	Mode	15
201-1,500	16%	9	Range	0-45,000
1,501-5,000	12%	7	Sum	135,973
5,001 or more	10%	6	Standard Deviation	6609
TOTAL	100%	58		

Table 45A. FR grantee acres own and actively farm or ranch (FR Q49).

Acres	***FR %***	***FR N***	***Univariate statistics***	
None	3.5%	2	Mean	1079
1-5	21%	12	Median	27
6-10	12%	7	Mode	5
11-20	9%	5	Range	0-13,000
21-200	26%	15	Sum	62,572
201-999	9%	5	Standard Deviation	2670
1,000-10,000	16%	9		
Over 10,000	3.5%	2		
TOTAL	100%	57		

Table 45B. FR grantee acres leased from someone else (FR Q50).

Acres Leased	***FR %***	***FR N***	***Univariate statistics***	
None	44%	28	Mean	1244
1-5	5%	3	Median	3
6-10	7%	4	Mode	0
11-20	4%	2	Range	0-35,000
21-200	16%	9	Sum	73,401
201-999	7%	4	Standard Deviation	5058
1,000-10,000	13%	7		
Over 10,000	4%	2		
TOTAL	100%	55		

Table 46. FR grantee affiliation with arm or natural resource organizations *(FR Q44)*

Organization	***FR % Yes***	***FR N***
Farm Bureau	46%	27
Farmers Union	17%	10
Organic Farmers Group	32%	19
Direct Seeding Group	3%	2
Commodity Group	32%	19
Boards or Commissions	30.5%	18
Other	46%	12

Affiliated Boards for Commissions

OSC Research committee
Farmers Market
Lake County Soil & Water Conservation
Various Co-op's & Pork Producers. Homestead farming groups
Fair Board and Grange
Hopi Conservationist Board, Livestock Association
Food Policy Council
SWCD
Local agricultural commission

Other organizations

Alternative Energy Resources Organization (AERO).
CBO
Division of Forestry and Wildlife - State of Hawaii
Division of Forestry and Wildlife at state level
Forage And Nutrition Group (Discussion Group)
FSA County Committee
Grange!
Grazing associations, Cooperatives, State Cattlemen's Association, County Cattlemen's Association
NN Farm Board at Ganado
NRCS-RCD's
Samoan Family Sunfish Coop.
USDA organic certification program, certified naturally grown.

FR grantees used a variety of outlets to sell their farm or ranch products. Very few sold 100% of their farm or ranch products solely through one outlet (Table 47). Only 14% sold 100% through wholesale or broker, only 5% marketed 100% of their products for "family, personal, or cultural use or barter, while even fewer, 3%, marketed 100% directly to consumers. None marketed 100% through retail outlets. As interesting are the percent who did not use various outlets at all. Forty-eight percent did not market through retail outlets, while 42% did not market through wholesale or through a broker; similarly 46% did not use products for family, personal, or cultural use or barter.

Three quarters of FR grantees, 76%, marketed some to all of their products directly to consumers (though the majority do less than 100% of products this way). A majority of FR grantees, or 52%, marketed some of their products (but not all) through retail outlets. Forty-three percent marketed between 1%-99% of their goods through wholesale or broker with the additional 14% selling 100% this way. Finally, a majority "market" at least some of their products "for family, personal, or cultural use or barter," though the vast majority of these marketed 25% or less of their products this way.

Table 47. FR grantee farm or ranch products sold to these outlets (FR Q48)

Percent marketed *(% N)*	***Wholesale or broker***		***Retail outlets***		***Directly to consumers***		***For family, personal, or cultural use or barter***	
None	42%	24	48%	28	23%	13	46%	26
1-25%	12%	7	41%	24	35%	20	44%	25
26%-50%	5%	3	2%	1	3%	2	2%	1
51-99%	26%	15	9%	5	35%	20	3%	2
100%	14%	8	0%	0	3%	2	5%	3
Total	100%	57	100%	58	100%	57	100%	57

Eighty-eight percent of FR grantees had two or more ***family members working*** on their farm or ranch with the vast majority of these having between two to four family members including the FR grantee (Table 48). The average number of family members working on the farm or ranch was 3 and the range was 0-17. While over a third of FR grantees had no ***non-family members working*** on their farm or ranch (36%), two fifths had between one and four non-family workers. Only one-fifth (22%) had five or more non-family workers on their farm or ranch. The average number of non-family workers per grantee farm or ranch was four and the range was 0-55. Two fifths, 44%, had between two and four ***total workers (including the grantee)***. The majority, 54% had five or more total workers on their farm or ranch. The average number of total workers per grantee farm or ranch was seven and the range was 0-56. For a more detailed breakdown of full-time, part-time and seasonal family and non-family workers see Table 49.

Table 48. Family and non-family people who work on FR grantee farm or ranch (including grantee) (FR Q51)

Those working on your farm or ranch *(% N)*	**Family**		**Non-family**		**Total**	
None	2%	1	36%	21	0%	0
One	10%	6	13%	8	2%	1
Two	41%	24	13%	8	20%	12
Three-Four	32%	19	15%	9	24%	14
Five-Six	8%	5	8%	5	17%	10
Seven-Ten	2%	1	7%	4	22%	13
11 or more	5%	3	7%	4	15%	9
Total	***100%***	***59***	***100%***	***59***	***100%***	***59***
Univariate Statistics						
Mean number per grantee		3.2		3.74		6.95
Median		2		1		5
Mode		2		0		2
Range		0-17		0-55		1-56
Sum		189		221		410
Standard deviation		2.69		7.83		7.83

Table 49. Family and non-family full-time and part-time people work on FR grantee farm or ranch (including grantee) (FR Q51)

Family including you *(% N)*	**Full-time**		**Part-time year round**		**Seasonal**	
None	15%	9	53%	31	71%	42
One	37%	22	27%	16	12%	7
Two	32%	19	12%	7	7%	4
Three or more	15%	9	8%	5	10%	6
Total	***100%***	***59***	***100%***	***59***	***100%***	***59***
Univariate Statistics						
Mean number per grantee		1.6		0.84		0.78
Median		1		0		0
Mode		1		0		0
Range		0-6		0-5		0-12
Sum		93		50		46
Standard deviation		1.192		1.215		1.885

Non-family *(% N)*	**Full-time**		**Part-time year round**		**Seasonal**	
None	76%	45	64%	38	58%	34
One	7%	4	15%	9	8%	5
Two	7%	4	14%	8	19%	11
Three-Ten	8%	5	7%	4	10%	6
11 or more	2%	1	0%	0	5%	3
Total	100%	59	100%	59	100%	59
Univariate Statistics						
Mean number per grantee		1.51		0.71		1.52
Median		0		0		0
Mode		0		0		0
Range		0-55		0-5		0-15
Sum		89		42		90
Standard deviation		7.222		1.218		3.109

AP Grantee Characteristics. The majority AP grantees had a current position with Extension (63%) and another 15% had a current position with an Agricultural Experiment Station. The remaining 22% have position with non-profit organizations or some other organization.

Table 50. AP grantee current position *(AP Q37)*

	AP %	AP N
Extension	63%	17
Agricultural Experiment Station	15%	4
NRCS	0%	0
ARS	0%	0
Non-profit organization	7%	2
Other	15%	4
TOTAL	100%	27

Other positions

Government-Agricultural Development Services
Self employed and non-profit organizations
Administration of Extension and Research programs
Non land grant UC
Local Conservation District

CONCLUSIONS

FR grantees and AP grantees reported success in how their grants were implemented. A majority of grantees in both groups indicated that the hoped for results were achieved to a great extent. A majority of FR grantees had effective technical advisors who guided their projects in a number of ways including helping with the grant proposal conducting tests and measurements, organizing field events, and publicizing the project. Among AP grantees, a majority successfully coordinated their projects with cooperating farmers or ranchers who served on project planning teams, participated in on-farm research or demonstrations, provided research plots or a site for a farm tour, or gave presentations about the projects. Both FR and AP grantees disseminated information about their projects by giving presentations at workshops, conferences or other events; writing news articles for the agricultural press or other media outlets; or hosting farm tours.

Farmers or ranchers, university extension and other agricultural professionals attended field days and tours presented by FR and AP projects, averaging as many as 102 per reporting FR grantee and 108 per reporting AP project. Furthermore, farmers or ranchers, university extension and other agricultural professionals learned about FR and AP projects through presentations at workshops or conferences, averaging as many as 171 per reporting FR project and 237 per reporting AP project. FR and AP grantees also reported visited individually with farmers or ranchers about their projects, averaging as many as 54 per reporting FR project and 24 per reporting AP project.

The ideas, approaches, or technologies put forth on the various Western SARE projects were put into use on farms and ranches. Among 48 reporting FR projects and 27 reporting AP projects, 1246 Farmers or ranchers who learned about one of the FR or AP projects also tested or adopted the idea, approach, or technology put forth in the project. Furthermore, a majority of both grantee groups indicated that the idea, approach, or technology continues to be used. For some projects where the idea,

approach, or technology was no longer used, the costs were too high, unforeseen factors interfered or it did not work as intended.

FR grantees observed positive impacts on their own farm or ranch operation as a result of using their main idea, approach, or technology. These positive impacts included decreased input and/or operating costs, increased yields and production outcomes, and improvements in measures of environmental quality. Furthermore, a majority of FR grantees experienced an increase in net income on their farm or ranch as a result of their project. Likewise, AP grantees observed improvements on those farms and ranches that tried their project idea, approach, or technology. Specifically, a majority of AP grantees observed increased farm or ranch efficiencies and/or increased net income on the farm or ranch using the idea, approach, or technology.

FR grantees and the cooperating farmer or rancher on AP grants made changes in their farming behavior as a result of participating on a Western SARE grant. A majority of FR grantees sought more information on the use of the idea, approach or technology; expanded the use of the idea, approach, or technology on other parts of their farm or ranch; and/or changed other operations on their farm or ranch. Similarly, a majority of AP grantees indicated they observed these same behaviors among their cooperating farmers and ranchers. A majority of FR grantees indicated their satisfaction with farming had increased as result of the project and/or they increased their level of cooperation with other farmers.

Grantees from both grant programs identified important results and new ideas generated from their project. The most important results from FR and AP grantees were described as success in demonstrating the idea, approach, or technology; a modification or expansion of how the idea, approach, or technology was used; exploration and improved understanding of the idea, approach, or technology; and project outcomes that surpassed what was expected.

Over three quarters of **FR grantees** indicated the information they gained from their project was “very useful”. Furthermore, nearly all of the **AP grantees** indicated that they are or will be extending information on the idea, approach, or technology that was tested with their project. Over three quarters of grantees in both groups reported their project triggered or inspired new ideas. On several projects, enhancements or additional applications of the practice were explored and others made refinements of the practice. Some projects developed new value added products. Other grantees felt their perspective had changed and/or they changed the way they do things as a result of the project. Finally, some grantees thought their project led to greater dissemination of the idea, approach, or technology. Over three quarters of those FR grantees whose project triggered or inspired new ideas reported they tested the new ideas on their farm/ranch (compared to 73% in 2005) and three quarters of those who have tested those ideas on their farm or ranch said that they have continued to use those new ideas on their farm or ranch.

Overall, FR grantees and AP grantees felt favorable about the Western SARE grant program and gave overall positive ratings to aspects of the Western SARE grant-making and administration process. The majority of grantees in both groups indicated their expectations about Western SARE programs and services were somewhat to greatly exceeded and another third in each grantee group indicated their expectations were met. Nearly all grantees in both groups said they would consider seeking another grant from the Western SARE. Furthermore, all but one FR grantee and all AP grantees would recommend seeking a grant from the Western SARE to others. Specifically, a majority of FR grantees said they would not have pursued the idea, approach, or technology of their project without the having received the grant.

Final Respondent Comments

Overall FR grantees felt very positive about their experience with the Western SARE grant:

Because of the grant, I was able to pursue my goal of finding what could be done with fish waste that was produced from my son's wholesale business. (FR grantee)
My SARE project was a disappointment not because of the SARE service but because of the group I worked with that lacked support for my project. I wished I would have tried my project independently instead of counting on someone and then have it fall through. I piggybacked with the Sanpete County Weed Board project because it looked good on my SARE application. (FR grantee)
By the implementation of Country of Origin Labeling (C.O.O.L.) and the enforcement of the Packers and Stockyard Act, a more level playing field within the beef cattle industry would give an economic boost to the ranch. (FR grantee)
You have a great program -- more people need to know about it. (FR grantee)
Sorry I am later in getting this to you but life took a bumpy turn. Thanks for your help. (FR grantee)
Great job! Sorry, it took me to reply! (FR grantee)
I feel this is a very important program. This is the only grant program that I know about that farmers can apply for. Most of the other grants are for "the professionals". educators and industry groups. The SARE gives farmers a chance to try out ideas that they might want to incorporate into their farming or marketing programs. We are a small family farm. a dying breed. Anything that will support the "actual farmer" is valuable. (FR grantee)
I am sincerely interested in a SARE grant that would allow me to process my olives from the 1100 hybrid trees I have purchased, planted, and irrigated. This equipment in not available to me due to my isolation in Nevada and being the only person in the state to plant these trees and ready them for oil processing. (FR grantee)
The western SARE grant was great, it allowed a grazing system to start and is still going today. The only problem is that most of the farmers around our area are too pig headed and subsidized by the government so much they are not willing to look at new systems. They would rather just do what grandpa did. Kind of disappointing since the age of farmers is getting golder every day. As a sheep guy I just really wonder. I struggle to find pasture but there is 100,000 acres enrolled in CRP in this county that cannot be grazed. But the deer spend all winter eating my sheep pasture. Figure that out, huh. Many thanks. (FR grantee)
I have had good experiences and would share with others. (FR grantee)
Even at my age I am still learning and willing to learn more I am very eager to learn new ideas to enhance my operations so I can pass it on to the next generation. I would like to thank the SARE for giving me the opportunities of expanding new ideas I just wish that the recycling fish waste to fertilizer would have worked if only the extension would have supported it. Thank you. (FR grantee)
Check out the comment provided earlier. Simply put, after my involvement with SARE, I think it is simply a waste or at the minimum, a misdirection, of taxpayer money. I have no intention of ever getting involved in this sort of a deal again and I would have to advise others of the same. The SARE program appears to be designed for parasites and professional fund seekers not for real farmers. (FR grantee)

