

# Identifying Outcomes for Program Evaluation

## EXAMPLE OUTCOMES FOR BEGINNING FARMER & RANCHER TRAINING EFFORTS



**CAS**  
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FOOD SYSTEMS

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January 2020

# IDENTIFYING OUTCOMES for PROGRAM EVALUATION: Example Outcomes for Beginning Farmer & Rancher Training Efforts



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## TABLE OF CONTENTS

### LEARNING DOMAINS

- 6 Production
- 7 Marketing
- 8 Business and Financial
- 10 Land Access
- 11 Succession
- 12 Labor, Capital & Materials
- 13 Community Support

### SPECIALIZED OUTCOMES

- 14 Start Farming
  - 15 Farmer Success
  - 17 Audience Specific
- 

## Purpose

The primary purpose of this document is to help staff at beginning farmer and rancher (BFR) training organizations identify useful outcomes for program evaluation. Examples of common or frequently used outcomes for BFR programs, as well as other examples of outcomes that programs might find useful, are provided to facilitate the process. The document also provides examples of indicators and data collection questions to further assist with the development of an evaluation plan.

## Why Outcomes

Identifying desired and expected outcomes is a key piece of evaluating the success or impact of a program. It is also an important part of creating a strategic and actionable program plan. If you don't know where you are going, how will you get there? How will you know if you have accomplished what you hoped to achieve? Identifying

outcomes is an important first step to answering these questions.

## Intended Audience

Over the last few years, BFR program staff have indicated a growing interest in learning more about BFR outcomes for improved program evaluation. While this document was developed to address these specific organizations' needs, it can also be of use to others who train aspiring or practicing farmers in any stage of their development, whether through extension efforts, university programs, non-governmental organizations, etc.

## Suggestions for Using this Tool

### OUTCOMES

Begin by identifying which of the main education efforts or support services are most applicable to your organization (e.g., production, marketing, resource acquisition, community support, etc.).

Next, review the listed outcomes in your program's area of focus and reflect—with a team or individually: What outcomes are relevant? What other outcomes would be more suitable? It is important to identify both short-term and medium-term outcomes for programs. The *Reflection Questions for Identifying Outcomes* section on page 5 can be used as a tool to help with the process of developing outcomes that suit your needs.

## INDICATORS AND DATA COLLECTION QUESTIONS

The third and fourth columns of each matrix provide examples of indicators and questions that can be used in your data collection tools (e.g., survey, interview, etc.). Use these as a starting place for generating your own indicators and data collection questions/instruments. You can find more BFR-related examples for generating indicators on the Farm Answers website (see <http://bfrdp.farmanswers.org/Reports> - explore the "Results" tab). Similarly, see the GREW Evaluation Resource Library for example data collections instruments and instructions: <https://nesfp.org/program-evaluation/library>. For those planning on applying for a BFRDP grant (USDA, 2019), indicators provide a level of detail that are important in both the proposal and the reporting system, even though the official instructions may not specifically ask for "indicators."

## Important Points to Keep in Mind!

- **These outcomes are meant to be illustrative, not exhaustive.**

Every possible outcome is not listed. Just because something is not on the list does not mean it lacks value to your stakeholders, your organization, or society.

- **We are not prescribing what "should" be measured, or what the "best" metrics are.**

The metrics you select should be based on the organization's context, goals, and stakeholder needs (staff, farmers, participants, funders, community, etc.).

- **We do not recommend using all these metrics—be selective.**

While a program may aim to address a number of goals and outcomes, it can be important to prioritize the most important ones and measure those. Don't get overwhelmed with more data that you can effectively process and analyze.

- **If an outcome you are looking for is not in a specific matrix, try looking for it in a different one.**

In order to keep the list succinct, we attempted not to repeat outcomes across the matrices. For example, while marketing outcomes may be part of business and financial efforts, they are more likely to be listed in the Marketing section. Additionally, items you might expect to see in the Impacts/Results sections of a matrix may be found in the Farmer Success matrix.

- **Example indicators and data collection questions are related to the general section (e.g., short-term outcomes/attitudes, etc.).**

The indicators and questions are not necessarily directly related to each other or to a specific outcome.

- **Example indicators may or may not have numbers attached to them.**

Example indicator numbers and percentages were only included when they were based on actual program targets or known trends related to outcomes results (e.g., "80% of participants completed..."). When examples were not based

on actual program targets or known trends, a blank space is used (\_\_\_# or \_\_\_%).

- **Adapt data collection questions to your organization.**

When creating a new data collection instrument, we suggest you use the example questions and links to other tools as a starting place for instrument design. Consider your program's desired outcomes, indicators, context and audience when crafting a survey or interview questions. Additionally, it is ideal to vet the instrument, and your delivery process, with a group similar to the intended audience.

- **Only short- and medium-term outcomes are listed in this document.**

Long-term outcomes were not listed as a category in the matrices since few programs are at a stage to evaluate them and they are not expected to be included in 3-year BFRDP projects. Some items listed in the Impacts/Results section, as well as ideas listed in the [Long-Term Outcomes & System Level Outcomes](#) diagram, can be used for developing long-term outcomes. Additionally, see Blay-Palmer et al. (2020) and Rodman-Alvarez & Colasanti (2019) for other examples and guidance.





## Methods

The example outcomes, indicators and data collection questions presented here were generated from a variety of sources. Our intention was to identify the most frequently used or potentially useful outcomes and provide example indicators or survey/interview questions. To identify these items, we reviewed beginning farmer related literature, Beginning Farmer and Rancher Development Program (BFRDP) REEport outcome summaries (Andrews, 2016), BFRDP RVS project reports (Farm Answers, 2017), and the evaluation summary of the BFRDP funding program (NSAC, 2017). The items in this document were also derived from a sample of beginning farmer and rancher (BFR) organization surveys, interview questions, and reports. Project partners and advisors also contributed to the content. Finally, interviews were conducted with BFR training professionals covering different training programs and audiences to ensure that important outcomes for organizations were not left out.

