

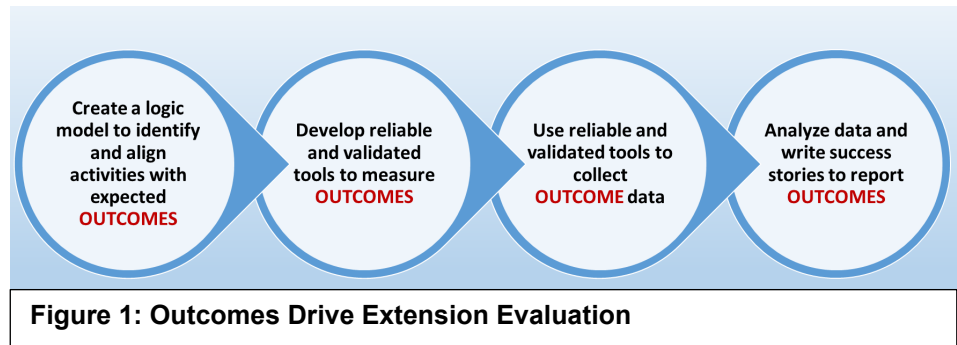
Identifying Extension Program Outcomes

Omolola A Adedokun

Introduction

The goal of Extension is to translate research into actionable knowledge and skills that clients can use to effect behavior change and improve their lives, livelihoods, and communities. However, Extension faces stricter requirements for accountability and increasing demand for impact documentation to justify continued funding. Hence, Extension evaluation has become much more outcome and impact driven.

The primary aim of Extension evaluation is to identify, measure, and report the outcomes of programmatic and outreach efforts. Extension evaluation typically begins with the creation of a logic model to identify and align program activities with program outcomes,



followed by the development and implementation of data collection tools (e.g., surveys, interview schedules, and observation protocols) to measure outcomes, and the development of success stories and impact statements to report and disseminate program outcomes (see Figure 1¹). In a sense, outcomes are the currency of Extension evaluation. However, Extension specialists often struggle with identifying, measuring, and documenting the outcomes of their programs. The purpose of this article is to describe and illustrate the different levels of program outcomes. The article should serve as a useful resource for Extension specialists in identifying and differentiating among levels of outcomes for their programs.

What are Program Outcomes?

Program outcomes are the measurable or observable end-results attributable to a program. Outcomes can also be described as the measures of program impact or effectiveness—i.e., the changes or improvements that result from participating in a program.

The W K Kellogg Foundation Logic Model Development Guide² identifies three levels of program outcomes: short-term (initial) outcomes, medium-term (intermediate) outcomes, and long-term outcomes.

- **Short-term Outcomes:** Demonstrated and/or self-reported improvements in knowledge, awareness, attitudes, opinions, skills, and/or aspirations measurable immediately after participation in Extension programs or outreach efforts.

¹ Figure 1 is an original work of the author.

² WK Kellogg Foundation. (2004). Logic model development guide: Using logic models to bring together planning, evaluation, and action. WK Kellogg Foundation.

- **Medium-term Outcomes:** New or improved practices, behaviors, or choices that result from the knowledge, awareness, attitudes, opinions, skills, and/or aspirations that individuals gained from their participation in Extension programs or outreach. Also known as intermediate or behavior change outcomes, medium-term outcomes are observable or measurable actions that result from learning.
- **Long-term Outcomes:** The individual or community situations or conditions that changed or improved because individuals or communities adopted new (or improved existing) actions, practices, and behaviors. Markers of long-term outcomes (also known as impacts) can be improvements in individual or community social, economic, or environmental conditions resulting from an Extension program or outreach.

Outcomes and Time

While short-term outcomes can be observed or measured immediately after clients' participation in Extension programs or outreach, medium- and long-term outcomes typically require follow-up (or longitudinal) evaluation because behavior, actions, and practices take time to develop. The length of time between program delivery and follow-up depends on the nature of the program, content, and expected outcomes. For example, long-term outcomes from a diabetes management education program (e.g., improved blood glucose levels) may be noticeable within two weeks while long-term outcomes from a weed management education program (e.g., improved crop yield) may not be observable until the end of the growing season.

Identifying the anticipated outcomes of an Extension program or outreach effort is a necessary step in measuring and documenting impact. Outcome identification occurs during program ideation or planning. It is important for specialists to identify the outcomes of their programs before program delivery. Table 1 presents questions that can guide Extension Specialists in identifying appropriate levels of outcomes for their programmatic and outreach efforts.

Table 1: Guiding Questions for Identifying Levels of Outcomes

Tier of Outcomes	Brief Description	Guiding Question(s)
Short-term Outcomes	What specialists expect Extension clients to learn from an Extension program or contact.	<ul style="list-style-type: none"> • What is the knowledge, awareness, attitudes, opinions, skills and/or aspirations that participants are expected to gain or improve because of their contact with Extension or their participation in an Extension program?
Medium-term Outcomes	What specialists expect Extension clients to do (or be able to do) with the lessons from an Extension program or contact.	<ul style="list-style-type: none"> • What are participants expected to use the knowledge, opinions, awareness, skills, aspirations, or attitudes gained from their contact with Extension (or participation in an Extension program) to do? • What choices, behaviors, practices, or actions should participants be able to undertake because of lessons learned from their contact with Extension (or participation in an Extension program)?
Long-term Outcomes	Situations or conditions that change as a result of Extension clients doing something with the lessons/knowledge gained from an Extension program or contact.	<ul style="list-style-type: none"> • How will/has the program made the lives of participants better? • What are (expected) sustained improvements in the lives of participants and/or others affected by the original problem?