Would like more information and opportunity to explore carbon sequestration. Need a grant to demonstrate the use of herbivore (goats and sheep) to control biomass (brush) to limit or prevent catastrophic fires in 42 states that have wildfire challenges. A system that is self sustainable i.e. offspring paying for infrastructure costs (goat meat raising in demand because of ethnic change in America-excellent meat to limit obesity and diabetes). (FR grantee)
Need results sent to those that participate. (FR grantee)
I appreciate the fact that my application for Coconut production using recycled food source is been approved and as a result it has given me more interest to get more serious to do more intensified farming of coconut crab. I would like to get into the reproduction phase and learn more about the crab and how to best and feasibly farm this specie. (FR grantee)
Although I didn't rate you excellent in all categories, I believe SARE to be among the most useful, beneficial, and efficient organizations funded with public money. I hope that you will be able to continue your quest to improve the lives of the farm and ranch community. You are a needed voice about what is necessary, possible, and achievable - eschewing the USDA dogma that has driven so many promising small producers from the land. Congratulations on your past accomplishments. May you always be there for those future generations of small, sustainable, ecologically-minded producers that will need the time-proven, hands-on knowledge that you nurture. (FR grantee)
I am very impressed with the SARE organization. When I needed help with implementing the grant...they were very helpful..When I had 50 students, instead of the 15 I thought would be interested in my year-round greenhouse class...they increased the amount within the grant award! I love SARE! (FR grantee)
I would like to thank the SAREs for giving me the opportunity in receiving this grant to help implement new ideas for farming. (FR grantee)
I apologize for the delay in sending in the survey: I was off island due to a family crisis. It is my sincere appreciation and thank you very much to SARE for the opportunity provided to me especially the grant I received which allowed me to build a small scale Green Water Hatchery. Due to year 2009 Tsunami, it has impacted Tilapia farmers and slowed the demand for fingerlings. However, I have used my hatchery as a grow-up tank and raised fish. The products I was able to help the community, church during cultural events. With Danger and harmful chemicals dumped into the ocean which could render salt water fish not safe for consumption. I believed raising tilapia on land is safe and is made possible by great hand of SARE. Thank you. (FR grantee)
Grants are important to assist in providing the tools to teach and improve ranching and farming. It provides new ideas and assists to develop better practices. (FR grantee)
I am grateful that I was able to get a grant from SARE. I worked with North Seattle University Extension and achieved dramatic results, but getting those results put into a bulletin has proved difficult. (FR grantee)
Western SARE has the most approachable leaders and information officers of all the agriculture related organizations. *Western SARE provides funding for worthy projects which are not available elsewhere.* *Western SARE strongly advocates for producers who have fallen through the cracks of other agriculture related organizations.* *Western SARE leads in seeking out feedback and responding to feedback from producers.* *Western SARE should strongly advocate farming as a noble vocation.* *Western SARE should establish local resource centers, perhaps share space with NRCS local resource centers. (FR grantee)*

The sub-regional conference was incredibly helpful - so was the national conference in 2008. Please hold more of these and please fund local conferences - they are especially helpful in a state such as ours where people are so far flung and rarely get together. (FR grantee)
Wonderful program, keep up the good work. One frustration I have is that SARE wants to see tangible impacts on other producers, which I understand. But at least where I farm, there is nobody in their right mind who will duplicate what I want to experiment with. They are all large scale conventional and I am small-scale organic and very labor intensive. So when filling out the application, I have a difficult time determining producer impacts to the research I want to do. All I can do is hope to lead by example. (FR grantee)
Our family farm is our life and we have been struggling to survive let alone grow and expand. This grant was the boost we needed to take that first step and invest in our future. We needed to reinvent ourselves or let go. Now we can see all types of opportunities for expansion. But to us, most importantly our children see they do have a future in farming, how to be creative and realize there is alternatives. We have a renewed since of pride and enthusiasm. Thank-you. (FR grantee)
All the staff at WSARE have been wonderful. I will not seek other grants because writing a report, gathering statistics and photos is very intimidating to me. This is unreasonable because the money you give me to do great things with is far more than the small amount of time you require for a report. It's my deficiency. I have no trouble keeping stacks of records on thousands of plant's performances. The volume of pedigrees on my genetic lines would amaze you. I can hand pollinate 16 hours a day, or pick rocks all day, but making reports is as dreaded as facing a firing squad. It's not your fault. It's my problem. I think grants work best for people who can work the grant system, often not farmers. But you have been wonderful. If it would have saved time for you for me to reply by computer I would have done it, but you didn't express a preference. It was easy for me to fill out the paper. I was procrastinating using the computer. (FR grantee)
SARE is a very user-friendly and farmer-friendly program! (FR grantee)

AP grantees also felt very positive about their experience with the Western SARE grant and expressed their gratitude:

You all have done a great job in rewarding grants that will go to aide and sustain the most important jobs out there.....Agriculture. (AP grantee)
Thank you SARE for providing the opportunity to conduct much needed applied research and demonstration in site-specific initiatives! (AP grantee)
The program is outstanding and you would get a full excellent rating except I do not want anyone to think in those terms. I hope you continue to be creative and stay up to date on the issues that impact ranchers and farmers and hinder sustainable agriculture in many ways. I think where there is a problem, there is always a solution and that is what I think this grant program promotes. (AP grantee)
Professional-Producer grants need to involve fewer producers for the funding provided. $50,000 with 5 producers for two years is not adequate for supplies and travel in many agricultural areas of the western US. (AP grantee)
Western-SARE is my favorite granting agency. The staff and director are very congenial and attentive to granting issues and the agency has a range of granting opportunities to fit the diverse needs of growers, small and large operations. (AP grantee)

I very much appreciated the opportunity to work on this project. It was the first grant in my career at Extension and it helped me get started and develop collaborative relationships with colleagues and farmers. It also got me started on what has proven to be a very helpful line of work for the clients I serve. WSARE staff have been wonderful to work with. They have been helpful whenever I have had questions and the quality of their work inspires me to do my best in my work. (AP grantee)
SARE is probably the most user friendly and producer connected portion of the USDA network. I firmly believe it has done an invaluable service for the American (and global) small farmer. If there is an improvement I would suggest for the national network it would be to draw closer links and possibly even amalgamate with the Small Farms Association. I think we both serve the same target although SARE does extend to all uses of the land. (AP grantee)
My experience with SARE was entirely positive, from the initial discussion of my project ideas through the final report stage. I am now, however, in a different position and now read and study about organic agriculture and the food system mostly for my own interest. Had to leave the farm to take this new job with UVM Extension and hope to someday have a farm again; I will certainly seek out SARE information when I am back "on the land". THANK YOU! (AP grantee)
Thanks for the funding - you were the only agency even interested. (AP grantee)
I was pleased with the opportunity SARE presented me and my cooperating producer with and wish that I could have pursued the project to conclusion. (AP grantee)
I have greatly profited from my 22-year relationship with WSARE. I am concerned that WSARE may be trying to cover too much "sustainability terrain" in recent years with too few grants available in any one area. I realize that WSARE has fought to remain viable over the past twenty years, but I am concerned that the agronomic technique change -type grants are diminishing in favor of grants for activities that are decidedly not on-farm. Research funds are very scarce in this arena. (AP grantee)
I have found SARE to be a valuable source for funding as well as information. I like how SARE promotes involvement of farmers in the research field work and dissemination of the information. At a time when universities are "big" on journal writing for Extension Professionals, I think it is important to note most farmers are not going to read journals, but they will read SARE publications, participate in field research and follow the work and recommendations of SARE. SARE fills a need for applied research to be explored, funded, and the results to be disseminated. (AP grantee)
Some of the questions on grant applications seem a bit redundant. It is great that SARE has a program that producers can gain grant funds directly, hardly any projects can do that. (AP grantee)
This grant afforded us the opportunity to work on a project that was practical and interesting; we are still learning from the use of this technology and will continue to work with it in the future. We appreciate the opportunity. Thank you! (AP grantee)
On behalf of my producers, I would like to express my gratitude to WSARE Management team, headed by Phil. thank you so much. Rota was known for invasion of this Cuban Slugs prior to our project, now people came to realize and learn effective alternative ways to control Cuban slugs in a sustainable ways, effective and safe to the environment. I will continue to promote our results to the farmers and the community for more benefits and eliminate slugs problem in the region. I sent my results to the national Malacologist Dr. David Robinson and was so happy for the results. Cuban slugs is the most critical invasive species that invaded the island of Rota six year ago and our battle has started. Thank you WSARE in this timely manner of approaching to solve our problems. As a Professional, I am proud that this is my first competitive grant funded through WSARE. I am overwhelmed by the results, no award can compare to the positive impact that may brought to the diversified agriculture industry of the CNMI. (AP grantee)

Although the project itself has been frustrating at times I greatly appreciate the SARE people in their understanding and granting an extension in time and change in location to be able to complete the project as well as an additional no cost extension in time to complete the final report. Also please note there are four producer meetings scheduled for this April that the results of this study will be reported at, and the results will also be published in Extension newsletters this spring and articles submitted to popular Ag publications. (AP grantee)
Crop-livestock integration practices have the potential to increase efficiencies and economic opportunities across multiple agricultural operations, and to reduce environmental risks. Although some crop-livestock projects have been funded by WSARE, these projects, including this project, are only a starting point. In California the acceptance and use of crop-livestock integration practices is rapidly growing, but is limited by many unknown factors. More research funding on this topic can potentially have a large impact on this sustainable practice. (AP grantee)
Thank you. (AP grantee)

APPENDIX A

Survey Materials and Questionnaires

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FR GRANTEE SURVEY MATERIALS

INTRODUCTORY LETTER FROM WESTERN SARE

Western SARE Letterhead

February 4, 2011

«FNAME» «LNAME»
«Address»
«City», «State» «Zip»

Dear «FNAME» «LNAME»,

You will soon receive a survey in the mail, and we'd like your help. Here's why. For over 15 years, farmers and ranchers have used funds from USDA's Western region Sustainable Agriculture Research and Education (SARE) Farmer/Rancher Grant program to test and develop production or marketing approaches. The goal is to increase profitability, protect the environment and support families and communities.

Western SARE, working with Washington State University's Social and Economic Sciences Research Center, is conducting a region-wide survey of farmers and ranchers who were awarded Farmer/Rancher Grants from 2004 through 2008. The results will help guide and shape the Western SARE Farmer/Rancher Grant program (now called Producer Grants) in the future. We seek answers to questions like, "How can the program be improved to better serve those who apply for and receive grants?" "What did people learn and do as a result of the grant-funded project?" And, "Did other growers observe the project?"

This is where you come in. Because you received a Farmer/Rancher grant award, we are seeking your input to answer these and other questions. When you receive the survey and a postage-paid return envelope, we ask that you complete the paper *or online* questionnaire as soon as possible. Be assured that all responses will be strictly confidential. If you received more than one Farmer/Rancher award, you will receive a survey for each project. Please fill out each survey with responses appropriate to that project.

To acknowledge your valuable input, we'd like to offer you a free SARE book. Just fill out the order form included with the survey and return it with your completed survey. If you complete the online survey, just fill out the on-line publication order form that will appear once you've completed the survey.

Thank you in advance for taking the time to help us with this valuable project. We look forward to hearing from you.

Sincerely,

V. Philip Rasmussen, Ph.D.
Coordinator, Western SARE Program

PRE-NOTICE LETTER FROM SESRC

February 11, 2011

«FNAME» «LNAME»
«Organization»
«Address»
«City», «State» «Zip»

Dear «FNAME» «LNAME»

The Western Sustainable Agriculture Research and Education (SARE) program is conducting a survey of **recipients of Farmer Rancher Grants** (now known as Producer Grants) from 2004-2008. Through this survey Western SARE hopes to learn from grant recipients about the overall reach and impact of the grants that were funded and to assess the quality of the services provided by the Western SARE program.

Please complete this survey on the internet by logging on to:

http://opinion.wsu.edu/agproducer

When you are ready to access and complete the survey, you will need to submit the following:

Access Code Number: «RESPID»

Your participation in this survey is completely voluntary. The information you provide will be kept confidential.
The Access Code printed in this letter will be used to check your name off the follow-up mailing list. *If you received more than one Farmer Rancher Grant from 2004- 2008, this survey asks for information specific to one of the grants you received.*

Western SARE is offering free SARE bulletins and one free SARE book as a token of its appreciation of your completion of this survey. Just fill out the form at the end of the online survey.

This evaluation is being implemented by the Social and Economic Sciences Research Center at WSU (SESRC), (http://www.sesrc.wsu.edu/). If you prefer a paper questionnaire, one will be mailed to you in a couple of weeks. If you have any questions, contact us at (800) 833-0867 or krebill@wsu.edu, or the SARE contact person for this program evaluation effort, Al Kurki at (406) 449-0104 or akurki@ncat.org.

Sincerely,

Danna Moore, Ph.D.
Assistant Director

Rose Krebill-Prather, Ph.D.
Research Associate

FIRST EMAIL MESSAGE

EMAIL TEXT for WSR6 GROUP B: WESTERN SARE AGPRODUCER

SUBJECT LINE: Western SARE Farmer-Rancher Grant Recipient!

Dear «First_Name»,

The Western SARE has asked us to contact you regarding a survey we are conducting on their behalf pertaining to those who have received a **Farmer-Rancher Grant** (now known as Producer Grants) from 2004-2008. You should have also received a letter from us regarding this survey. The Western SARE hopes to learn from grant recipients about the overall reach and impact of the grants that were funded and to assess the quality of the services provided by the Western SARE program.

Please complete this survey on the internet by clicking on the following link:

http://opinion.wsu.edu/agproducer

When you are ready to access and complete the survey, you will need to submit the following:

Access Code Number: «RESPID»

Your participation in this survey is completely voluntary and the information you provide will be kept confidential. Western SARE will summarize the survey results in such a way that no one person's responses are distinguishable.

We appreciate your help with this important evaluation. This information will contribute to SARE's ongoing effort to determine its usefulness. Thank you again very much for your assistance.

Sincerely,
Rose Krebill-Prather
Study Director
Social and Economic Sciences Research Center
Washington State University
Telephone: 509-335-6202
Email: krebill@wsu.edu

FIRST LETTER WITH QUESTIONNAIRE

February 28, 2011

«FNAME» «LNAME»
«Organization»
«Address1»
«Address2»
«City», «State» «Zip»

Dear «FNAME» «LNAME»,

We are writing to you today about our survey of **recipients of a Western SARE Farmer/Rancher Grant** from 2004-2008. The information provided in the survey is central to an evaluation of the overall reach and impact of the grants that were funded and to the evaluation of the effectiveness of the services provided by the Western SARE Farmer/Rancher Grant Program. In order for the evaluation to be representative of all of the grants in this program, we really need to hear from you. *As a grant recipient, your completed survey is so important!*

If you prefer a paper version of the survey, please fill out the enclosed paper questionnaire and return it to us using the prepaid envelope.

If you would like to complete this survey on the internet, please log on to:

http://opinion.wsu.edu/agproducer

When you are ready to access and complete the survey, you will need to submit the following:

Access Code Number: «ID»

Your participation in this survey is completely voluntary. The Access Code printed in this letter and on the paper questionnaire will be used to check your name off the follow-up mailing list. *If you received more than one farmer/rancher grant from 2004-2008, this survey asks for information specific to one of the grants you received.* The information you provide will be kept confidential. Results will be summarized in such a way that no one person's responses are distinguishable.