## TERMS

- **Evaluation:** “Systematic inquiry to obtain accurate, useful insights about the answers to evaluation questions in a manner that is feasible, is credible to relevant stakeholders, makes strategic use of limited time and resources, and contributes to ... program evolution.” (Archibald, 2018)
- **Outcome:** Desired changes or results stemming from a program’s activities or efforts.
- **Short-Term Outcome:** Changes in *knowledge, attitudes, skills, awareness, or intentions*. These changes usually happen during or immediately after an event or program.
- **Medium-Term Outcome:** Changes in behaviors or actions as a result of learning, or immediate impacts or results stemming from those actions. These changes usually happen a few months to a few years after the intervention.
- **Long-Term Outcome:** Ultimate desired changes, such as changes in conditions in the social, environmental, or economic realms. These changes usually take place several years after an intervention, and often as part of a more collaborative or system-wide effort.
- **Impact:** While impacts are generally used as a synonym for long-term outcomes, in this document it refers to both the immediate or more distal results coming from actions taken as part of medium-term outcomes.
- **Indicator:** A specific, observable, and measurable characteristic or change that shows the progress a program is making toward achieving an outcome.
- **Output:** Direct products of program activities, such as new services provided, number of people served, and/or new products or materials developed.
- **Process Measure:** Process measures are metrics aimed to answer questions about how well a program was delivered. Did it follow its implementation plan? Were people served well? Who was served?

# Reflection Questions for Identifying Outcomes & Indicators

The following questions can be used to develop your own program or project outcomes and indicators. They can be utilized for individual reflection or group discussion.

## 1. Over the long haul, what's the impact you are working toward?

- What are you hoping will ultimately happen as a result of your work? How will the future be different? See [Long Term Outcomes & System Level Outcomes](#) for examples of different long-term outcomes or desired impacts.

## 2. What are the four or five significant outcomes you want your program to achieve in a specified timeframe?

- What do you hope happens for the individuals you serve as a result of your work?
- What changes do you hope to make beyond the individual—at an organization, community, or state or national level? See [Long Term Outcomes & System-Level Outcomes](#) for examples of different system-level outcomes. More ideas can be found in Blay-Palmer et al. (2020) and Rodman-Alvarez & Colasanti (2019).
- If exploring farmer success, how do your different stakeholders—farmers, funders, staff, etc.—define success? Also see [Elements of Farmer and Rancher Success](#) for a general high-level list of ways farmers and others define success.

- If identifying outcomes for aspiring farmers, what kinds of desired work-related outcomes are most important (e.g., starting a new farming business, managing a farm, etc.)? Given how long it can take for people to start a farming businesses, what other interim outcomes show that participants are on their way towards their desired work outcomes? Also see [Outcomes for Aspiring Farmers and Ranchers](#) for a pictorial description of interim and desired work outcomes and how they relate to different program activities.

## 3. What is realistic to expect from participants immediately after taking part in a program event?

- What changes in knowledge, understanding, attitude, or intention, are reasonable? These initial expectations should lead toward achieving your desired outcomes.

## 4. How do your outcomes relate to one another?

- Which outcomes have to happen before others can take place? See [Example Pathway of a 9-month Training Program](#) for an example of how outcomes relate to each other in a theory of change model. For more guidance on developing a theory of change, which can be a very useful tool for identifying outcomes, see the Evaluation Resource Library: <https://nesfp.org/program-evaluation/library>.

## 5. Which of these outcomes are most important to use?

- Once you have identified a range of relevant outcomes, you'll need to choose the most appropriate ones. A few more sub-questions can help get at this larger question:
  - a. Are these outcomes strategic? Do they provide an effective path toward your desired long-term outcomes?
  - b. Which outcomes are most meaningful? To whom?

## 6. How will you know if you've achieved these outcomes?

- Typically, indicators provide the description of how you will measure your desired outcomes. You develop them by considering these questions:
  - a. What would you consider evidence that an outcome has been achieved?
  - b. Is this item measurable? Does it include specific identifiable behaviors, experiences, events, or conditions? The amount or extent to which some change has happened? A target number, percentage, or proportion of people who achieved it? A timeframe when it is expected to happen?
  - c. Do you have the resources to get the data you need to demonstrate accomplishment?



# PRODUCTION

	OUTCOME CATEGORIES	EXAMPLE OUTCOMES	EXAMPLE INDICATORS	EXAMPLE QUESTIONS FOR DATA GATHERING TOOLS
SHORT-TERM	Knowledge and Skills	<ul style="list-style-type: none"> <li>Learns new or improved production practices</li> <li>Understands basic vocabulary and concepts regarding the farming or ranching field</li> <li>Understands food safety regulatory requirements</li> <li>Develops knowledge of preventative/management practices of common problems (e.g. pests, diseases)</li> <li>Knowledge of crop or grazing planning strategies</li> </ul>	<p>__# of aspiring farmers participating in an introductory training program report better understanding of the skills, abilities, and resources needed to successfully farm or ranch at the end of the program.</p> <p>88% of participants report an increase in knowledge on the primary course topics (e.g., soil tillage &amp; cultivation, irrigation, propagation, etc.).</p>	<p>Please rate your level of improved familiarity with the regulatory requirements for value-added food processing as a result of this training. 4) High; 3) Medium; 2) Low; 1) I don't know (Derived from Bowman &amp; Oberholtzer, 2018)</p> <p>What were the 3 most important things you learned or took away from this aspiring farmer training program?</p>
	Attitudes and Intentions	<ul style="list-style-type: none"> <li>Develops confidence in production/growing ability</li> <li>Has confidence in ability to prevent and/or manage common problems (e.g., pests, diseases)</li> <li>Committed to learning more about food safety rules</li> <li>Intends to add a new product to the farm</li> <li>Intends to get certified in production method or process (e.g. GAP, organic)</li> <li>Intends to implement new production practices</li> </ul>	<p>55% of training participants reported feeling more confident in their ability to prevent and/or manage common fruit production problems (e.g. pests, diseases, poor growing conditions). (Derived from Mark et al., 2016)</p> <p>__% of participants in the training reported that they intend to implement at least one new sustainable production practice on their farm in the next year.</p>	<p>After participating in this workshop, how would you rate your interest in learning more about food safety regulations that apply to your farming operation? 1) No interest; 2) Little interest; 3) Some interest; 4) Interest; 5) High interest; 6) Unsure</p> <p>Of the practices demonstrated and discussed in the field day, how many of the practices would you like to explore implementing on your own ranch? 1) One; 2) Two; 3) Three; 4) Four or more; 5) Unsure</p>
MEDIUM-TERM	Actions	<ul style="list-style-type: none"> <li>Creates a food safety plan</li> <li>Implements new production techniques</li> <li>Adds a new crop, commodity, or value-added product to the farm plan</li> </ul>	<p>__% of participants report that they have completed or made good progress on a food safety plan within 6 months of attending the workshop.</p>	<p>In the past 6 months, what progress have you made on a food safety plan for your farming or ranching operation? 1) None; 2) Started a plan; 3) Made progress on plan; 4) Completed plan</p>
	Results/ Impacts	<ul style="list-style-type: none"> <li>Increase in amount of food produced</li> <li>Increase in sales made to a local market</li> <li>Increase in amount of land being farmed with sustainable practices</li> <li>Passes a food safety inspection</li> </ul>	<p>__% of participants report that they have adapted practices that increased productivity in the year after completing this program. (Derived from Angelic Organics Learning Center, Inc., 2012)</p>	<p>"Over the last 5 years, has the amount of land you have in sustainable production changed? 1) Increased; 2) Decreased; 3) Stayed the same" (Farm Beginnings Collaborative, 2015)</p>