Illustrative Examples

The scenarios described below provide illustrative examples of Extension program outcomes. Scenario 1 describes the outcomes of a formal Extension program that involves the implementation of a curriculum, typical of most Family and Consumer Sciences (FCS) and 4-H programs. Scenario 2 describes the outcomes of brief Extension contacts and outreach, akin to the work of most Agricultural and Natural Resource Extension specialists. Scenario 2 also demonstrates how specialists can identify the outcomes of related or combination of Extension contact modes.

Outcomes vs Reach

Program reach is the extent to which an outreach activity attracts its intended audience. Reach can be measured as number of people who attend a program; number of materials distributed; website clicks, downloads, or views; etc. Although program reach is important, it is not an outcome because it does not capture changes in knowledge, behavior, or conditions as a result of a program. Extension specialists are required to report reach; however, outcomes can only be measured using an evaluation tool specific to the anticipated short-, medium-, or long-term outcomes.

Scenario 1

A recent community survey reported that two in three families in Gregson State lack any type of emergency savings and 63% of adults live paycheck to paycheck. These families often face difficulties in stretching their financial resources to meet basic needs. To address this challenge, Dr. Moe, a state FCS Extension Specialist, developed *Mind Your Money*, a curriculum that teaches limited-resource adults the skills needed to make informed financial decisions and adopt financial behaviors that can have positive effects on their financial well-being. Dr. Moe will train Extension agents to deliver the curriculum in their respective counties. Program implementation will occur over 8 weeks and include weekly sessions, two field trips to a local bank, and hands-on planning and budgeting activities.

Table 2: Potential Program Outcomes for Scenario 1

Short-term Outcomes	Medium-term Outcomes	Long-term Outcomes
<p><i>Participants will gain or increase their knowledge of personal finance concepts, specifically:</i></p> <ul style="list-style-type: none"> • Knowledge of how to write a budget • Knowledge of credit card interest rates and fees • Knowledge of the differences between savings and checking accounts 	<p><i>Participants will adopt personal finance management practices. Specifically, participants will:</i></p> <ul style="list-style-type: none"> • Develop monthly spending plans/budgets • Implement their monthly spending plans/budgets • Pay bills on time 	<p><i>Participants will experience improved financial wellness, specifically:</i></p> <ul style="list-style-type: none"> • Increase in personal savings • Reduction in debt • Improvement in credit scores

Scenario 2

Dr. John is an Extension Specialist for soybean pest management specializing in crop entomology and Integrated Pest Management (IPM). Dr. John provides research-based educational programs, outreach, and materials (resources) to support effective, environmentally responsible management of soybean pests. The overarching goal of his Extension outreach is to enhance soybean farmers/producers, and stakeholders' awareness and adoption of IPM practices, which will in turn reduce wastage/loss due to pests, and in the long-term improve yield and profitability. Dr. John's Extension outreach is mostly via brief contacts including short in-person (or virtual) trainings,

seminars, and workshops; farm visits, field days and demonstrations; phone calls and emails; and non-interactive contacts through his website, publications, and recorded video presentations.

Table 3: Potential Program Outcomes for Scenario 2

Short-term Outcomes	Medium-term Outcomes	Long-term Outcomes
<p><i>Participants will gain awareness and/or knowledge of specific IPM practices:</i></p> <ul style="list-style-type: none"> • Awareness of pest resistant varieties • Knowledge of soybean pest identification • Knowledge of safe handling of pesticides 	<p><i>Participants will adopt or implement the IPM practices or approaches that Dr. John suggested or prescribed:</i></p> <ul style="list-style-type: none"> • Select pest resistant crop varieties • Develop and implement pesticide application plan based on pest ID • Integrate biological pest management strategies 	<p><i>Improvements or changes to initial/original situation or problem that prompted clients to contact Dr. John:</i></p> <ul style="list-style-type: none"> • Reduction in crop loss from pests • Increase in soybean yield • Increase in profitability

Summary

Program outcomes are the measurable or observable end-results attributable to a program. There are three levels of program outcomes—short-term (initial) outcomes, medium-term (intermediate) outcomes, and long-term outcomes—that are logically and sequentially related. Short-term outcomes (i.e., immediate gains in knowledge, awareness, attitudes, opinions, skills, and/or aspirations) lead to medium-term outcomes (i.e., practices, behaviors, or choices that result from short-term outcomes), which in turn lead to long-term outcomes or impact (i.e., conditions or situations that changed because of behaviors, choices, or practices adopted). Outcome evaluation is important for showing if programs are achieving the desired results, and for justifying continued funding. However, identifying the expected levels of outcomes is a necessary first step in evaluating the effectiveness of Extension programs and outreach efforts.

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