Western SARE is also offering free SARE bulletins and one free SARE book as a token of its appreciation of your completion of this survey. Complete the enclosed publication order form and return it with your completed survey or you can complete the form online if you decide to complete the survey online.

This evaluation is being implemented by the Social and Economic Sciences Research Center at WSU (SESRC), (http://www.sesrc.wsu.edu/). If you have any questions, contact us at (800) 833-0867 or krebill@wsu.edu, or the SARE contact person for this program evaluation effort, Al Kurki at (406) 449-0104 or alk@ncat.org.

Sincerely,

Danna Moore, Ph.D.
Assistant Director

Rose Krebill-Prather, Ph.D.
Research Associate

SECOND EMAIL MESSAGE

SECOND EMAIL TEXT for WSR6 GROUP B:
WESTERN SARE AGPRODUCER

SUBJECT LINE: Western SARE Farmer-Rancher Grant Recipient!

Dear «First_Name»,

We are contacting you on behalf of the Western SARE regarding a survey of those who received a **Farmer-Rancher Grant** (now known as Producer Grants) in 2004-2008. If you have already completed the survey, we offer our sincere thanks. If you have not yet completed it, we hope you will do so today! Please fill out and return the paper questionnaire that was mailed to you, or if you prefer, *please complete the survey on the internet by clicking on the following link:*

http://opinion.wsu.edu/agproducer

When you are ready to access and complete the survey, you will need to submit the following:

Access Code Number: «RESPID»

Your participation in this survey is completely voluntary and the information you provide will be kept confidential. Western SARE will summarize the survey results in such a way that no one person's responses are distinguishable.

The Western SARE hopes to learn from grant recipients about the overall reach and impact of the grants that were funded and to assess the quality of the services provided by the Western SARE program. We appreciate your help with this important evaluation. Thank you again very much for your assistance.

Sincerely,
Rose Krebill-Prather
Study Director
Social and Economic Sciences Research Center
Washington State University
Telephone: 509-335-6202
Email: krebill@wsu.edu

POSTCARD REMINDER

March 2011

Recently, we sent you a letter and questionnaire asking you to respond to a survey of those who received a **Western SARE Farmer/Rancher Grant** in 2004-2008.

If you have already completed the survey, please accept our sincere thanks. If not, we ask that you do so as soon as possible. The information obtained from the survey will help Western SARE determine its future funding and program priorities.

Please complete the questionnaire on the web at the following address
http://opinion.wsu.edu/agproducer

Your access code is printed above your address on the front side of this postcard. If you have any questions, please call Rose Krebill-Prather at (800) 833-0867, or send an email message to krebill@wsu.edu.

Sincerely,

Rose L. Krebill-Prather

Rose Krebill-Prather
Social & Economic Sciences Research Center

Washington State University
Pullman, WA 99164

SECOND LETTER WITH QUESTIONNIARE

March 31, 2011

«FNAME» «LNAME»
«Organization»
«Address»
«City», «State» «Zip»

Dear «FNAME» «LNAME»,

We recently contacted you regarding an *evaluation survey of* **recipients of Western SARE Farmer/Rancher Grants** from 2004-2008. The Western SARE is interested in learning from grant recipients about the overall reach of the grants that were funded and to assess the quality of the services provided by the Western SARE program so they can determine future program and funding priorities.

While the number of completed surveys we have received from other grant recipients is very encouraging so far, as of today we have not received your completed survey. We very much need your help on this important study. You have the option of completing the survey either on paper or via the internet.

If you prefer a paper version of the survey, please fill out the enclosed paper questionnaire and return it to us using the prepaid envelope.

If you prefer to complete this survey on the internet please log on to:

http://opinion.wsu.edu/agproducer

When you are ready to access and complete the survey, you will need to submit the following:

Access Code Number: «ID»

Your participation in this survey is completely voluntary. The information you provide will be kept confidential. The Access Code will be used to check your name off the follow-up mailing list. *If you received more than one Farmer/Rancher Grant from 2004-2008, this survey asks for information specific to one of the grants you received.*

Western SARE is also offering free SARE bulletins and one free SARE book as a token of its appreciation of your completion of this survey. Complete the enclosed publication order form and return it with your completed survey or you can complete the form online if you decide to complete the survey online.

This evaluation is being implemented by the Social and Economic Sciences Research Center at WSU (SESRC), (http://www.sesrc.wsu.edu/). If you prefer a paper questionnaire, one will be mailed to you in a couple of weeks. If you have any questions, contact us at (800) 833-0867 or krebill@wsu.edu, or the SARE contact person for this program evaluation effort, Al Kurki at (406) 449-0104 or akurki@ncat.org.

Sincerely,

Danna Moore, Ph.D.
Assistant Director

Rose Krebill-Prather, Ph.D.
Research Associate

THIRD EMAIL MESSAGE

THIRD EMAIL TEXT for WSR6 GROUP B:
WESTERN SARE AGPRODUCER

SUBJECT LINE: Western SARE Farmer-Rancher Grant Recipient: It is not too late! !

Dear «First_Name»,

We have heard from an encouraging number of Western SARE Farmer-Rancher Grant recipients so far! ***We need to hear from you too*** so that our results will truly represent those who received a Farmer-Rancher Grant from the Western SARE!

Please complete the survey on the internet by clicking on the following link:

http://opinion.wsu.edu/agproducer

When you are ready to access and complete the survey, you will need to submit the following:

Access Code Number: «RESPID»

If you prefer a paper questionnaire, please fill out and return the paper questionnaire that was mailed to you, or if you need a replacement questionnaire please contact us at (800) 833-0867 or email me at krebill@wsu.edu and ask for a "Western SARE Farmer-Rancher Survey".

Your participation in this survey is completely voluntary and the information you provide will be kept confidential. The survey results in such a way that no one person's responses are distinguishable. We appreciate your help with this important evaluation. Thank you again very much for your assistance.

Sincerely,
Rose Krebill-Prather
Study Director
Social and Economic Sciences Research Center
Washington State University
Telephone: 509-335-6202
Email: krebill@wsu.edu

FINAL LETTER WITH QUESTIONNAIRE

May 6, 2011

«FNAME» «LNAME»
«Organization»
«Address»
«City», «State» «Zip»

Dear «FNAME» «LNAME»,

We have not yet received your completed survey for the evaluation of the Western SARE Farmer/Rancher Grant Program! It is so important that *each recipient* of a Western SARE Farmer/Rancher Grant provide critical feedback to the evaluation process by completing this survey. So far we have heard from over half of the recipients and hope that through your participation we can increase that proportion even more. You have the option of completing the survey either on paper or via the internet.

If you prefer a paper version of the survey, please fill out the enclosed paper questionnaire and return it to us using the prepaid envelope.

If you prefer to complete this survey on the internet please log on to:

http://opinion.wsu.edu/agproducer

When you are ready to access and complete the survey, you will need to submit the following:

Access Code Number: «ID»

If for some reason, you do not feel you are able to complete this survey, please send us an email, so that we can update our records regarding those who have not yet responded. Through this evaluation, the Western SARE will be able to better understand the usefulness of this grant program.

Western SARE is also offering free SARE bulletins and one free SARE book as a token of its appreciation of your completion of this survey. Complete the enclosed publication order form and return it with your completed survey or you can complete the form online if you decide to complete the survey online.

This evaluation is being implemented by the Social and Economic Sciences Research Center at WSU (SESRC), (http://www.sesrc.wsu.edu/). If you have any questions, contact us at (800) 833-0867 or krebill@wsu.edu, or the SARE contact person for this program evaluation effort, Al Kurki at (406) 449-0104 or akurki@ncat.org.

Sincerely,

Danna Moore, Ph.D.
Assistant Director

Rose Krebill-Prather, Ph.D.
Research Associate

FINAL EMAIL MESSAGE

GROUP B, WESTERN SARE, FARMER RANCHER GRANT FINAL EMAIL REMINDER

SUBJECT LINE: One more plea for the Western SARE

Dear «FNAME» «LNAME»,

Because of the importance of having your SARE project represented in the evaluation results, we are making one more plea for your participation in a very important evaluation of the Western SARE Farmer/Rancher Grant Program! All results are confidential and will help the Western SARE evaluate their usefulness.

Please complete this survey on the internet by clicking on the following link:

http://opinion.wsu.edu/agproducer

After you get to the survey webpage, you will need to submit the following:

Access Code Number: «ID»

If for some reason, you do not feel you are able to complete this survey, please send us an email, so that we can update our records regarding those who have not yet responded.

Western SARE is also offering free SARE bulletins and one free SARE book as a token of its appreciation of your completion of this survey. At the end of the survey you can complete the bulletin/book order form online.

This evaluation is being implemented by the Social and Economic Sciences Research Center at WSU (SESRC), (http://www.sesrc.wsu.edu/). If you have any questions, contact us at (800) 833-0867 or krebill@wsu.edu, or the SARE contact person for this program evaluation effort, Al Kurki at (406) 449-0104 or akurki@ncat.org.

Sincerely,

Danna Moore, Ph.D.
Assistant Director

Rose Krebill-Prather, Ph.D.
Research Associate

Evaluating the Western SARE Farmer/Rancher Grant Program

Survey of Ag Producer Grantees

We'd like to hear about your experience with the Western SARE Farmer/Rancher Grant Program and obtain your feedback! The project we'd like you to refer to is:

Project Title: «Project_Title»
Project Number: «Project_Number»
Project Year «Project_Year»

Your response to this survey, along with those of other Western SARE farmer/rancher grantees in your region will help guide future SARE policy and program design.

We sincerely appreciate your participation in this survey!

Q1. How did you hear about the Western Sustainable Agriculture Research and Education (SARE) Farmer/Rancher Grant Program? *Mark all that apply.*

- ☐ Extension agent/educator
- ☐ Other growers
- ☐ SARE website
- ☐ News article
- ☐ SARE newsletter or publication
- ☐ Other, *please specify*:
- ☐ Don't know

Q2. To what extent did you achieve the results that you had hoped for with the Western SARE Farmer/Rancher Grant?

① To a great extent
② To some extent
③ To a slight extent
④ Not at all

Q3. What main idea, approach, or technology was tested in your Farmer/ Rancher Grant funded project?

Q4. In what year did you start using this main idea, approach, or technology?

YEAR:

Q5. Are you still using the idea, approach or technology you tested?

① Yes → *Go to Q8*
② No → *Continue with Q6*

Q6. In what year did you stop using this main idea, approach, or technology?

YEAR:

Q7. What is the main reason you discontinued use of this main idea, approach, or technology?

2

Q8. What impact has this main idea, approach or technology tested on your farm or ranch had on each of the following aspects of your farm or ranch?

	Decreased	*Stayed the same*	*Increased*	*Don't know*	*Not applicable*
Fertilizer and/or Soil Amendments Costs	①	②	③	④	⑤
Fuel Costs	①	②	③	④	⑤
Pesticide Costs	①	②	③	④	⑤
Weed Control Costs	①	②	③	④	⑤
Seed Costs	①	②	③	④	⑤
Hired Labor Costs	①	②	③	④	⑤
Management Costs	①	②	③	④	⑤
Machinery and Equipment Costs	①	②	③	④	⑤
On-Farm Processing Costs	①	②	③	④	⑤
Costs of Direct-to-Consumer Sales	①	②	③	④	⑤
Yields Per Acre	①	②	③	④	⑤
Total Animal Production Per Year	①	②	③	④	⑤
Overall Gross Sales	①	②	③	④	⑤
Types of crops or livestock you raise	①	②	③	④	⑤
Value of crops or livestock per unit	①	②	③	④	⑤
Market or customer recognition of crops or livestock you raise	①	②	③	④	⑤
Soil Erosion	①	②	③	④	⑤
Soil Quality	①	②	③	④	⑤
Air Quality	①	②	③	④	⑤
Water Quality	①	②	③	④	⑤
Quantity of Wildlife Habitat	①	②	③	④	⑤
Other, *please describe:*	①	②	③	④	⑤

Q9. As result of your involvement with this Western SARE funded project, what changes in your agricultural outlook have you experienced? *Mark one response for each one.*

	Decreased ▼	Stayed the same ▼	Increased ▼	Don't know ▼	Not applicable ▼
Your satisfaction with farming	①	②	③	④	⑤
Your spouse's satisfaction with farming	①	②	③	④	⑤
Level of cooperation with other farmers	①	②	③	④	⑤
Likelihood that your children will stay in farming	①	②	③	④	⑤
Quality of life conditions for farm labor	①	②	③	④	⑤
Favorable options for farm succession	①	②	③	④	⑤

3

Q10. As a result of this Farmer/ Rancher Grant-funded project, have you seen an increase in net income on your farm or ranch?

① Yes→ *Continue with Q11*
② No→ *Go to Q12*

Q11. What is your estimate of the increase per unit (for example, acre, animal, field, farmstand, farm)?

$_____ per _____
(please specify unit: acre, animal, field, farmstand, farm, etc.)

Q12. As a result of this Farmer/ Rancher Grant project, have you:
Please mark your response for each one.

	Yes	No
Sought more information on use of the approach or technology tested?	①	②
Expanded use of this approach or technology to other parts of your farm or ranch?	①	②
Changed other operations on your farm or ranch?	①	②
Added a new enterprise to your farm or ranch?	①	②
Obtained new markets for the crops or livestock raised on your farm or ranch?	①	②
Other,	①	②

please specify:

Q13. Were there any problems or extenuating circumstances that you think limited the impact and effectiveness of this project or your ability to use the results?

① Yes →*Go to Q14*
② No → *Go to Q15*

Q14. What factors limited the impact?

Q15. The technical advisor on your project was from:

① Extension
② NRCS (Natural Resource Conservation Service)
③ Other, *please specify:*

Q16. In which of the following ways did the Technical Advisor on your project help your project? *Please mark all that apply or none if no help was given.*

☐ Write the grant proposal
☐ Organize a field day for the project
☐ Publicize the project (for example, write press release, notify others)
☐ Conduct tests and measurements
☐ Other, *please specify:*
☐ *None*

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Q17. The Technical Advisor on your Western SARE project was:

① Very helpful
② Somewhat helpful
③ Not helpful

Q18. Please indicate what educational events or materials were part of your project's outreach effort? *Please mark your response for each one.*

	Yes	No
Farm Tour that you hosted	①	②
Presentation you gave at a workshop, conference or other event	①	②
Contributed to an academic paper	①	②
News article for the ag press or other media outlet	①	②
Other, *please specify:*	①	②

Q19. How many people from each of the following audiences would you estimate learned about your project through a farm tour and/or a presentation you gave?