# MARKETING

	OUTCOME CATEGORIES	EXAMPLE OUTCOMES	EXAMPLE INDICATORS	EXAMPLE QUESTIONS FOR DATA GATHERING TOOLS
SHORT-TERM	Knowledge and Skills	<ul style="list-style-type: none"> <li>Understands benefits and challenges of various marketing strategies</li> <li>Has knowledge of marketing outlet options</li> </ul>	<p>___% of participants report learning “a great deal” about new marketing strategies applicable to their business.</p>	<p>As a result of this training, I now have a better understanding of the marketing outlets available to me.</p> <ol style="list-style-type: none"> <li>1) Strongly disagree;</li> <li>2) Moderately disagree;</li> <li>3) Neither agree nor disagree;</li> <li>4) Moderately agree;</li> <li>5) Strongly agree</li> </ol>
	Attitudes and Intentions	<ul style="list-style-type: none"> <li>Develops confidence in ability to attract customers</li> <li>Has confidence in ability to access markets</li> <li>Intends to pursue a new marketing outlet</li> <li>Intends to create and use new marketing materials (e.g. logo, business card, signage, etc.)</li> <li>Intends to create a marketing plan</li> </ul>	<p>___# workshop participants feel more confident in their ability to sell their products in a new market.</p> <p>___% of participants plan to begin selling their products to a new market in the next 12 months.</p>	<p>Please rate your level of confidence in expanding to a new market both before and after completing this day-long training. Rating scale: 1 to 7, where 1 = Not very confident and 7 = Very confident (pre and post survey question)</p> <p>What new market opportunities do you intend to use in the following season? 1) CSA; 2) Wholesale; 3) Direct to restaurants; 4) Direct to grocery stores; 5) Farmers’ market(s); 6) Farm stand or on-farm retail; 7) Internet/online; 8) Other _____</p> <p>(Derived from Farm Beginnings Collaborative, 2015)</p>
	Actions	<ul style="list-style-type: none"> <li>Develops new marketing materials for the farm (e.g. logo, business card, signage, social media, website, etc.)</li> <li>Sells produce through multiple marketing outlets</li> <li>Adds a new market venue</li> <li>Obtains assistance from state agencies that promote “made in _____” products</li> </ul>	<p>___% of participants create new marketing materials within 6 months of the training.</p> <p>___# program participants expanded to a new market over the past year.</p>	<p>“Which marketing materials have you developed since your participation in the program, if any? 1) Marketing plan; 2) Logo; 3) Business card; 4) Brochures; 5) Flyers; 6) Signs; 7) Social media pages; 8) Other”</p> <p>(Mark et al., 2016)</p>
	Results/ Impacts	<ul style="list-style-type: none"> <li>Increase in prices received for products at markets</li> <li>Increase in sales of farm products</li> <li>Increase in financial well-being</li> </ul>	<p>___% of participants reported that the amount of product being sold is “more than before” the training.</p> <p>(Derived from Mark et al., 2016)</p>	<p>A year following my participation in _____ program, my farm sales have: 1) Decreased; 2) Stayed the same; 3) Increased slightly; 4) Increased moderately; 5) Increased significantly</p>

# BUSINESS AND FINANCIAL

	OUTCOME CATEGORIES	EXAMPLE OUTCOMES	EXAMPLE INDICATORS	EXAMPLE QUESTIONS FOR DATA GATHERING TOOLS
SHORT-TERM	Knowledge and Skills	<ul style="list-style-type: none"> <li>• Understands how to set short- and long-term goals for a farm business</li> <li>• Understands how to use financial statements (balance sheet, cash flow, etc.)</li> <li>• Understands importance of using a balance sheet</li> <li>• Understands how to create a farm business plan</li> <li>• Understands basic book keeping and record keeping skills</li> <li>• Understands available business structures</li> <li>• Has knowledge of farming tax laws</li> <li>• Understands insurance needs for a farm (e.g. general liability, etc.)</li> </ul>	<p>__% of participants demonstrate an increased understanding of what business management skills are important for a farming/ranching operation.</p>	<p>“How Important is it to you to learn more about how to use your balance sheet and income statement to understand and manage your farm or ranch business? 1) Not important; 2) Somewhat important; 3) Important but not a priority; 4) Important; 5) Very important/High priority?”</p> <p>(Farm Credit Council, 2019)</p>
	Attitudes and Intentions	<ul style="list-style-type: none"> <li>• Has confidence in ability to make decisions based on financial statements</li> <li>• Intends to create/edit/update business plan</li> <li>• Intends to use financial statements to make decisions</li> <li>• Intends to consult or hire accounting or tax professionals</li> </ul>	<p>__ % of workshop participants reported increased confidence in their ability to develop an effective business plan.</p> <p>__% of participants intend to consult with a financial professional (accountant and/or tax advisor) within the following year.</p>	<p>Rate your comfort level using the following budgeting documents: (List documents and have a 1 to 4 rating scale for each with 1 = low and 4 = high)</p> <p>In the next 12 months, I intend to develop a new business plan or make changes to an existing plan. 1) Definitely not; 2) Unlikely; 3) Possible; 4) Probably; 5) Definitely</p>
MEDIUM-TERM	Actions	<ul style="list-style-type: none"> <li>• Develops financial tracking documents</li> <li>• Forms an LLC or corporation</li> <li>• Creates a business bank account</li> <li>• Uses financial documents to make decisions</li> <li>• Creates or improves an existing business plan</li> </ul>	<p>__% of trainees report that they took important step/s to improve their business financial system/s within 6 months of the program.</p> <p>__# program participants reported they improved their book and recordkeeping systems after the training.</p>	<p>“Which of the following documents have you created as part of your financial plan within a year after the program? (Check all that apply) 1) Balance sheet; 2) Budget [year]; 3) Cash flow [year]; 4) None of them”</p> <p>(Farm Stewardship Project, 2016)</p> <p>In the past growing season, how often did you use your balance sheet to help you understand your business? 1) Never; 2) Rarely; 3) Sometimes; 4) Regularly</p> <p>(Derived from Farm Credit Council, 2019)</p>