Number who learned about your project:	**Through a farm tour?**	**Your presentation at workshop or conference?**
Farmers or Ranchers		
University or Extension Staff		
Agency Staff		
Others		
Not Applicable	❍	❍
Don't know	❍	❍

Q20. How many farmers or ranchers visited with you about the project individually?

Q21. How many other farmers or ranchers that you know of tried out your idea, approach or technology on their own agricultural operation?

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Q22. What types of public recognition did you receive for your project? *Please mark all that apply.*

- ☐ Award
- ☐ Article in local newspaper
- ☐ Article in newsletter
- ☐ Article in magazine
- ☐ Other, *please specify:* _____
- ☐ Don't know

Q23. What was the most important result of this Western SARE Farmer/Rancher Grant funded project?

_____

Q24. How useful was the information you gained from the Western SARE Farmer/Rancher Grant funded project?

① Very Useful
② Somewhat Useful
③ Not very useful

Q25. Did this project trigger or inspire any new ideas for you?

① Yes → *Continue with Q26*
② No → *Go to Q29*

Q26. Please describe these new ideas.

_____

Q27. Did you test those new ideas on your farm or ranch?

① Yes→ *Continue with Q28*
② No→*Go to Q29*

Q28. Have you continued to use those new ideas on your farm or ranch?

① Yes
② No

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Q29. When a new approach to farming or ranching comes along that might be of financial benefit to my farm or ranch, I tend to:

① Try it out right away myself.

② Wait to see if others try it out first then test it myself.

③ Wait until an approach is proven and used by lots of neighbors before trying it out myself.

Q30. When a new approach to farming or ranching comes along that might be of environmental benefit to my farm or ranch, I tend to:

① Try it out right away myself.

② Wait to see if others try it out first then test it myself.

③ Wait until an approach is proven and used by lots of neighbors before trying it out myself.

Q31. Please rate aspects of applying for Western SARE funds, using a scale of 1 *(Excellent)* **to 5** *(Very Poor)***.**

	Excellent	Good	Fair	Poor	Very Poor	No Opinion
Ease of finding information about SARE funding opportunities	①	②	③	④	⑤	❍
Ease of finding information on SARE grant policies and procedures	①	②	③	④	⑤	❍
Ease of finding information on SARE-funded projects	①	②	③	④	⑤	❍
Ease of obtaining grant application forms	①	②	③	④	⑤	❍
Clarity of grant application forms and instructions	①	②	③	④	⑤	❍
Adequate time between announcement and deadline to submit proposals	①	②	③	④	⑤	❍

Q32. Please rate aspects of Western SARE's provision of information on grant application status, using a scale of 1 *(Excellent)* **to 5** *(Very Poor)***.**

	Excellent	Good	Fair	Poor	Very Poor	No Opinion
Keeping you informed on the status of your application and the funding decision	①	②	③	④	⑤	❍
Allowing adequate time for applicants to respond to additional requests for information	①	②	③	④	⑤	❍
Providing official notification and explanation of the outcomes of the review process in a timely manner	①	②	③	④	⑤	❍

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Q33. Please rate aspects of Western SARE's Farmer/Rancher Grant process, using a scale of 1 *(Excellent)* to 5 *(Very Poor)*.

	Excellent	Good	Fair	Poor	Very Poor	No Opinion
Reasonable grant requirements and provisions	①	②	③	④	⑤	❍
Timeliness of distributing funds for awarded projects	①	②	③	④	⑤	❍
Streamlined reporting requirements that eliminate redundancy	①	②	③	④	⑤	❍
Responding to your post-award requests in a timely manner (i.e., budget modifications, no-cost extensions of time, etc.)	①	②	③	④	⑤	❍

Q34. Please rate aspects of Western SARE's staff interactions, using a scale of 1 *(Excellent)* to 5 *(Very Poor)*.

	Excellent	Good	Fair	Poor	Very Poor	No Opinion
Courteousness	①	②	③	④	⑤	❍
Timeliness in responding to requests for information and assistance	①	②	③	④	⑤	❍
Ability to direct you to the right person	①	②	③	④	⑤	❍
Responsiveness to your questions	①	②	③	④	⑤	❍
Accuracy of responses	①	②	③	④	⑤	❍

Q35. To what extent have the Western SARE programs and services met your expectations?

① Greatly falls short of expectations
② Somewhat falls short of expectations
③ Meets expectations
④ Somewhat exceeds expectations
⑤ Greatly exceeds expectations
❍ No Opinion

Q36. If Western SARE could do one thing to improve its program service, what should it do?

Q37. Would you consider seeking another grant from Western SARE?

① Yes
② No

Q38. Would you recommend seeking a grant from Western SARE to others?

① Yes
② No

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Q39. Without a Farmer/Rancher Grant, would you still have pursued your project?

① Yes
② No

Q40. What type of sustainable agriculture information would be helpful to you on your farm or ranch? *Mark your response for each information area.*

Sustainable Agricultural Information Areas	Very Helpful	Somewhat Helpful	Not Helpful	Not applicable
Soil building practices including cover crops and rotations	①	②	③	④
Ecologically-based weed management strategies	①	②	③	④
Ecologically-based insect and disease management strategies	①	②	③	④
No-till/direct seeding	①	②	③	④
Sustainable livestock management or production systems (e.g. management intensive grazing)	①	②	③	④
Alternative methods for maintaining livestock health	①	②	③	④
Raising grass-fed or natural meats	①	②	③	④
Alternative marketing approaches (e.g., direct marketing, eco-labeling)	①	②	③	④
Value-added processing of agricultural products on the farm or ranch	①	②	③	④
Organic agriculture	①	②	③	④
Economics of alternative farming systems, such as organics	①	②	③	④
Water use efficiency in irrigation	①	②	③	④
Producing renewable energy on-farm or on-ranch (solar, wind, hydro)	①	②	③	④
Energy efficiency measures for farms and ranches	①	②	③	④
Agro forestry	①	②	③	④
Producing biofuel for on-farm or on-ranch use	①	②	③	④
Other, *please specify:*	①	②	③	④

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Q41. What are your preferred ways of getting sustainable agriculture information?
Mark your response for each way.

Ways to get information	Highly preferred	Moderately preferred	Not preferred
Internet (the Web)	①	②	③
Extension agent or educator	①	②	③
Other farmers or ranchers	①	②	③
Farm or commodity group	①	②	③
Farm publications	①	②	③
Farm tours, field days, workshops, or conferences	①	②	③
Sustainable agriculture group	①	②	③
Other, *please specify:*	①	②	③

Q42. Among your preferred ways of getting sustainable agriculture information as indicated in Q41, which ONE way do <u>you prefer the most</u>? *Please select only one response.*

① Internet (the Web)
② Extension agent or educator
③ Other farmers or ranchers
④ Farm or commodity group
⑤ Farm publications
⑥ Farm tours, field days, workshops, or conferences
⑦ Sustainable agriculture group
⑧ Other, *please specify*:

Q43. SARE develops and disseminates information about sustainable agriculture through print and electronic media. *Please mark all that apply.*

☐ I am not familiar with SARE publications.
☐ I read a SARE publication.
☐ I was inspired by a SARE publication to explore new production or marketing ideas.
☐ I adopted new production or marketing techniques as a result of a SARE publication.
☐ I passed SARE publication(s) on to others.
☐ I sought more information from the resources listed in SARE publication(s).

Q44. What farm or natural resource organizations are you affiliated with? *Please mark all that apply.*

☐ Farm Bureau
☐ Farmers Union
☐ Organic Farmers Group
☐ Direct Seeding Group
☐ Commodity Group (such as the Stockgrowers, Wheat Growers, etc.)
☐ Boards or Commissions
☐ Other, *please specify*:

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Q45. What is your age? Age: ☐

Q46. How many years have you been farming or ranching? Years: ☐

Q47. What are the crops or livestock produced on your farm or ranch? *Please mark all that apply.*

- ☐ Vegetables
- ☐ Fruit
- ☐ Nuts
- ☐ Grains (wheat, barley, oats, corn, etc.)
- ☐ Seed
- ☐ Hay
- ☐ Legumes
- ☐ Green manure or cover crops
- ☐ Cotton
- ☐ Poultry
- ☐ Goats
- ☐ Sheep
- ☐ Hogs
- ☐ Dairy cattle
- ☐ Beef cattle
- ☐ Aquaculture
- ☐ Other, *please specify:* ☐

Q48. What percentage of your farm or ranch products do you sell to these outlets? *Percentages should total 100%.*

Wholesaler or broker (e.g., grain elevator, auction yard, sales barn, bulk processor)	_____%
Retail outlets such as stores, bakeries or restaurants	_____%
Directly to consumers (for example, direct sales, CSA's, farmers markets)	_____%
For family, personal or cultural use or barter	_____%
	100%

Q49. How many acres do you own and actively farm or ranch? _____ owned acres

Q50. How many acres do you lease from someone else? ..... _____ leased acres

Q51. How many family and non-family full-time and part-time people work on your farm or ranch including you?

	Family members (including you)	**Non-family members**
Full Time		
Part Time year round		
Seasonal		

Q52. In what state or protectorate do you farm or ranch?

STATE or PROTECTORATE: ☐

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Now that you have completed the questionnaire, we invite your comments. Please feel free to write your comments on the space provided below.

Thank you for your participation in this survey!

Please send your completed survey in the enclosed stamped, pre-addressed envelope.

Social and Economic Sciences Research Center
Washington State University
PO Box 641801
Pullman, WA 99164-1801

«ID»

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AP GRANTEE SURVEY MATERIALS

INTRODUCTORY LETTER FROM WESTERN SARE

February 4, 2011

«FNAME» «LNAME»
«Address»
«City», «State» «Zip»

Dear «FNAME» «LNAME»,

You will soon receive a survey in the mail, and we'd like your help. Here's why. Since 2004, USDA's Western region Sustainable Agriculture Research and Education (SARE) program has funded on-farm research projects directed by agriculture professionals like you. Western SARE is conducting it first-ever assessment of this Ag Professional + Producer (AP+P) grants program.

On behalf of Western SARE, Washington State University's Social and Economic Sciences Research Center will conduct a region-wide survey of ag professionals who were awarded AP+P grants from 2004 through 2008. The results will help guide and shape the Western SARE AP+P grant program in the future. First, the survey results provide data that seldom appears in project reports. Second, it helps Western SARE answer questions like, "How can the program be improved to better serve those who apply for and receive grants?" "What did people learn or do as a result of the grant-funded project?"

This is where you come in. Because you received an AP+P grant award, we are seeking your input to answer these and other questions. When you receive the survey and a return envelop, we ask that you complete the questionnaire as soon as possible. Be assured that all responses will be strictly confidential. If you received more than one AP+P award, you will receive a survey for each project. Please fill out each survey with responses appropriate to that project.

To acknowledge your valuable input, we'd like to offer you a free SARE book. Just fill out the order form included with the survey and return it with your completed survey.

Thank you in advance for taking the time to help us with this valuable project. We look forward to hearing from you.

Sincerely,

V. Philip Rasmussen

V. Philip Rasmussen, Ph.D.
Coordinator, Western SARE Program

PRE-NOTICE LETTER FROM SESRC

February 11, 2011

«FNAME» «LNAME»
«Organization»
«Address»
«City», «State» «Zip»

Dear «FNAME» «LNAME»,

The Western Sustainable Agriculture Research and Education (SARE) program is conducting a survey of **recipients of Ag Professional + Producer Grants** from 2004-2008. Through this survey Western SARE hopes to learn from grant recipients about the overall reach and impact of the grants that were funded and to assess the quality of the services provided by the Western SARE program.

Please complete this survey on the internet by logging on to:

http://opinion.wsu.edu/saregrantee

When you are ready to access and complete the survey, you will need to submit the following:

Access Code Number: «ID»

Your participation in this survey is completely voluntary. The information you provide will be kept confidential.
The Access Code will be used to check your name off the follow-up mailing list. *If you received more than one AP+P Grant from 2004- 2008, this survey asks for information specific to one of the grants you received.*

Western SARE is offering free SARE bulletins and one free SARE book as a token of its appreciation of your completion of this survey. Just fill out the form at the end of the online survey.

This evaluation is being implemented by the Social and Economic Sciences Research Center at WSU (SESRC), (http://www.sesrc.wsu.edu/). If you prefer a paper questionnaire, one will be mailed to you in a couple of weeks. If you have any questions, contact us at (800) 833-0867 or krebill@wsu.edu, or the SARE contact person for this program evaluation effort, Al Kurki at (406) 449-0104 or akurki@ncat.org.

Sincerely,

Danna Moore, Ph.D.
Assistant Director

Rose Krebill-Prather, Ph.D.
Research Associate

FIRST EMAIL MESSAGE

EMAIL TEXT for WSR6 GROUP D: WESTERN SARE SAREGRANTEE

SUBJECT LINE: Western SARE Ag Professional + Producer Grant Recipient!

Dear «First_Name»,

The Western SARE has asked us to contact you regarding a survey we are conducting on their behalf pertaining to those who have received an **Ag Professional + Producer (AP+P) Grant** from 2004-2008. You should have also received a letter from us regarding this survey. The Western SARE hopes to learn from grant recipients about the overall reach and impact of the grants that were funded and to assess the quality of the services provided by the Western SARE program.

Please complete this survey on the internet by clicking on the following link:

http://opinion.wsu.edu/saregrantee

When you are ready to access and complete the survey, you will need to submit the following:

Access Code Number: «RESPID»

Your participation in this survey is completely voluntary and the information you provide will be kept confidential. Western SARE will summarize the survey results in such a way that no one person's responses are distinguishable.

We appreciate your help with this important evaluation. This information will contribute to SARE's ongoing effort to determine its usefulness. Thank you again very much for your assistance.

Sincerely,
Rose Krebill-Prather
Study Director
Social and Economic Sciences Research Center
Washington State University
Telephone: 509-335-6202
Email: krebill@wsu.edu

FIRST LETTER WITH QUESTIONNAIRE

February 28, 2011

«FNAME» «LNAME»
«Organization»
«Address1»
«Address2»
«City», «State» «Zip»

Dear «FNAME» «LNAME»,

We are writing to you today about our survey of **recipients of a Western SARE Ag Professional + Producer Grant** from 2004-2008. The information provided in the survey is central to an evaluation of the overall reach and impact of the grants that were funded and to the evaluation of the effectiveness of the services provided by the Western SARE Ag Professional + Producer Grant Program. In order for the evaluation to be representative of all of the grants in this program, we really need to hear from you. *As a grant recipient, your completed survey is so important!*

If you prefer a paper version of the survey, please fill out the enclosed paper questionnaire and return it to us using the prepaid envelope.

If you would like to complete this survey on the internet, please log on to:

http://opinion.wsu.edu/saregrantee

When you are ready to access and complete the survey, you will need to submit the following:

Access Code Number: «ID»

Your participation in this survey is completely voluntary. The Access Code printed in this letter and on the paper questionnaire will be used to check your name off the follow-up mailing list. *If you received more than one ag professional + producer grant from 2004-2008, this survey asks for information specific to one of the grants you received.* The information you provide will be kept confidential. Results will be summarized in such a way that no one person's responses are distinguishable.

Western SARE is also offering free SARE bulletins and one free SARE book as a token of its appreciation of your completion of this survey. Complete the enclosed publication order form and return it with your completed survey or you can complete the form online if you decide to complete the survey online.

This evaluation is being implemented by the Social and Economic Sciences Research Center at WSU (SESRC), (http://www.sesrc.wsu.edu/). If you have any questions, contact us at (800) 833-0867 or krebill@wsu.edu, or the SARE contact person for this program evaluation effort, Al Kurki at (406) 449-0104 or alk@ncat.org.

Sincerely,

Danna Moore, Ph.D.
Assistant Director

Rose Krebill-Prather, Ph.D.
Research Associate

SECOND EMAIL MESSAGE

EMAIL TEXT for WSR6 GROUP D:
WESTERN SARE SAREGRANTEE

SUBJECT LINE: Western SARE Ag Professional + Producer Grant Recipient!

Dear «First_Name»,

We are contacting you on behalf of the Western SARE regarding a survey of those who received an **Ag Professional + Producer (AP+P) Grant** in 2004-2008. If you have already completed the survey, we offer our sincere thanks. If you have not yet completed it, we hope you will do so today! Please fill out and return the paper questionnaire that was mailed to you, or if you prefer, ***please complete the survey on the internet by clicking on the following link:***

http://opinion.wsu.edu/saregrantee

When you are ready to access and complete the survey, you will need to submit the following:

Access Code Number: «RESPID»

Your participation in this survey is completely voluntary and the information you provide will be kept confidential. Western SARE will summarize the survey results in such a way that no one person's responses are distinguishable.

The Western SARE hopes to learn from grant recipients about the overall reach and impact of the grants that were funded and to assess the quality of the services provided by the Western SARE program. We appreciate your help with this important evaluation. Thank you again very much for your assistance.

Sincerely,
Rose Krebill-Prather
Study Director
Social and Economic Sciences Research Center
Washington State University
Telephone: 509-335-6202
Email: krebill@wsu.edu

POSTCARD REMINDER

March 2011

Recently, we sent you a letter and questionnaire asking you to respond to a survey of those who received a **Western SARE Ag Professional + Producer Grant** in 2004-2008.

If you have already completed the survey, please accept our sincere thanks. If not, we ask that you do so as soon as possible. The information obtained from the survey will help Western SARE determine its future funding and program priorities.

Please complete the questionnaire on the web at the following address
http://opinion.wsu.edu/saregrantee

Your access code is printed above your address on the front side of this postcard. If you have any questions, please call Rose Krebill-Prather at (800) 833-0867, or send an email message to krebill@wsu.edu.

Sincerely,

Rose Krebill-Prather
Social & Economic Sciences Research Center

Washington State University
Pullman, WA 99164

SECOND LETTER WITH QUESTIONNIARE

March 31, 2011

«FNAME» «LNAME»
«Organization»
«Address»
«City», «State» «Zip»

Dear «FNAME» «LNAME»,

We recently contacted you regarding an *evaluation survey of* **recipients of Western SARE Ag Professional + Producer Grants** from 2004-2008. The Western SARE is interested in learning from grant recipients about the overall impact of the grants that were funded and to assess the quality of the services provided by the Western SARE program so they can determine future program and funding priorities.

While the number of completed surveys we have received from other grant recipients is very encouraging so far, as of today we have not received your completed survey. We very much need your help on this important study. The Western SARE will use the results from this evaluation to determine its future program and funding priorities. You have the option of completing the survey either on paper or via the internet.

If you prefer a paper version of the survey, please fill out the enclosed paper questionnaire and return it to us using the prepaid envelope.

If you prefer to complete this survey on the internet please log on to:

http://opinion.wsu.edu/saregrantee

When you are ready to access and complete the survey, you will need to submit the following:

Access Code Number: «ID»

Your participation in this survey is completely voluntary. The information you provide will be kept confidential. The Access Code will be used to check your name off the follow-up mailing list. *If you received more than one Ag Professional + Producer Grant from 2004-2008, this survey asks for information specific to one of the grants you received.*

Western SARE is also offering free SARE bulletins and one free SARE book as a token of its appreciation of your completion of this survey. Complete the enclosed publication order form and return it with your completed survey or you can complete the form online if you decide to complete the survey online.

This evaluation is being implemented by the Social and Economic Sciences Research Center at WSU (SESRC), (http://www.sesrc.wsu.edu/). If you prefer a paper questionnaire, one will be mailed to you in a couple of weeks. If you have any questions, contact us at (800) 833-0867 or krebill@wsu.edu, or the SARE contact person for this program evaluation effort, Al Kurki at (406) 449-0104 or akurki@ncat.org.

Sincerely,

Danna Moore, Ph.D.
Assistant Director

Rose Krebill-Prather, Ph.D.
Research Associate

THIRD EMAIL MESSAGE

THIRD EMAIL TEXT for WSR6 GROUP D:
WESTERN SARE SAREGRANTEE

SUBJECT LINE: Western SARE AP+P Grant Recipient: It is not too late! !

Dear «First_Name»,

We have heard from an encouraging number of Western SARE Ag Professional + Producer (AP+P) Grant recipients so far! ***We need to hear from you too*** so that our results will truly represent those who received an AP+P Grant from the Western SARE!

Please complete the survey on the internet by clicking on the following link:

http://opinion.wsu.edu/saregrantee

When you are ready to access and complete the survey, you will need to submit the following:

Access Code Number: «RESPID»

If you prefer a paper questionnaire, please fill out and return the paper questionnaire that was mailed to you, or if you need a replacement questionnaire please contact us at (800) 833-0867 or email me at krebill@wsu.edu and ask for a "Western SARE Ag Professional and Producer Survey".

Your participation in this survey is completely voluntary and the information you provide will be kept confidential. The survey results in such a way that no one person's responses are distinguishable. We appreciate your help with this important evaluation. Thank you again very much for your assistance.

Sincerely,
Rose Krebill-Prather
Study Director
Social and Economic Sciences Research Center
Washington State University
Telephone: 509-335-6202
Email: krebill@wsu.edu

FINAL LETTER WITH QUESTIONNAIRE

May 6, 2011

«FNAME» «LNAME»
«Organization»
«Address»
«City», «State» «Zip»

Dear «FNAME» «LNAME»,

We have not yet received your completed survey for the evaluation of the Western SARE Ag Professional and Producer Grant Program! It is so important that *each recipient* of a Western SARE Ag Professional and Producer Grant provide critical feedback to the evaluation process by completing this survey. So far we have heard from about half of the recipients and hope that through your participation we can increase that proportion even more. You have the option of completing the survey either on paper or via the internet.

If you prefer a paper version of the survey, please fill out the enclosed paper questionnaire and return it to us using the prepaid envelope.

If you prefer to complete this survey on the internet please log on to:

http://opinion.wsu.edu/saregrantee

When you are ready to access and complete the survey, you will need to submit the following:

Access Code Number: «ID»

If for some reason, you do not feel you are able to complete this survey, please send us an email, so that we can update our records regarding those who have not yet responded. Through this evaluation, the Western SARE will be able to better understand the usefulness of this grant program.

Western SARE is also offering free SARE bulletins and one free SARE book as a token of its appreciation of your completion of this survey. Complete the enclosed publication order form and return it with your completed survey or you can complete the form online if you decide to complete the survey online.

This evaluation is being implemented by the Social and Economic Sciences Research Center at WSU (SESRC), (http://www.sesrc.wsu.edu/). If you have any questions, contact us at (800) 833-0867 or krebill@wsu.edu, or the SARE contact person for this program evaluation effort, Al Kurki at (406) 449-0104 or akurki@ncat.org.

Sincerely,

Danna Moore, Ph.D.
Assistant Director

Rose Krebill-Prather, Ph.D.
Research Associate

FINAL EMAIL MESSAGE

GROUP D, WESTERN SARE, AP+P GRANT FINAL EMAIL REMINDER

SUBJECT LINE: One more plea for the Western SARE

Dear «FNAME» «LNAME»,

Because of the importance of having your SARE project represented in the evaluation results, we are making one more plea for your participation in a very important evaluation of the Western SARE Agricultural Professional and Producer (AP+P) Grant Program! All results are confidential and will help the Western SARE evaluate their usefulness.

Please complete this survey on the internet by clicking on the following link:

http://opinion.wsu.edu/saregrantee

After you get to the survey webpage, you will need to submit the following:

Access Code Number: «ID»

If for some reason, you do not feel you are able to complete this survey, please send us an email, so that we can update our records regarding those who have not yet responded.

Western SARE is also offering free SARE bulletins and one free SARE book as a token of its appreciation of your completion of this survey. At the end of the survey you can complete the bulletin/book order form online.

This evaluation is being implemented by the Social and Economic Sciences Research Center at WSU (SESRC), (http://www.sesrc.wsu.edu/). If you have any questions, contact us at (800) 833-0867 or krebill@wsu.edu, or the SARE contact person for this program evaluation effort, Al Kurki at (406) 449-0104 or akurki@ncat.org.

Sincerely,

Danna Moore, Ph.D.
Assistant Director

Rose Krebill-Prather, Ph.D.
Research Associate

AP GRANTEE QUESTIONNAIRE

Evaluating the Western SARE Ag Professional + Producer Grant Program

Survey of Ag Professional Grantees

We'd like to hear about your experience with the Western SARE Ag Professional + Producer Grant Program and obtain your feedback! The project we'd like you to refer to is:

Project Title: «Project_Title»
Project Number: «Project_Number»
Project Year «Project_Year»

Your response to this survey, along with those of other Western SARE grantees in your region will help guide future SARE policy and program design.

We sincerely appreciate your participation in this survey!

Q1. How did you first hear about the Western Sustainable Agriculture Research and Education (SARE) Ag Professional + Producer Grant Program? *Mark all that apply.*

- ☐ A colleague
- ☐ SARE website
- ☐ News article
- ☐ SARE newsletter or publication
- ☐ Other, *please specify*: _____
- ☐ Don't know

Q2. In which of the following ways was one or more cooperating farmers or ranchers involved on your Ag Professional + Producer Grant funded project? *Please mark all that apply.*

- ☐ Served on project planning team (e.g., involved in decisions on what to do, why, how)
- ☐ Actively involved in on-farm research or demonstration (e.g., managed field trials, interpreted results, hosted or lead tour)
- ☐ Provided land for the test plots or provided site for a tour
- ☐ Spoke about the project at a meeting (presentation, panel, etc.)
- ☐ Co-authored a paper or other product
- ☐ Other, *please describe:* _____
- ☐ *None, no cooperating farmer or rancher was involved*

Q3. What main idea, approach, or technology was tested in your Ag Professional + Producer Grant funded project?

_____

Q4. Did this main idea, approach, or technology get put into use on a farm or ranch that cooperated on this project?

① Yes → *Continue with Q5*

② No → *Go to Q9*

Q5. In what year did this main idea, approach, or technology get put into use on a cooperating farm or ranch?

YEAR: _____

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Q6. Is this cooperating farmer or rancher still using the idea, approach or technology on his/her farm or ranch?

① Yes → *Go to Q9*

② No → *Continue with Q7*

Q7. In what year did the cooperating farmer or rancher stop using this main idea, approach, or technology?

YEAR: [ ]

Q8. What is the main reason the farmer/rancher discontinued use of the idea, approach, or technology?

[ ]

Q9. Please indicate what educational events or materials were part of your Ag Professional + Producer project's outreach effort? *Please mark your response for each one.*

	Yes	No
Farm tour hosted by cooperating farmer or rancher	①	②
Presentation you gave at a workshop, conference or other event	①	②
Extension publication	①	②
Journal article	①	②
News article for the ag press or other media outlet	①	②
Other, *please specify*:	①	②

[ ]

Q10. What types of public recognition did you receive for your Ag Professional + Producer project? *Please mark all that apply.*

- ☐ Award
- ☐ Article in local newspaper
- ☐ Article in newsletter
- ☐ Article in magazine
- ☐ Other, *please specify*: [ ]
- ☐ Don't know

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Q11. How many people from each of the following audiences would you estimate learned about your Ag Professional + Producer project through a farm tour and/or a presentation you gave?

Number who learned about your project:	Through a farm tour?	Your presentation at workshop or conference?
Farmers or Ranchers		
University or Extension Staff		
Agency Staff		
Others		
Not Applicable	❍	❍
Don't know	❍	❍

Q12. How many farmers or ranchers, not including any farmers or ranchers directly cooperating with the project, visited with you about the Ag Professional + Producer project individually?

Number of farmers or ranchers:

Q13. How many other farmers or ranchers, not including any farmers or ranchers directly cooperating with the project, that you know of, tried out your idea, approach or technology on their own agricultural operation?

Number of farmers or ranchers:

Q14. As a result of this Ag Professional + Producer Grant project, have you observed any of the following actions from farmers or rancher who cooperated on your project?
Please mark your response for each one.

	Yes	No
Sought more information on use of the approach or technology tested?	①	②
Expanded use of this approach or technology to other parts of their farm or ranch?	①	②
Changed other operations on their farm or ranch?	①	②
Added a new enterprise to their farm or ranch?	①	②
Obtained new markets for the crops or livestock raised on their farm or ranch?	①	②
Other, *please specify*:	①	②

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Q15. Which of the following improvements have you observed on farms or ranches that tried out the main idea, approach or technology from your project? *Mark your response for each possible improvement.*

	Observed	Not observed	Not sure
Increased net income	①	②	③
Improved soil quality	①	②	③
Improved surface water quality	①	②	③
Increased access to locally grown food	①	②	③
Increased farm/ranch efficiencies (e.g. net grazing efficiency)	①	②	③
Improved quality of life/increased satisfaction with quality of life	①	②	③
Improved wildlife habitat and increased wildlife populations	①	②	③
Other changes *please specify:*	①	②	③

Q16. To what extent did you achieve the results that you had hoped for with the Western SARE Ag Professional + Producer project?

① To a great extent
② To some extent
③ To a slight extent
④ Not at all

Q17. Were there any problems or extenuating circumstances that you think limited the impact and effectiveness of this Ag Professional + Producer project?

① Yes → *Continue with Q18*
② No → *Go to Q19*

Q18. What factors limited the impact?

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Q19. What was the most important result of this Western SARE Ag Professional + Producer Grant-funded project?

Q20. Are you, or will you be extending information on the idea, approach, or technology you tested with this Ag Professional + Producer project?