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## BUSINESS AND FINANCIAL *continued*

	OUTCOME CATEGORIES	EXAMPLE OUTCOMES	EXAMPLE INDICATORS	EXAMPLE QUESTIONS FOR DATA GATHERING TOOLS
MEDIUM-TERM	Results/ Impacts	<ul style="list-style-type: none"> <li>• Increase in income</li> <li>• Increase in business health</li> <li>• Business appears sustainable</li> <li>• Re-investment of business profits</li> </ul>	<p>__% of participants reported increasing their gross income in two years after leaving the program.</p> <p>__% of students increase their score on the Business Health Assessment by 20% between pre and post assessments. (See Farm Credit Council (2019), for an instrument that assesses Business Health)</p>	<p>“How did your gross income (total revenue) from farm production compare to last year? 1) Increase; 2) Stayed the same; 3) Decrease; 4) Don’t know”</p> <p>(Farm Beginnings Collaborative, 2015)</p>



# RESOURCES - LAND ACCESS

	OUTCOME CATEGORIES	EXAMPLE OUTCOMES	EXAMPLE INDICATORS	EXAMPLE QUESTIONS FOR DATA GATHERING TOOLS
SHORT-TERM	Knowledge and Skills	<ul style="list-style-type: none"> <li>Understands how to articulate land needs (such as how much land to lease or purchase)</li> <li>Has knowledge of farmland acquisition basics</li> <li>Understands how to identify land suitable for production</li> <li>Understands components of a sound lease or license agreement</li> </ul>	<p>__% of program participants report better understanding of their needs for suitable land and resources to realize their farm vision and plan.</p> <p>All training participants could identify new resources to help them identify and access land.</p>	<p>Please rate this workshop's value in helping you to assess a farm site suitable for your farming goals and needs.</p> <p>1) Not valuable; 2) Slightly valuable; 3) Somewhat valuable; 4) Valuable; 5) Very valuable</p>
	Attitudes and Intentions	<ul style="list-style-type: none"> <li>More confident making land tenure decisions (e.g., understanding their options)</li> <li>More confident regarding where to turn for farmland advising/help/support</li> <li>Intend to develop a land search plan</li> <li>Plan to use online farm link or farm land finder websites</li> </ul>	<p>40% (6/15) of participants feel increased confidence in making informed decisions about gaining access to farmland.</p> <p>(Derived from Mark et al., 2016)</p> <p>__% of participants reported that they plan to utilize available services to help create a lease.</p>	<p>Please rate your confidence in making sound decisions about accessing farm or ranch lands after completing this program.</p> <p>1) Low; 5) High</p> <p>As a result of the workshop series, I feel confident I can get the help I need to secure a land lease. 5) Strongly agree; 4) Moderately agree; 3) Neither agree nor disagree; 2) Moderately disagree; 1) Strongly disagree</p>
MEDIUM-TERM	Actions	<ul style="list-style-type: none"> <li>Develops a farm search plan</li> <li>Assesses suitability of land for a farm enterprise</li> <li>Secures a sound lease agreement</li> <li>Purchases land</li> </ul>	<p>__# workshop participants complete a farm search plan by the end of the 3-month course.</p> <p>__% of program participants secured or improved upon a written lease within a year after the program.</p>	<p>Since completing the program, I have secured a written lease for ____ acres.</p> <p>Since completing the program, I have purchased ____ acres of farmland to start or improve my farm business.</p>
	Results/Impacts	<ul style="list-style-type: none"> <li>Have more secure land tenure</li> <li>Expanded acreage available to farm business</li> <li>Made infrastructure investments or improvements to farm or ranch land</li> </ul>	<p>__# farmers make financial investments/improvements to the land 3 years following program participation.</p>	<p>How likely is it that you will own or continue to own your farmland in five years?</p> <p>1) Not probable; 2) Somewhat improbable; 3) Neutral; 4) Somewhat probable; 5) Very probable</p>