① Yes
② No

Q21. Did this project trigger or inspire any new ideas for you?

① Yes → *Continue with Q22*
② No → *Go to Q23*

Q22. Please describe these new ideas.

Q23. What surprising or unintended results, if any, came from this project?

Q24. Did this Ag Professional + Producer project lead to any of the following:

☐ Leverage additional funds to continue or expand this project.
☐ Secure funding for a new but related project.
☐ Other types of advantages
please describe:

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Q25. Please rate aspects of applying for Western SARE funds, using a scale of 1 *(Excellent)* **to 5** *(Very Poor)*.

	Excellent	Good	Fair	Poor	Very Poor	No Opinion
Ease of finding information about SARE funding opportunities	①	②	③	④	⑤	❍
Ease of finding information on SARE grant policies and procedures	①	②	③	④	⑤	❍
Ease of finding information on SARE-funded projects	①	②	③	④	⑤	❍
Ease of obtaining grant application forms	①	②	③	④	⑤	❍
Clarity of grant application forms and instructions	①	②	③	④	⑤	❍
Adequate time between announcement and deadline to submit proposals	①	②	③	④	⑤	❍

Q26. Please rate aspects of Western SARE's provision of information on grant application status, using a scale of 1 *(Excellent)* **to 5** *(Very Poor)*.

	Excellent	Good	Fair	Poor	Very Poor	No Opinion
Keeping you informed on the status of your application and the funding decision	①	②	③	④	⑤	❍
Allowing adequate time for applicants to respond to additional requests for information	①	②	③	④	⑤	❍
Providing official notification and explanation of the outcomes of the review process in a timely manner	①	②	③	④	⑤	❍

Q27. Please rate aspects of Western SARE's Ag Professional + Producer Grant process, using a scale of 1 *(Excellent)* **to 5** *(Very Poor)*.

	Excellent	Good	Fair	Poor	Very Poor	No Opinion
Reasonable grant requirements and provisions	①	②	③	④	⑤	❍
Timeliness of distributing funds for awarded projects	①	②	③	④	⑤	❍
Streamlined reporting requirements that eliminate redundancy	①	②	③	④	⑤	❍
Responding to your post-award requests in a timely manner (i.e., budget modifications, no-cost extensions of time, etc.)	①	②	③	④	⑤	❍

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Q28. Please rate aspects of Western SARE's staff interactions, using a scale of 1 *(Excellent)* **to 5** *(Very Poor)*.

	Excellent	Good	Fair	Poor	Very Poor	No Opinion
Courteousness	①	②	③	④	⑤	❍
Timeliness in responding to requests for information and assistance	①	②	③	④	⑤	❍
Ability to direct you to the right person	①	②	③	④	⑤	❍
Responsiveness to your questions	①	②	③	④	⑤	❍
Accuracy of responses	①	②	③	④	⑤	❍

Q29. To what extent have the Western SARE programs and services met your expectations?

① Greatly falls short of expectations
② Somewhat falls short of expectations
③ Meets expectations
④ Somewhat exceeds expectations
⑤ Greatly exceeds expectations
❍ No Opinion

Q30. If Western SARE could do one thing to improve its program service, what should it do?

Q31. Would you consider seeking another grant from Western SARE?

① Yes
② No

Q32. Would you recommend seeking a grant from Western SARE to others?

① Yes
② No

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Q33. What type of sustainable agriculture information would be helpful to you in your position? *Mark your response for each information area.*

Sustainable Agricultural Information Areas	**Very Helpful**	**Somewhat Helpful**	**Not Helpful**	**Not applicable**
Soil building practices including cover crops and rotations	①	②	③	④
Ecologically-based weed management strategies	①	②	③	④
Ecologically-based insect and disease management strategies	①	②	③	④
No-till/direct seeding	①	②	③	④
Sustainable livestock management or production systems (e.g. management intensive grazing)	①	②	③	④
Alternative methods for maintaining livestock health	①	②	③	④
Raising grass-fed or natural meats	①	②	③	④
Alternative marketing approaches (e.g., direct marketing, eco-labeling)	①	②	③	④
Value-added processing of agricultural products on the farm or ranch	①	②	③	④
Organic agriculture	①	②	③	④
Economics of alternative farming systems, such as organics	①	②	③	④
Water use efficiency in irrigation	①	②	③	④
Producing renewable energy on-farm or on-ranch (solar, wind, hydro)	①	②	③	④
Energy efficiency measures for farms and ranches	①	②	③	④
Agro forestry	①	②	③	④
Producing biofuel for on-farm or on-ranch use	①	②	③	④
Other, *please specify:*	①	②	③	④

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Q34. What are your preferred ways of getting sustainable agriculture information?
Mark your response for each way.

Ways to get information	Highly preferred	Moderately preferred	Not preferred
Internet (the Web)	①	②	③
From consultations with my peers	①	②	③
Farmers or ranchers with whom I work	①	②	③
Journal articles	①	②	③
Farm publications	①	②	③
Professional conferences/workshops	①	②	③
In-service training	①	②	③
Other, *please specify:*	①	②	③

Q35. Among your preferred ways of getting sustainable agriculture information as indicated in Q34, which ONE way do <u>you prefer the most</u>? *Please select only one response.*

① Internet (the Web)
② From consultations with my peers
③ Farmers or ranchers with whom I work
④ Journal articles
⑤ Farm publications
⑥ Professional conferences/workshops
⑦ In-service training
⑧ Other, *please specify*:

Q36. SARE develops and disseminates information about sustainable agriculture through print and electronic media. *Please mark all that apply.*

☐ I am not familiar with SARE publications.
☐ I read a SARE publication.
☐ I was inspired by a SARE publication to explore new production or marketing ideas.
☐ I adopted new production or marketing techniques as a result of a SARE publication.
☐ I passed SARE publication(s) on to others.
☐ I sought more information from the resources listed in SARE publication(s).

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Q37. Is your current position through:

① Extension
② Agricultural Experiment Station
③ NRCS
④ ARS
⑤ Non-profit organization
⑥ Other, *specify:*

Q38. In what state or protectorate do you work?

STATE or PROTECTORATE:

Please turn to back page.

Now that you have completed the questionnaire, we invite your comments. Please feel free to write your comments on the space provided below.

Thank you for your participation in this survey!

Please send your completed survey in the enclosed stamped, pre-addressed envelope.

Social and Economic Sciences Research Center
Washington State University
PO Box 641801
Pullman, WA 99164-1801

«ID»

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APPENDIX B

Text Comments

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Main idea, approach, or technology tested in Project *(Farmer/ Rancher (Q3) / AP (Q3)*

FR	*We were testing/demonstrating ditch stabilization/improvement techniques under out local conditions.*
FR	*Because my son has a fish wholesale business, we were interested in looking at what we could do with the fish waste that was generated after filleting the fish. We were able to make fishmeal, fish feed, earrings, other ornaments like materials for flower arrangements, hair ornaments. From the large fish intestines, chum were extracted for bottom fish fishing.*
FR	*To use goats to control weeds in a sensitive area around houses instead of chemicals.*
FR	*Increase stocking ratio to better utilize pasture forage.*
FR	*Testing forage winter wheat varieties*
FR	*Grazing sheep in young and intermediate age stands of hybrid poplar.*
FR	*Utilizing sheep for weed management in organic vineyards and orchards.*
FR	*Comparison of direct seeding of Pentemon with planting greenhouse started pentemon to on stand establishment for native seed production.*
FR	*Feasibility of mobile poultry processor.*
FR	*Using wool (local) for prosthetic use.*
FR	*Winter Farmers' Market*
FR	*Main idea was figuring out what traditional Navajo foods (corn products) were popular.*
FR	*To teach the public about the value of clumping bamboos as a viable resource for the Hawaiian Islands.*
FR	*Publicizing organic approach to afforestation.*
FR	*The main idea was to increase buying of pears at retail by sampling pears. Only 20% of the population buy pears due to confusion of ripening and how they taste. We tested the idea of repeated sampling to increase consumption.*
FR	*Web site development for our business* *survey of customers*
FR	*Computer Technology applied to design aspects for small-scale farms.*
FR	*Windbreaks will increase the yield and reduce the weeds in an alfalfa field. Use of Mondell Pine trees will be a tree of choice.*
FR	*Compaction of ground on dry land wheat fields by sheep grazing.*
FR	*Rangeland and vegetation monitoring to develop a baseline for vegetation health and long term trends; to qualify for other grants for the construction of range improvements, water and fencing.*
FR	*To determine the effects of various nitrogen fertilizer levels on grass yields, nitrogen efficiency, forage quality, and potential nitrogen loss into the groundwater in established dense grass swards in Coastal Oregon pastures.*
FR	*Year round production for cold frame using solar energy,*
FR	*Using forage winter wheat*

FR	*To make fish emotion and ferdegate my corn crop but did not succeed due to lack of knowledge in making fish emotion.*
FR	*Education for farm interns.*
FR	*Determining quality of the different chaparral species in our landscape for goat consumption.*
FR	*Farmer to farmer networking and marketing cooperation.*
FR	*The kill of nematode and bacteria in digested manure.*
FR	*Effectiveness of a chlorophyll sensing sprayer for summertime use in chem fallow*
FR	*Coconut crab production using recycled food source.*
FR	*To see whether forage kowhai could be established in a stand of established grasses.*
FR	*Cooperative marketing of a niche product.*
FR	*We were looking for a way to reduce cholorosis in beans through use of annual ryegrass and to determine if the use of ryegrass could be a potential second crop in the same growing season without impacting bean yields.*
FR	*Trying to use composting redworms to either increase the re-use rate for pasture-raised chickens, or to speed composting of chicken manure and bedding.*
FR	*Basically, it was developing an enterprise budget for growing mini squash for a market garden, smaller scale than most enterprise budgets. I did a controlled experiment growing 4 different summer squash varieties to two different sizes and compared yields. I also did a customer survey and kept track of sales, and kept track of costs. It gave me a much better idea of what my production and sales needed to be to make a profit.*
FR	*Alternative Organic Pest Control.*
FR	*To find a means of disposal for meat processing waste that could be used to enhance field fertility.*
FR	*Alternative livestock feed... Duckweed... cleaning waste water*
FR	*Using goats and insects for biological control and to demonstrate the use to others.*
FR	*Teaching year round gardening in plastic covered hoop house to 50 adults.*
FR	*The Southwest Survivor Queenbee Project was designed to establish a regional pool of Survivor stock genetics to enhance the regional and local honeybee lines for the benefit of area beekeepers and colonies. Survivor stock colonies are hives that have had no chemical treatments and demonstrate heartiness.* *Breeder Queens were selected by various participating area beekeepers (all experienced area beekeepers were invited to participate at no cost). Zia Queen bee Co. made the connections and implemented the selection and rearing protocol throughout northern New Mexico.* *The project ran through 2009 with selection of initial cross-stocks as future breeding contenders. This project has expanded to include other regions and has served as a model for survivor stock establishment and rearing protocols nationwide.*
FR	*Variety trials, establishing and growing a market with collaborators. Developing strategies for growers to work together to develop this new market.*

FR	*The main idea or purpose that I think it'll best to keep people from using the reef within my community, because the more people go fishing, the more they damage the reef. Next, the problem is over-fishing.* *My approach is for people in the community to have fishpond, so they can easily provide for their own food.* *There were no technology test takes place at my fishpond, but few workshops were held at my farm.*
FR	*To have a small-scale green water tilapia hatchery to support our tilapia farmers in American Samoa.*
FR	*Plant identification, plant growth, anatomy of plants, soil, ecological sites, livestock herd health, sponsorships of range, farmland workshop presenters on topics of range, plant life, farmlands, plant identification, noxious weeds and etc.*
FR	*Beneficial use of a heretofore-ignored natural resource.*
FR	*? The demand for tomatoes in Palau is quite high. Farmers are keen to grow tomatoes but are hesitant due to many failed attempts, e.g. hydroponics (due to contamination), high tunnels (due to excessive heat, humidity and wind), open fields (due to diseases); high risk, high cost and the prevalence of blossom end rot (due mainly to calcium deficiency), diseases (due partially to overhead watering); cracked fruit (due to frequent heavy rains) and losses due to sun scald (20%) , fruit flies (70-90%) and poor fruit set (due to hard hitting rain and high night time temperatures). This project attempted in a systematic sustainable low-cost manner through shade netting and other methods to overcome these constraints. The project overcame all these constraints except diseases.*
FR	*Using no till methods for renovating hay land*
FR	*We were trying to assess the impact and effectiveness of bare fallow tilling on wee suppression and soil fertility.*
FR	*Integrating pasture-raised heritage turkeys into a cropping system.*
FR	*Our goals were to extend our fresh fruit and raw walnut income with dried or flavored products. We were concerned about the high loss of excess ripe fruit and we needed to sell more nuts direct to the public by bettering our marketing presentations and skills. This wonderful Grant program allowed us to develop new sale options for orchard fruits by drying the excess fruit and now we are considering pies and jams. With the nuts, we were able to create a line of 5 different flavors, and better options to market them besides Ziploc baggies.*
FR	*Would pasturing ducks on 1 acre improve that soil's health?*
FR	*Using heat from our butcher waste compost pile to render oils off bone and tallow. The materials were placed in 55-gallon drums and buried in the compost for three to five days yielding 17 to 20 gallons (est.) oil. The resulting oils were analyzed by the lab at wash. state university and a recipe for making biofuel was created.*
FR	*Genetic advancement, new cultivation methods that eliminate the need for herbicides.*
FR	*We demonstrated management techniques and equipment suitable to small-scale farming, ranching and timber operations in the Sierra Nevada region.*
FR	*Making organic way foundation for bees.*

AP	*The use of the greenhouse concept with application to tropical climates and their conditions. As it relates to production of crops during the rainy season where insects and plant diseases are at their peak. The use of the water barrier was a great test to see if we could adapt it to our conditions. In a nutshell, it proved very useful.*
AP	*Test the feasibility of substituting farm-produced soil stimulants for lime to regulate soil phi*
AP	*Aquaculture -Fishpond pilot test/demonstration*
AP	*Transitioning from conventional to organic dairy status.*
AP	*Information for people to access on the web with links to federal Clean Water and Endangered Species programs as well as Oregon's regulatory programs. A primary effort in preparing the information was to create a roadmap through the laws and regulations that affect livestock operations and alert them to certain actions that could impede compliance. Also, we offered a list of agencies and scientists for contact by individuals for discussion and help in designing adaptive management strategies to improve or change ranching practices when they are warranted. We also created a CD for use by each county in Oregon with similar information and distributed them through the county associations.*
AP	*Profitable and Sustainable irrigated pasture grazing systems. Farmers shared with the researchers their production practices, production costs, gross returns, on their grazed irrigated pasture systems. They also provided why they used this integrated systems and their perceived whole farm benefits.*
AP	*Weed Prevention. Working to increase noxious weed awareness with land owners and land users.*
AP	*Single drip versus double drip irrigation. Mulch versus weed strips versus fabric cloth.*
AP	*A three-tiered approach to noxious weed control that included biological control and some herbicide treatment of the main infestation, aggressive management including herbicides and sheep grazing in the barrier zone, and weed prevention in the area surrounding the barrier zone.*
AP	*To determine the better methods of increasing stands of onions on land with a sub-surface drip irrigation (SDI) system. Hydrogel, a cross-linked polyacrylamide, was mixed with Zeolite, a ground porous stone that transported water to the hydrogel, was applied in the seed furrow in an effort to improve germination and emergence of the small onion seeds.* *Oats and triticale was strip-planted between the tender emerging seedling onions to reduce damage from blowing sand. The wheat was later killed to prevent competition with the growing onions.* *To look at methods of tillage for maintaining beds over the subsurface drip-lines.*
AP	*Whether Sunn hemp could be used as a cover crop to help manage a nematode problem.*
AP	*We tested the use of molasses, sprayed at various concentrations, to attract sheep to consume medusahead, a noxious annual weed.*