# RESOURCES - SUCCESSION

	OUTCOME CATEGORIES	EXAMPLE OUTCOMES	EXAMPLE INDICATORS	EXAMPLE QUESTIONS FOR DATA GATHERING TOOLS
SHORT-TERM	Knowledge and Skills	<ul style="list-style-type: none"> <li>Has knowledge of farm succession planning components and options</li> <li>Recognizes the dynamics, complications and challenges of achieving a successful farm transfer</li> </ul>	<p>__% of participants report having a better understanding of their goals, readiness, options and pathways to transition or transfer land to a successor or next generation farmer.</p>	<p>Please rate the increase in your understanding of what constitutes a farm succession plan as a result of this workshop. 1 to 5 scale with 1 = no increase to 5 = significant increase</p>
	Attitudes and Intentions	<ul style="list-style-type: none"> <li>Has confidence that a successful farm transfer is possible</li> <li>Intends to develop a comprehensive farm succession or transfer plan</li> </ul>	<p>__% of participants reported feeling comfortable with their ability to discuss their transition plans with their families.</p> <p>70% of attendees plan to develop at least one component of a farm transition plan in the next 6 months (e.g. asset transfer, management transfer, business plan, estate, retirement, land use, goal setting &amp; family communication).</p> <p>(Derived from Land for Good, n.d.)</p>	<p>As a result of this training, I feel confident in my ability to talk with my family about my farm transition plans. 1) Strongly agree; 2) Moderately agree; 3) Neither agree nor disagree; 4) Moderately disagree; 5) Strongly disagree</p> <p>Which component of a transition plan do you intend to work on prior to our next session?</p>
MEDIUM-TERM	Actions	<ul style="list-style-type: none"> <li>Develops a farm succession or transfer plan</li> <li>Works with a financial adviser to determine needs for retirement</li> </ul>	<p>__#__% of program participants have received assistance from a relevant professional on their transition plan.</p> <p>__# __% of program participants have completed at least one component of their farm transfer plan in the past 9 months.</p>	<p>Since completing this program, how many components of your farm transfer plan have you started developing? ____ Completed? ____</p> <p>Since completing this training, I have developed or completed the following components of a farm transfer plan. [List components of farm transfer plan and have respondents rate each one with the following response options: a) Haven't started yet; b) Started/working on this; c) Completed]</p>
	Results/ Impacts	<ul style="list-style-type: none"> <li>Have more secure land tenure</li> <li>Expanded acreage available to farm business</li> <li>Made infrastructure investments or improvements to farm or ranch land</li> </ul>	<p>__% of participants indicated that they are prepared to pass the farm on after they are no longer farming.</p>	<p>Please rate your level of confidence that your farm will continue to operate and be successful. Rating scale: 1 to 5, where 1 = Little confidence and 5 = Very confident</p>

# RESOURCES - LABOR, FINANCING AND MATERIALS

	OUTCOME CATEGORIES	EXAMPLE OUTCOMES	EXAMPLE INDICATORS	EXAMPLE QUESTIONS FOR DATA GATHERING TOOLS
SHORT-TERM	Knowledge and Skills	<ul style="list-style-type: none"> <li>• Has knowledge of suppliers of tools and equipment necessary to run a farm enterprise</li> <li>• Has knowledge about farm labor options</li> <li>• Understands state and federal farm labor laws, rules and regulations</li> <li>• Has knowledge of various forms of financing available to beginning farmers</li> <li>• Understands how to improve creditworthiness</li> <li>• Understands how to make decisions about taking on debt</li> <li>• Understands what a credit score is and why it is important</li> </ul>	<p>__% of workshop participants reported having a better understanding of farm labor laws in their state/area.</p> <p>__# __% of webinar participants who reported having a better understanding of different types of financing available to them.</p>	<p>I better understand the difference between operating credit, credit for asset purchase or improvement, and credit for land acquisition as a result of this workshop.</p> <p>5) Strongly agree; 4) Somewhat agree; 3) Neutral; 2) Somewhat disagree; 1) Strongly disagree</p> <p>(Derived from Farm Credit Council, 2019)</p>
	Attitudes and Intentions	<ul style="list-style-type: none"> <li>• Develops confidence in ability to employ workers on farm</li> <li>• Has confidence in ability to apply for financial assistance from federal or state farm programs</li> <li>• Intends to apply for a loan</li> <li>• Intends to learn more about the requirements for employing workers on farm or ranch</li> </ul>	<p>__% of participants report that they would like to learn more about how and where to find potential farm workers.</p> <p>__% of program participants who plan to apply for a loan within the next 12 months to improve their farm business.</p>	<p>I now feel more confident to secure outside labor for my farm. 5) Strongly agree; 4) Agree; 3) Neutral; 2) Disagree; 1) Strongly disagree</p> <p>How likely are you to apply for a loan within the next 12 months? Please rate your answer on a scale of 1 - 5, where 1 = Not likely and 5 = Very likely.</p>
MEDIUM-TERM	Actions	<ul style="list-style-type: none"> <li>• Hires additional labor for the farm</li> <li>• Participates in farm-related programs (e.g. USDA, FSA, NRCS)</li> <li>• Applies for a loan</li> </ul>	<p>__% of participants have hired new employees to work on their farm in the 6 months after the workshop.</p> <p>__# technical assistance session recipients completed applications for NRCS programs within 4 months after their last session.</p>	<p>Since your time in this program, have you participated in any USDA programs (e.g. FSA, NRCS)? If so, please elaborate on the programs or organizations.</p> <p>(Derived from New Mexico State University, 2012)</p>
	Results/ Impacts	<ul style="list-style-type: none"> <li>• Receives a loan from a government farm-related program</li> <li>• Increased farm production by hiring new workers</li> </ul>	<p>__# participants receive farm operation loans within 2 years of completing the program.</p>	<p>Since graduating from the program, have you received a loan for your farm business to do any of the following activities (check all that apply)?</p> <p>1) Purchase land; 2) Purchase equipment; 3) Pay for operating expenses ; 4) Implement conservation practices; 5) Other_____</p>

# COMMUNITY SUPPORT

	OUTCOME CATEGORIES	EXAMPLE OUTCOMES	EXAMPLE INDICATORS	EXAMPLE QUESTIONS FOR DATA GATHERING TOOLS
SHORT-TERM	Knowledge and Skills	<ul style="list-style-type: none"> <li>• Has knowledge of town, state, or national officials who can provide assistance</li> <li>• Understands importance of participation in agriculture or farming related organizations</li> </ul>	<p>__% of participants reported that they learned of organizations and agencies to contact for assistance with their farm.</p>	<p>As a result of this program, I am aware of how to get in contact with my local Extension agent. 1) Yes; 2) No; 3) Unsure</p> <p>List 3 new organizations/agencies discussed at this workshop that can provide assistance to your farming operation.</p>
	Attitudes and Intentions	<ul style="list-style-type: none"> <li>• Has confidence in ability to locate professionals and officials in regards to farm matters</li> <li>• Intends to stay in contact with other training program participants</li> <li>• Intends to contact mentor or senior farmers/ranchers for support or assistance</li> </ul>	<p>__% of workshop participants feel confident they can locate agriculture professionals when they need agronomic help.</p> <p>__% of program participants intend to contact a farmer in their area for mentoring and assistance in the next two months.</p>	<p>How valuable do you believe it is to join an organization that advocates for public policy that supports your farming interests? 1) Not valuable; 2) Undecided; 3) Somewhat valuable; 4) Valuable; 5) Very valuable</p> <p>How likely are you to follow up with a farmer you met at the mixer for mentoring or farm advice? 1) Extremely unlikely; 2) Unlikely; 3) Undecided; 4) Likely; 5) Extremely likely</p>
MEDIUM-TERM	Actions	<ul style="list-style-type: none"> <li>• Maintains contact with peers, expert farmers, or other professionals met at learning or networking events</li> <li>• Contacts farm support agencies</li> <li>• Joins a farming or ranching group or association</li> <li>• Becomes more engaged in the political process regarding farming or ranching issues</li> </ul>	<p>__% of participants indicated that they stayed in contact with other farmers from their program after completion. (Derived from Mark et al., 2016)</p> <p>__% of program participants joined a farming/ranching group or association in the last year.</p>	<p>Are you a dues-paying member of an association that provides you with information and advocacy about legal and regulatory aspects of farming? 1) Yes; 2) No; 3) Unsure (Derived from Farm Credit Council, 2019)</p> <p>How many times have you received advice, information or direction from farm support agencies or organizations over the past year? _____</p>
	Results/Impacts	<ul style="list-style-type: none"> <li>• Farmers and ranchers feel they can get help when they need it</li> <li>• Farmers and ranchers became community leaders</li> <li>• Farmers and ranchers feel that their connections helped improve their business success</li> </ul>	<p>__% of participants indicated that the help they received from peers and/or mentor farmers positively impacted their farming or ranching business.</p>	<p>As a farmer, I am someone who makes a difference in my community/has a positive impact. 4) Very like me; 3) Somewhat like me; 2) Somewhat unlike me; 1) Definitely unlike me</p>

# START FARMING

	OUTCOME CATEGORIES	EXAMPLE OUTCOMES	EXAMPLE INDICATORS	EXAMPLE QUESTIONS FOR DATA GATHERING TOOLS
SHORT-TERM	Knowledge and Skills	<ul style="list-style-type: none"> <li>Understands the broad knowledge base needed to operate a successful farm or ranch</li> <li>Has ability to create a vision and goals related to starting a farm or ranch</li> <li>Aware of a number of options and possible paths to start farming or ranching</li> </ul>	<p>__% of program participants report they better understand the agronomic, business and relational knowledge and skills it takes to farm.</p> <p>__% of program participants can envision new ways to launch their farming career.</p>	<p>After attending this introduction to farming workshop, I better understand the knowledge, skills and resources that are required to operate an independent farm business. 1) Strongly disagree; 2) Disagree; 3) Neutral; 4) Agree; 5) Strongly agree</p>
	Attitudes and Intentions	<ul style="list-style-type: none"> <li>Has confidence in ability to start farming or ranching</li> <li>Intends to start farming or ranching</li> </ul>	<p>__# participants indicated confidence in their ability to manage a small-scale farm at the end of the 6-month program.</p> <p>“1/3 of participants plan to continue their farming education next year.” (First Generation Farmers, 2017)</p> <p>72% of participants plan to start farming after participating in this program. (Derived from Angelic Organics Learning Center, Inc., 2012)</p>	<p>Please identify the most accurate statement about your farming plans for the next year (choose all that apply): 1) I plan to start a farm business; 2) I plan to manage a farm; 3) I plan to work/apprentice on a farm; 4) I plan to continue my farming education; 5) I plan to do other work to support my ultimate plans to farm; 6) I plan to leave farming; 7) Other: _____</p>
MEDIUM-TERM	Actions	<ul style="list-style-type: none"> <li>Develops a comprehensive farming or ranching plan</li> <li>Takes action to start farming or ranching</li> <li>Gains more experience working on a farm (as a volunteer, worker, intern, apprentice)</li> <li>Starts farming or ranching</li> <li>Transitions from incubators to independent businesses</li> <li>Decides not to continue farming or ranching</li> </ul>	<p>__% of participants who took action to start a farm business, which includes any of the following activities, within the year after the program: researched or participated in continuing education; worked on a business plan; worked on a farm, explored farm financing, etc.</p> <p>__# participants plan to start ranching in the year after the program.</p> <p>“75% of Incubator farmers continue farming beyond the incubator.” (Global Growers Network, 2017)</p>	<p>Since leaving the program, have you earned income from selling food or other agricultural products you have grown/raised? 1) Yes; 2) No; 3) Unsure</p> <p>“If you are no longer farming or interested in farming, what did you learn from the program that led you to make this decision, if anything?” (Mark et al., 2016)</p>

# FARMER SUCCESS

There are many ways to define farmer success. The structure and substantial content of the first 3 columns (dimensions of success, categories, example outcomes) were used, with permission, directly from Pool (2014, p. 70). Her research, and the research her project was built upon (including definitions of small business success), explored the multiple ways small-scale farmers define success for themselves. These outcomes can be used refine a program's definitions of success, or identify if a program is meeting different farmer definitions of success.

		CATEGORIES	EXAMPLE OUTCOMES	EXAMPLE INDICATORS	EXAMPLE QUESTIONS FOR DATA GATHERING TOOLS
MEDIUM-TERM	SOCIAL	Belief or Cause	<ul style="list-style-type: none"> <li>Addressing environmental causes (i.e. sustainable agriculture, biodiversity)</li> <li>Addressing farming causes (i.e. preserving breeds, maintaining farming skills)</li> </ul>	<p>"73% (66/90) increased knowledge and practices in environmental sustainability."</p> <p>(The University of Texas – Pan American, 2012)</p>	<p>Is your farm certified organic? 1) Yes; 2) In Process; 3) No</p> <p>(Derived from Farm Credit Council, 2019)</p>
		Community	<ul style="list-style-type: none"> <li>Building relationships</li> <li>Providing healthy food</li> <li>Being an employer</li> </ul>	<p>"90% of participants in programming report an increased sense of community as a result of participating."</p> <p>(Practical Farmers of Iowa, 2017)</p>	<p>As a farmer, I am making healthy food more available to my community. 1) Not at all; 2) Very little; 3) Somewhat; 4) Significantly</p>
	OPERATIONAL	Production	<ul style="list-style-type: none"> <li>High product quality</li> <li>Adhering to desired production practices</li> <li>Achieving efficiency</li> </ul>	<p>__% of participants indicated that they are implementing their desired production practices.</p>	<p>To what extent have the changes you've made to your production practices, as a result of the trainings, helped your operation be more efficient? 1) No difference; 2) Minor difference; 3) Some difference; 4) Strong difference; 5) Significant difference</p>
		Markets	<ul style="list-style-type: none"> <li>Customer satisfaction</li> <li>Favorable reputation in the marketplace</li> <li>Long-term, loyal customers</li> </ul>	<p>__% of participants report feeling that they have a positive relationship with their customers.</p>	<p>How important is developing long-term customers to your farm business? 1) Not a priority; 2) Low priority; 3) Somewhat of a priority; 4) Neutral; 5) Moderate priority; 6) High priority; 7) Essential priority</p>