AP	*1) Methods of preserving breadfruit through fermentation* *2) blending of fermented breadfruit and imported High Protein premixed feed base* *3) Acceptance of fermented feeds by pigs of different ages* *4) comparative rates of gain on imported feeds vs. locally produced feeds*
AP	*A series of farm tours was scheduled to showcase to families sustainable farming methods in a variety of products - livestock, vegetables, dairy, etc.*
AP	*The use of native plants for extracting dye products*
AP	*Designing a newer model of a small-scale biogas digester that could perform in domestic, small farm applications in cold climates.*
AP	*That a combination of cool-season annual, warm-season annual, and cool-season perennial forage species could be used to minimize winter cattle hay feeding by extending the grazing season and to minimize leaching of soil nitrate.*
AP	*In their 2008 draft Farm Credit Council Report, Gary Matteson and Robert Heuer shared: "The lack of processing, storage and distribution infrastructure hinders efforts to ramp up the supply of locally sourced foods. However, building these local distribution systems will depend on non-farm entrepreneurs" and further indicated that financing will be "needed to cultivate the development of supply chains that will shorten the geographic distances between the farm gate and dinner table."* *New distribution models must be created to replace old models, which rely heavily on the movement of food over long distances creating a dependence on high fossil fuel inputs. This system results in greater storage and packaging needs, a high rate of product loss and waste, and lower nutritional benefits due to the time from field to fork. These represent only a few of the detrimental issues that stem from our current global food system.* *Time and again, it is local solutions that have proved optimal in addressing the issue of agricultural viability for small to mid-sized sustainable producers. Although farmers markets alone often do not serve the complete marketing outlet needs for small to mid-sized producers, they provide a larger profit margin for those producers. When these producers sell through farmers markets, for example, they get 100% of the dollar that they make. On average, when selling through the conventional distribution channels, farmers make about 19 cents on the dollar (USDA's Economic Research Source).* *Agricultural Institute of Marin, with the support of the WSARE grant, developed a local distribution model program in partnership with the experience, ideas and needs of local farmers.*
AP	*Could conventional strawberry growers adapt a technique proven to provide good key pest control in organic strawberries?*
AP	*Evaluation of new bramble varieties for disease resistance, yield and hardiness.*
AP	*How to get the best technical advice to producers so they will use it. How to directly help producers with information for their situations.*

AP	*Using soil moisture sensors and micro-climate technology in beet crops with center pivot irrigation systems, to see if the information it provided the producer would help him; time irrigations, save energy and water, be alerted to weather conditions that are conducive to spread of fungal and bacterial outbreaks, dry fields down for harvest.*
AP	*Integrated Pest Management, use of ducks as predator for Cuban slugs, use of neem extract, and testing the ability of slug baits due to rainfall. Simple approaches, safe and available in the Island.*
AP	*That perennial cool season forage grasses might be different in their nitrogen use efficiency.*
AP	*We are applying the practice of using sheep with trained aversions to grape leaves to grave vineyard floor vegetation on commercial vineyards.*
AP	*Develop student internship program for new BS degree.*
AP	*Working with farmers to improve the ways they use the online market distribution system to publicize and sell their value-added items.*
AP	*We tested organic grape powdery mildew prevention and treatment recommendations from CA and OR for Idaho.*

Most important result of this Western SARE Farmer/Rancher Grant funded project *(FR Q23 / AP Q19)*

FR	*I believe the most important lesson learned from this grant was that there is a possibility of creating a job here in the community. I did not attempt further research into selling the products made from the skeletal parts of the fish in the internet. The unfortunate thing was that the lady who was working with me died. I wanted to set her up to make and sell the products that we had started to make and in a small way started to sell to the public.*
FR	*We proved to a very skeptical crowd that goats love to eat Russian Knapweed and thrive. No they won't die, and yes they can still reproduce and even gain weight on noxious weeds.*
FR	*Proved the validity of using cell grazing to increase calf weights and improve pasture health.*
FR	*Received $ to try something new*
FR	*That it demonstrated the concept is feasible.*
FR	*I has changed the way many vineyards manage their weeds, leading to cost savings, reduced pesticide use, reduced tractor use, reduced erosion particularly on hillsides. The project has also been started now in New Zealand with a 1000 hectare vineyard who read about my research. And I am also consulting with a few other sheep ranchers to help them expand grazing to other vineyards throughout the US.*
FR	*We were planning to build a mobile poultry processor and compared it to building a stationary unit. from this we found stationary more feasible and therefore built a stationary unit.*
FR	*I learned so much and want to do more work on it.*
FR	*Creation of the Hillsdale Winter Farmers' Market.*
FR	*The analysis of traditional Navajo food (corn) products that Navajos still seek to eat.*
FR	*Educated public about clumping (non-invasive) vs running (invasive) bamboo resulting in "not-all-bamboo-is-bad."*
FR	*We hosted an open house and showed many people our approach.*
FR	*Most important result was to give validity to the idea of sampling for pears. Also, that by sampling you can increase consumer awareness and willingness to try pears when they might not have. The grocery chain that I worked with saw a dramatic increase in their sales of pears. It would peak during and right after a sampling period but then decrease at a higher level each time. They increased their sales of pears 150%. They were very happy with the outcome.*
FR	*Web site connecting our company with potential markets and consumers*
FR	*The ability to create a diverse garden design with the aid of computer technology.*
FR	*The grant gave me the initial start with trees. Due to that start I have now surrounded the entire 80 acre project with Mondell Pine and Stone Pine trees which are both a windbreak and a beautification project that enhances my property and my bottom line.*
FR	*Showed that impact was not a problem.*
FR	*We have a 5 year baseline of vegetation monitoring and trend against which we can evaluate future changes. This resulted in better relations with the Forest Service on our allotment*

FR	*Knowledge of the loss of efficiency of nitrogen fertilizer as the amounts per acre increased. Reduced use of nitrogen at various times of the year to be more efficient in costs and application. Knowledge that normal rates of nitrogen do not cause increased amounts of residual nitrogen in the groundwater, at least when the forage is dense.*
FR	*Reduce cost for heating and increased profit margin*
FR	*Started looking at winter wheat forage options*
FR	*Dilution of fish waste from sulfuric acid.*
FR	*The curriculum we developed has been used around the country on many farms.*
FR	*Opportunity to receive more scientific results.*
FR	*Cooperative marketing.*
FR	*Testing devaluation.*
FR	*It gave a good overview of using the Weed Seeker sprayer so farmers could make an informed decision on whether to adopt its use*
FR	*To assist the farmers to combat insects and perticide using non-chemical techniques.*
FR	*To see that Forage Kochia could be grown in already established grasses.*
FR	*The development of a local, multi farm CSA.*
FR	*The project allowed us to test and verify an alternative growing regimen that allows us to grow dry beans for sale directly to consumers; all without the need for mineral supplementation. We have since discovered that the grass can be grazed prior to plow down while still giving the benefits to the bean crop. That is two crops on the same ground in the same growing year. Not something we get to do very much on the high plains.*
FR	*Don't know*
FR	*I had a much better understanding of the economics of growing crops at the market garden level, and have been able to help others understand the costs as well.*
FR	*Introduction of Alternative Organic Pest Control.*
FR	*Increased yields on native pastures and effective means of waste disposal.*
FR	*It works!!!*
FR	*It is difficult to change a person's paradigms and adopt a new approach to problem.*
FR	*Out of the 50 students for my year round hoop house greenhouse garden project/classes...12 greenhouses were put up and shared. The foods in these greenhouses are being sold in markets and feeding families.*
FR	*The sustainable establishment of beekeeper directed, implemented and maintained regionally fortified survivor stock honeybees. This results in less dependence for importation of potentially contaminated stock- high pest/pathogen loads from high production zones. With the emergence and continued mysteries behind CCD- Colony Collapse Disorder, this is of sincere magnitude for the continued pursuit and stewardship of honeybees and other pollinators.*
FR	*Developing a market for a new crop that helps a large number of growers in the community and contributes to their sustainability*
FR	*The most important result was it utilize small areas for farming. It can provide for daily needs and easy to maintain.*

FR	*Able to built and raised Tilapia. Provided fish to my community and church in many occasion. Also, providing of fingerlings to my Tilapia farmers.*
FR	*Using livestock equipment made livestock handling easier, low stress, herd health was handle easier, safety increased. Range Management, rotational grazing and prescribe grazing implemented, range management plan written, awareness on plant identification, noxious weed management, utilization studies effected on grazing lands, wind breaks for farming lands, soil erosion recognition, using natural diversions to water crops.*
FR	*I was able to stimulate oak sprouting on a large enough scale to prove that this unused resource had significant value to both livestock and wildlife.*
FR	*Tropical Tomato Production through Shade Netting and Other Methods was demonstrated and tomato production by other producers increased.*
FR	*Learned that we did not want to pursue no till on hay land renovation on our operation, trying no till on grain land on operation this year.*
FR	*It helped us gain important data to assess how our weed management strategy was effective*
FR	*It allowed me to try something out that I might not have otherwise.*
FR	*Our product line has increased and losses have decreased. We are now able to offer a variety of products during the off season and thus increase winters sales. Our marketing skills and tools have improved greatly.*
FR	*I was able to justify continuing to raise ducks because our soil quality so improved.*
FR	*We know that it will work at a very low cost and sustainable level, although the fuel produced has limitations. It has the potential to make irrigation feasible on about 160 acres.*
FR	*Genetic advancement of stress hardy corn to: 1) Increase nutritional levels, 2)To make it more machine harvestable.*
FR	*Farmers and ranchers in our region are now more likely to share information about technology and management.*
FR	*Being able to make organic wax foundation and to demonstrate that it can be done on a small farm scale.*

AP	*The opportunity the grant afforded the farmers to try a new way of growing crops during a period where certain crops are not grown due to diseases and pest. Because their are sources like the grant that allow these farmers to improve growing methods and to share that information with other farmers, ranchers and gardeners is a valuable plus for and island that is too reliant on imported goods.*
AP	*It demonstrated for the first time that farm-produced soil stimulants (BD preparations) can be effective in regulating soil pH*
AP	*Technology transfer and fishpond baseline information*
AP	*Actually made the transition from conventional to organic dairy*

AP	*The livestock producers (farmers and ranchers) learned a lot about the various regulations for clean water and were able to put into perspective what they could do to correct management activities and learn about the water quality testing that could be designed to fit their property and activities. Non point source contributions are understood better and the cooperative working relationships were improved between agencies and ranchers through this proactive approach to keeping the water clean.*
AP	*We were able to demonstrate that planting perennial forages (grasses and legumes) in a grazed pasture system is economically beneficial and enhances farm and environmental sustainability. The farmer cooperators had expressed that they experienced a more manageable farm system that gave them more satisfaction and more leisure time than when they farmed field crops (corn mostly) on these acres. They also expressed that this system helped provide inexpensive forages at the times of the year when native range and crop residues are not available. They also have an improved flexibility with their irrigation water supplies in dry years. In these years they can dry up their pastures during the summer heat, diverting water to more time critical enterprises. The irrigated pastures go dormant in these years and return to production once the water is turned back onto the fields.*
AP	*Increased awareness of noxious weeds and their impacts to range land and sustainable ranching operations. Large signs to inform residents and visitors of the efforts to minimize noxious weeds in the region.*
AP	*The growers in the project becoming the champion of irrigation efficiency and mulch as a weed suppressant and moisture control.*
AP	*Producers met together and talked about weed control in a region-wide basis rather than just an on-farm basis.*
AP	*The equipment used in the trials for maintaining beds over the subsurface drip system was accepted in the area and used by other SDI systems in the county.*
AP	*The farm owner and crew members became more efficient at addressing their nematode problem.*
AP	*Farmers and ag professionals are better able to estimate N contributions from cover crops with confidence so that they can credit cover crop N in their fertilizer programs.*
AP	*See Q18.*
AP	*The sun-dried fermented breadfruit was very successful. The pigs ate well, grew very well and were of at least equal quality to the comparative groups. Costs were reduced by about 60% before labor is considered. Un-marketable breadfruit was used and fruit was removed from the field before it could rot or develop insect pests.*
AP	*All of the families involved in our tours decided to change two or more aspects of their farming. Most were added crops or value-added products; two were changing their marketing methods.*
AP	*Without funding this project could have been accomplished*

AP	*Small farmers / ranchers throughout the Pacific Northwest and US have become more aware that there are potential applications of bioenergy technology that are relevant for small-scale, diversified farming operations to utilize to improve farm waste management, environmental quality, and to produce renewable energy. Some of these applications can be "aided" in their potential utility with good science and engineering, but many of them are well within the design capabilities of enterprising farmers.*
AP	*Providing technical assistance to the producer (including species and variety selection and establishment), which freed him up to observe and think about cropping system choices that were being implemented on his farm.*
AP	*The outcomes and impacts of Farm to Fork are both immediate and long-term. Farm to Fork brought additional income to producers on a weekly basis during the time they participate. This additional income averages about $4500 per producer annually. Local customers are learning more about local food production which means, ideally, that we are generating long-term loyalties to purchasing from these local producers.*
AP	*A large group of growers with who we have had contact, both organic and conventional, are now familiar with, and are using, the techniques we have tested.*
AP	*We were able to ID varieties that do well enough to recommend them to commercial growers. Some of these varieties are being used to replace older varieties.*
AP	*Best management practices taught and shared and used. Getting University attention to dairy goat management issues.*
AP	*That farmers in our area learned that they could use the technology, and the more they use it the better they get at understanding the data and how to make decisions based on it.*
AP	*A new enterprise has emerged, duck production on Rota island, an exciting new venture during this time of economic downturn. It's a win win situation of benefit to the farmers and the environment. More and more farmers are now raising ducks for controlling Cuban slugs and for meat and egg production. Our collaborators from the region were impressed by our predator ducks and would like to use this venture in their respective places. This will prevent further Cuban slug spread and prevent lung worm diseases carried by Cuban slugs which is fatal to human beings.*
AP	*Paiute' orchard grass produced the most dry matter forage per acre for each lb of nitrogen (N)/ac up to 100 lb/ac compared to the other seven grasses but because it produced only a fourth as much forage with no N it produced the least amount regardless of N rate. Thus, nitrogen use efficiency in and of itself may not mean much based on this one year, one location study. 'Oahe' intermediate wheatgrass and 'Paddock' meadow bromegrass produced more forage/ac per lb N/ac as N rate increased up to the maximum rate of 200 lb.*
AP	*The feedback from vineyard managers on practical logistics and methodologies in applying this practice in commercial vineyards.*
AP	*Making linkage between university and external communities.*
AP	*Increased income for farmers and ranchers and increased health of farmland due to the increased productivity/saleability of organic and naturally grown foods. Increased awareness of the value and availability of locally grown foods.*