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# FARMER SUCCESS *continued*

		CATEGORIES	EXAMPLE OUTCOMES	EXAMPLE INDICATORS	EXAMPLE QUESTIONS FOR DATA GATHERING TOOLS
MEDIUM-TERM	QUALITY OF LIFE	Lifestyle	<ul style="list-style-type: none"> <li>Achieving work life balance</li> <li>Staying home to raise a family</li> <li>Lifelong Learner</li> </ul>	<p>“An average of 59% of participants experienced improved satisfaction in their quality of life.”</p> <p>(Holistic Management International, 2012)</p>	<p>“Compared to when you enrolled in the [program name], how would you rate your quality of life? 1) I’m more satisfied with my quality of life; 2) I feel about the same; 3) I’m less satisfied with my quality of life”</p> <p>(Land Stewardship Project, 2016)</p>
		Personal Satisfaction	<ul style="list-style-type: none"> <li>Work satisfaction</li> <li>Feeling of accomplishment</li> <li>Enjoying continued learning and the challenge of the occupation</li> </ul>	<p>__# participants report the program helped them increase their feeling of accomplishment.</p>	<p>Rate the level of personal satisfaction farming gives you on a 1 to 5 scale, where 1 is none and 5 is great satisfaction.</p>
		Well-being (basic needs)	<ul style="list-style-type: none"> <li>Food security</li> <li>Implement cultural/spiritual practices (connection to land, access to familiar foods, etc.)</li> <li>Farmers physical and emotional health</li> </ul>	<p>__% of participants indicated that farming helps them to feel more confident in their food security.</p>	<p>In general, my farming or ranching operation has helped me/my family better meet basic needs for well-being (such as improved access to quality/preferred foods, improved mental health, ability to connect with cultural or spiritual practices). 5) Strongly agree; 4) Moderately agree; 3) Neither agree nor disagree; 2) Moderately disagree; 1) Strongly disagree</p>
	FINANCIAL	Solvency/ Financial Stability	<ul style="list-style-type: none"> <li>Farmer is making a living/household more financially secure</li> <li>Farm is still in business</li> <li>Farmer is achieving desired hourly wage</li> </ul>	<p>__% of participants met or exceeded their goals for income in the last 12 months.</p> <p>(Derived from Angelic Organics Learning Center, Inc., 2012)</p>	<p>During the past season, did you meet your goals for family income from products produced on your farm? 1) Exceeded my goals; 2) Met my goals; 3) Fell just short of my goals; 4) Was way below my goals”</p> <p>(Farm Beginnings Collaborative, 2015)</p> <p>To what extent did this program contribute to your ability to keep farming? 5) A great deal; 4) a lot; 3) A moderate amount; 2) A little; 1) Not at all</p>
		Productivity/ Growth	<ul style="list-style-type: none"> <li>Increasing gross sales or net income</li> <li>Increasing capacity for production (i.e. additional acreage)</li> <li>Wealth generation</li> </ul>	<p>__% of participants reported increased profitability in the past 3 years.</p>	<p>Farm expenses can be categorized as: a) Inescapable; b) Maintenance; or c) Wealth generating. Have you made any “wealth generating” investments this year? 1) Yes; 2) No; 3) Unsure. If yes, what investments have you made? Do you plan to make any “wealth generating” investments in the coming year?</p> <p>(Derived from Land Stewardship Project, 2016)</p>



## AUDIENCE SPECIFIC OUTCOMES

Since the BFRDP has prioritized specific audiences in its previous requests for applications (RFA)—military veterans, limited resource, farmer workers, immigrants/refugees, and socially disadvantaged groups<sup>1</sup>— example metrics for these audiences have been included below. While these metrics might often be thought of as outputs (counting numbers served) or process measures (looking at how well a program is implemented), for programs aiming to increase equity these can be seen as outcomes as well. For other organizations working with these audiences, these are examples of other measures that may be useful to explore in an evaluation focusing beyond just outcome measurement. Please note that the authors found few examples or resources available for evaluating farmer training programs on the topics below. Consider our initial efforts a starting place for further exploration. These examples are illustrative, and not comprehensive.

OUTCOME CATEGORIES	EXAMPLE OUTCOMES/ PROCESS MEASURES	EXAMPLE INDICATORS	EXAMPLE QUESTIONS FOR DATA GATHERING TOOLS
<b>Equity</b>	<ul style="list-style-type: none"> <li>• Increased awareness of program opportunities for socially disadvantaged and limited income farmers</li> <li>• Increased participation from socially disadvantaged and limited income farmers<sup>2</sup></li> <li>• Short- and medium-term outcomes are happening equally for all cultural groups</li> <li>• Program or project structure addresses inequities in the food system<sup>3</sup></li> </ul>	<p>“Majority of underserved minority producers in target area will be aware of and familiar with the project and its risk management education training activities.” (Alabama A&amp;M University, 2017)</p> <p>__% increase in participation in government programs that serve socially disadvantaged farmers.</p> <p>Services that help ensure participants can take full advantage of program benefits are in place and communicated.<sup>3</sup></p>	<p>Reflection question for program staff - “[How] do people of color or socially disadvantaged individuals have a greater opportunity to remain or become economically sustainable farms as a result of this program or policy?” (National Farm to School Network, 2019)</p> <p>To what extent did the workshop presenter/s address the current inequalities in the US food system? 1) Not at all; 2) Undecided; 3) Somewhat; 4) Adequately; 5) Significantly</p>
<b>Inclusion</b>	<ul style="list-style-type: none"> <li>• Participants feel included<sup>3</sup></li> <li>• Participants feel seen/ addressed<sup>3</sup></li> <li>• Participants who identify as socially disadvantaged continue to participate in the program<sup>3</sup></li> <li>• Participants recommend the program to their peers<sup>3</sup></li> <li>• Participants become active in program design<sup>3</sup></li> </ul>	<p>__% of participants reported that they felt this program was inclusive and accessible.</p> <p>__# new participants were recruited by current or past participants.</p>	<p>“What is [positive] about this [program] in terms of inclusion? What [is problematic] about this [program] in terms of inclusion?”<sup>4</sup> (Kim, 2017)</p> <p>To what extent has the program been respectful towards those who identify as: a) People of color? b) LGBTQ+? c) People with disabilities? d) ....? Answer each question with this rating scale: 1) Never; 2) Rarely; 3) Sometimes; 4) Often; 5) Extremely often; 6) Don’t know<sup>4</sup> (Derived from University of Wisconsin-Madison, 2017)</p>