AP	*The most important result was that we achieved our goals. We discovered that with minor adjustments, recommendations for CA suited our growing conditions; we prevented powdery mildew in the cooperating farmers' vineyard, he was able to successfully market his crop, and that success story inspired dozens of other producers in diverse regions to attempt organic table grapes. And now our cooperating producer is applying for grants on his own and continuing to research innovative approaches to problem solving, and I like to think that our Western SARE project was instrumental in starting this!*

New ideas *(FR Q26 / AP Q22)*

FR	*We were using this project to test and demonstrate new ideas.*
FR	*The major things that could be made from the waste product -- fish meal, fish fertilizer was feasible just on a small scale since it was difficult to macerate the large bones and other materials from the carcass. However while working with the disposed materials, we found interesting materials from the fins, tails, and body parts that could be made into earrings, flower arrangement materials, additions to hair adornments, fishing lures,*
FR	*Inspired an increased interest in nutrition and genetics in beef animals.*
FR	*Feeding forage winter wheat to replacement heifers*
FR	*Work on weed control in my field (i.e. change direction).*
FR	*Build a stationary processing unit.*
FR	*Use felted wool for garden use.*
FR	*Develop a community kitchen to process these traditional foods; I would be the supplier.*
FR	*Need for more research on pest-harvest use of bamboo.*
FR	*I want to do another project called "Meet a farmer". This would be working with a grocery chain again. The grocery chain would promote a weekly or monthly farmer and her produce. The farmer would sample his produce, have recipes, and talk to consumers.*
FR	*With growth we are always working for new ideas*
FR	*Would like to continue and complete.*
FR	*Since this project I have received a grant for 2 Skystream Wind Turbines on 50 foot towers which greatly reduce my electric bill for the alfalfa. It also inspired me to plant 1100 hybrid olive trees to add to my production.*
FR	*We trained a local nurseryman (Cooperative Extension Range Specialists trained him) in the techniques for the collection of vegetation monitoring data. He is now available for the other ranchers in the community. Forest service and NRCS hired him in the fall to do our ranch and several others in the area*
FR	*Adjusting times of nitrogen application based on weather.*
FR	*You're nuts if I am giving you my ideas*
FR	*No till for hay ground renovation*
FR	*How to make farm interns legal. How to best educate the next generation of farmers.*
FR	*Using techniques to have goats consume brush species not normally eaten.*
FR	*Trying alternate chemicals in the WeedSeeker sprayer*
FR	*It has made me more interested to get more engage in coconut crab farming and I had taken the initiative to improvised into modern technology to farm the crab. especially in the habitat design as well as the reproduction sites.*
FR	*To plant more.*
FR	*Off-season CSA programs like fall and winter options.*

FR	*We are now experimenting with ways to incorporate grazing into vegetable production grounds giving us better weed control, more income per acre, "free" fertilizer placement in the vegetable fields (less cost), and a very rapid increase in OM levels in the soils.*
FR	*We built a covered area for composting both chicken manure/bedding and cow manure/bedding. We now produce all of our own compost for our vegetable enterprise from our own livestock. Being able to say that we DON'T import compost from CAFO operations is an important marketing distinguisher for our vegetable CSA program, and our customers really appreciate it!*
FR	*I've wondered if the dynamics of growth and ripening of tomatoes, peppers, eggplants and other crops is similar to the growth of squash. For example, do tomatoes ripen faster if ripe ones are harvested quickly vs. left on the vine?*
FR	*Other untested organic pest control using other available plant materials.*
FR	*Subsequent grant request (Butcher Waste as Bio-fuel) was a result of the success we experienced with this original grant. We realized that a second valuable product could be derived from the process and began researching the possibility of extracting oils from the butcher waste - through the composting process - and turning those oils into bio-diesel for the tractors that are used in the composting process.*
FR	*Expanding water base livestock feeds\crops*
FR	*Focus on small landowners who might be more likely to try new ideas.*
FR	*I put up a greenhouse/hoop house in conjunction with my sheep barn to use the sheep's body heat to warm the greenhouse at night in the winter. I am planting strawberries in one greenhouse for early crops for market. i am going to teach children in the 4-H program how to grow food in greenhouses.*
FR	*5 years later we are now expanding the survivor stock concept to establish Breeding Companions that are available to other queen producers/rearers virtually nationwide. Sharing of quality, diverse stock is essential for the survival and ability to interact positively with our changing environment. Our efforts have attracted collaborations with various University researchers and USDA Bee laboratories. Establishing a pedigree and certified rearing process are some future ideas for the continued actualization of this breeding philosophy.*
FR	*Mostly with regards to greater diversification of crops and joint marketing. Doing the project research helped me to understand some of the other needs that growers have that revolve around new crop or product development.*
FR	*I experience quadraphonic and using waste water from fish pond to grow crops in it.*
FR	*Encouraging and sharing with the community how to raise Tilapia in your back yard.*
FR	*Putting prescribe grazing to use, new rangeland plans, revision of current plans, using natural material from land for erosion practices and prevention. Creating catchments during rain and snow seasons.*
FR	*Developed timing of growing that was most beneficial.*
FR	*Reduce shade netting to 25-35%. Try derris and Barringtonia asiatica to control white flies and aphids. We hypothesize (with help from producers, Palau-Taiwan Farmers Association, Bureau of Agriculture, Palau Community College – Cooperative Research and Extension, Taiwan Technical Mission, and Western SARE) that a) a "Tomato and Blossom Set Spray" containing a cytokinin from seaweed and/or crab shells can be developed and produced locally and b) fish emulsion using the enzyme papain from papaya and citrus peels (to deodorize and provide insecticidal*

	properties) can be developed and produced locally. Try fine mesh row covers. Leave the roof open/uncovered. Try high plastic tunnels. *Suckers or tip cuttings may be tried to multiply desirable hybrids which show exceptional suitability. All plants from the same package of hybrid seed do not perform equally as they should. On a rare occasion, one stands out. Milk dust or milk spray under plastic roof may be tried to reduce bacterial diseases. Kaolin clay may be tried to kill aphids, etc.* *Try Hairy vetch as a no-till mulch crop for tomatoes to lower pests and increase yields. Try 6-8" of shredded newspaper as mulch to lessen fungal diseases. Intercropping with garlic chives, ginger or marigolds may be tried to reduce whiteflies and aphids. Try reducing aphids with derris, neem (sprayed in the evening), soursop, turmeric, yam bean, or flour.* *Try reducing whiteflies with garlic chives, marigold, ginger, soaps, and milk powder. Try reducing fruit flies with bottle traps, vinegar-honey traps and coconut shell traps. Asian Vegetable Research Center has cultivars/landraces of tomatoes suitable to Palau conditions. Test these cultivars and post to the project information on the Western SARE website. Try grafting tomatoes to stronger and more suited tomato relatives.*
FR	*Using our current equipment for no till on grain land on operation*
FR	*To experiment further with strip tilling and other wee suppression strategies*
FR	*We want to expand our farm stand to include a certified kitchen so we can offer baked and canned products. We would like to have farm tours and also sell over the internet.*
FR	*We decided to continue to seek ideas for using our eggs in value added products.*
FR	*Using the fuel to power a pivot pump in a location too far from electricity to be feasible. Will utilize the heat from the diesel engine to preheat the fuel and keep it above its gelling point. A high gelling point is the fuels limiting factor.*
FR	*In examining kernels for nutrition I found never before known traits. A genetics lab has been helping me at their expense.*
FR	*We've formalized training for new farmers in the areas of equipment, technology and management.*

AP	*Trying new crops that are not typically grown on Guam such as herbs, container plantings, mulching etc.*
AP	*1. Test the replicability of the test results on multiple sites* *2. Test the relevance of the test results in mitigating greenhouse gases by limiting carbon emissions* *2. Evaluate the test results on the context of overall farm sustainability*
AP	*This projected presented a challenge for Yap Islands by illustrating concerns of the tilapia invasive species and indicating a need to address the problem. This led to a project to use the tilapia since it is not consumed by the local population in livestock feed such as poultry. The demonstration of fishpond technology has promoted aquaculture and its development in Yap. Species of interest are sea cucumber, pearl oysters, milkfish, shrimps, and others.*
AP	*Fertility methods for organic crop production*
AP	*1. Create teams in the state who can provide assistance to private landowners to take water samples on private property and submit the samples to certified labs to determine the levels of bacteria from non point contributions.* *2. Provide up to date information on riparian vegetation management techniques for livestock graziers and demonstrate ways to identify soil surfaces that are suitable for facultative and obligate species.*
AP	*I am working with other University researchers studying the effect of limited irrigation strategies on 15 different grass pasture species. We are testing three levels of irrigation on these grass forages: full irrigation, spring irrigation only, and spring and fall irrigation. In the two limited irrigation treatments, no water is applied from late June through mid August. In the fall treatment Irrigation is resumed in late August.*
AP	*New handouts for landowners to use with visitors to their property.* *Using GPS's to monitor weed locations over extended time periods.*
AP	*The economic potential longer term.*
AP	*Use of GPS systems on tractors to maintain beds over SDI lines. Use of a traveling sprinkler to improve stands on SDI systems with seeded onions.*
AP	*Development of infield rotation factors for farmers with limited land (using cover crops).*
AP	*The project helped us identify practical ways to estimate total N from cover crops in the field. Since then we have developed an N mineralization model for cover crops. Now we are working on estimating N mineralization from soil in vegetable crops. We hope to combine all of these findings into a site-specific N budgeting strategy for organic farmers and other farmers who build soil organic matter and use legume cover crops.*
AP	*First, this needs to be demonstrated in other states where breadfruit is available. Next, we must do serious efforts to find local high protein sources such as fish meal and possibly nuts of some sort. More effort needs to be placed on extension of this information also.*
AP	*We had a small pilot farmers' market that was the first of its kind in our area. That event prompted a group of private farmers to establish one which to my knowledge is still being held.*

AP	*The use of alternative plants for the extraction of dyes.*
AP	*We intend to further explore selection of low-temperature methanogens that can make these small-scale biogas digesters perform more year round.*
AP	*That cattle are able to utilize weeds in mixture with forage species, and that warm-season annual forage grasses have excellent potential as stockpiled winter feed because of their responsiveness to growing conditions during July and August, when cool-season forages are often not growing at peak productivity.*
AP	*Model programs like Farm to Fork are spurring a new way of connecting local institutional customers with local sustainable food producers. This new paradigm will take time and resources to set down roots and develop momentum to reshape our food system in the United States. As a visionary, unique program, Farm to Fork steps out into exploring the question of how to create new systems that will serve local and sustainable food producers to be able to market locally. We recommend that the financial support for developing local distribution models, which have positive consequences for health, local economic vitality, the environment, local farm communities, and much more, continue to be directed towards shaping this new paradigm.* *For other communities interested in developing a local food procurement and distribution program, we recommend working with a group of experienced and big-picture thinking farmers, engaging and surveying local institutions and businesses to determine the level of demand for local food, developing simple and effect systems that work to serve the specific needs of the community, and enlisting partners who either have experience, infrastructure, and resources.* *In addition, partnering with already established local distributors to handle the delivery and product pick up is a very effective and efficient way to utilize already existing distribution systems to further local farmers' needs. It is important to work with a distributor who has the farmers' best interest at heart.*
AP	*We are now involved in studies of movement of insects in and out of the trap crop, and we have recently received competitive grant funds to more closely study the predacious associates of lygus bugs in the trap cropped strawberry system.*
AP	*We have observed a lot of winter injury to many of the "summer bearing" varieties. This has caused us to look into some of our cultural practices (particularly pruning) to see if any change might lessen the injury.*
AP	*Creating a DVD of workshops and sending to producers who couldn't attend is worth the time and expense. DVD is still best way for rural producers to get information. (web is too hard still in many areas). Regional newsletter was accepted and good way to disseminate DVDs. Collaborating with sale people of animal equipment and care products was worth it, as rural producers don't get exposure to new product readily.*
AP	*We think that this technology could be useful in other crops grown in the area such as seed alfalfa, in fact we are currently waiting on a small grant application to fund the installation of one set of sensors. It is a project in conjunction with a local seed company.* *There are many places in growing season of seed alfalfa that the water available to the plant makes a big difference in the yields at harvest.*

AP	*The use of Neem must be promoted to the farmers as a source of organic pesticides. More economic opportunities being created, diversification of Agriculture in the CNMI, Stability of slug pellets due to weather, use of recyclable materials in Agriculture. Sustainability in Crop production, Invasive species, no more. Healthy Crops.*
AP	*Although not necessarily a new idea but further look at optimum mixtures of grasses and legumes, especially since the cost of N fertilizer is so high and with concerns about nitrates leaching into ground water. This study was to have had each grass planted with alfalfa as one of the N rate treatments but as mentioned earlier a site change to existing plots of these grasses had to be done and thus this treatment was not available.*
AP	*The use of crop-livestock integration practices in other cropping systems.*
AP	*New ideas for internship projects.*
AP	*These articles report on what has been happening in the local food biz in Idaho. Some of these are a direct result of Idaho's Bounty Co-op opening up new markets. Farmers who learned from the technology as a result of the SARE Grant have been successful in different ways. http://www.nwfoodnews.com/2011/01/07/if-weather-were-all-that-mattered/* *http://magicvalley.com/lifestyles/food-and-cooking/article_de9378c2-fce2-11df-98ce-001cc4c002e0.html* *IBC is a safe platform on which farmers can try out new products for winter sales. They get on the website and see others trying new things so they do too.*
AP	*The producer is now researching how to compost his vine prunings and use them on the farm to reduce off farm inputs.* *I was inspired to become more connected with others in our local table grape association and start working on other issues related to table grape production, including value added products, marketing, and cooperation between growers.*

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