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## AUDIENCE SPECIFIC OUTCOMES *continued*

OUTCOME CATEGORIES	EXAMPLE OUTCOMES/ PROCESS MEASURES	EXAMPLE INDICATORS	EXAMPLE QUESTIONS FOR DATA GATHERING TOOLS
<b>Cultural Competence</b>	<ul style="list-style-type: none"> <li>• Instructors demonstrate cultural competence<sup>3</sup></li> <li>• Curricula materials reflect participants lived experience and cultural heritage/ contributions<sup>3</sup></li> <li>• Language is appropriate for the audience (ESL, multiple languages)<sup>3</sup></li> </ul>	<p>__% of participants indicated that the instructors of this course were culturally sensitive.</p>	<p>Please rate the cultural competence of the class instructor on a 7-point scale, where 1 is not at all competent, and 7 is very competent.</p> <p>(Derived from CASFS, 2019)</p>
<b>Specific Needs</b>	<ul style="list-style-type: none"> <li>• People of color feel there are program staff and/or presenters who understand their experience (from similar backgrounds)<sup>3</sup></li> <li>• Military veterans feel program design reflects their experience<sup>3</sup></li> <li>• Women feel they have a network of other farmer/ rancher women to call on for support</li> <li>• Those who identify as LGBTQ+ feel connected to an LGBTQ+ supportive community within their farming circle</li> <li>• Immigrants/refugees gain numeracy/literacy skills</li> <li>• Immigrants/refugees gain access to culturally appropriate foods</li> </ul>	<p>20 women who had already begun farming were paired for off-farm mentorships in order to build connections with experienced women farmers.</p> <p>(Derived from Women, Food and Agriculture Network, 2012)</p>	<p>Throughout this program, I found value in working with staff members who came from military backgrounds.</p> <p>5) Strongly agree; 4) Moderately agree; 3) Neither agree or disagree; 2) Moderately disagree; 1) Strongly disagree</p> <p>How many times did you contact other women farmers in the program for advice and support this year?</p>

<sup>1</sup> A socially disadvantaged group has been defined for the BFRDP program as "...a group whose members have been subjected to racial, ethnic, or gender prejudice because of their identity as members of a group without regard to their individual qualities." United States Department of Agriculture. 2019. Beginning Farmer and Rancher Development Program: Fiscal 2019 and 2020 Request for Applications, Page 44. <https://nifa.usda.gov/sites/default/files/grant/FY19-FY20-BFRDP-RFA-Mod1-20190423.pdf>

<sup>2</sup> While counts of people that attended trainings are usually considered an output, for a program focused on improving equity, they may be considered an outcome.

<sup>3</sup> These items are generally considered process measures, used to explore how well the program is being implemented. For a program focused on improving equity, they may be considered an outcome.

<sup>4</sup> These example questions are derived from organizational surveys that collect information from larger groups of respondents. Care should be taken when adapting such questions to a smaller program sample. Think carefully about protecting participant anonymity. As with all survey development, it is good practice to solicit feedback on the questions and data collection process from the groups who will eventually be surveyed.



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*Identifying Outcomes for Program Evaluation is a product of the GREW Project. The GREW Project aims to help beginning farmer and rancher training organizations to develop and carry out program evaluations more easily, provide more useful information for all stakeholders, and continually improve their efforts to help farmers be more successful.*

## ACKNOWLEDGEMENTS

The following GREW Project advisors have provided valuable insight and contributions to the document: Tom Archibald (Virginia Tech); Jim Hafner (Land for Good); Gary Matteson (Farm Credit Council); Amy Bacigalupo (Land Stewardship Project); Beth Holtzman (University of Vermont Extension); Chris Brown (Agriculture & Land-Based Training Association). Additional contributions were made by Virginia State University's Small Farm Outreach Program staff, Andrea Brown (Global Gardens), Eugenia Gusev (International Rescue Committee), Katie Painter (Global Gardens), Matthew Thorne (Organizations for Refugee and Immigrant Success).

Additional thanks go to all those who supported the development of this document: Erin Foley (editor); Jane Bolling (graphic design); Daniel Press; Stacy Philpott.

The GREW Project is supported by the USDA National Institute of Food and Agriculture, Beginning Farmer & Rancher Development Program, project 2018-70017-28606. It is also supported by its partner and advisory team organizations.

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The Center for Agroecology & Sustainable Food Systems at the University of California, Santa Cruz is a research and education center dedicated to increasing ecological sustainability and social justice in the food and agriculture system.

Suggested Citation: Perez, Jan, Allyssa Mark, Pam Mavrolas, Kim Nielwolny; Jennifer Hashley and Damian Parr. 2020. *Identifying Outcomes for Program Evaluation: Example Outcomes for Beginning Farmer and Rancher Training and Support Efforts*. University of California, Santa Cruz, Center for Agroecology & Sustainable Food Systems. Santa Cruz, CA.

Photos are courtesy of Carolyn Lagattuta for CASFS, UCSC: Cover, page 5, and page 20; Martha Brown for CASFS, UCSC: page 9; Virginia Tech page 2, page 3, and page 18; New Entry Sustainable Farming Project page 4.