Modernizing Extension and Advisory Services

STRENGTHENING EXTENSION PROGRAM DEVELOPMENT COMPETENCIES

A MEAS Training Module

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Strengthening Extension Program Development Competencies

A MEAS Training Module

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Strengthening Extension Program Development Competencies

Content Area: Program Development

Introduction:
This curriculum is focused on building the educational capacity within extension and advisory systems by strengthening program development competencies. Extension and advisory service personnel in developing countries typically have technical knowledge and skills, but very often lack the necessary knowledge and skills that constitute educational capacity. Neglecting to develop the educational capacity of extension and advisory service personnel in developing countries will perpetuate systemic weaknesses and limit the potential for those systems to effectively address the needs of farmers.

Target Audience:
This curriculum is targeted at Ministry of Agriculture, non-governmental organization, and civil organization directors and field agents who facilitate the training of other field staff working directly with small-scale farmers in Feed the Future countries.

Curriculum Overview:
Programs are the educational foundation upon which extension and advisory service efforts to achieve food security and economic development are built. Over the course of the three day curriculum, key concepts in program planning, monitoring and evaluation, and implementation will be explored. Participatory methods will be emphasized throughout the curriculum to promote the empowerment of small-scale farmers and the development of farmer-led initiatives. Lecture, hands-on activities such as case study analysis and worksheets, and guided reflection and discussion will be the primary teaching methods used. The program will conclude with an evaluation of participants' learning. By the completion of the curriculum, participants will be prepared to apply their skills and knowledge to develop and implement training to build the program development competencies of field staff within their organizations.

Program Objectives:

1. By the end of the program, participants will be able to identify opportunities to integrate small-scale farmers into the program development process, as determined by responses to self-study exam questions.
2. By the end of the program, participants will be able to articulate and explain the major components of the program development process, as determined by responses to self-study exam questions.
3. By the end of the program, participants will be able to create a sample of a program plan that could be implemented with small-scale farmers, as determined by responses on program planning worksheets.

Day 1 Overview

Daily lessons:

- *Lesson 1. An Overview of the Program Development Process*. Provides a foundational view of the need for program development and its role in extension and advisory services; discusses traditional top-down approaches versus a contemporary emphasis on bottom-up/participatory approaches.
- *Lesson 2. Conducting Rapid and Participatory Rural Appraisals to Identify Farmer Needs*. Outlines the options for involving and empowering small-scale farmers as key drivers of the needs assessment process through RRA/PRA and related tools and techniques.
- *Lesson 3. Sorting and Prioritizing Program Ideas*. Provides a participatory tool for engaging community stakeholders in the prioritization of programming that addresses needs identified during the rapid and participatory rural appraisals.

Contributes to accomplishment of the following program objective(s):

1. By the end of the program, participants will be able to identify opportunities to integrate small-scale farmers into the program development process, as determined by responses to self-study exam questions.
2. By the end of the program, participants will be able to articulate and explain the major components of the program development process, as determined by responses to self-study exam questions.

Suggested Schedule:

Time	Activity	Teaching Strategies
0900	Introductions	N/A
0930	Lesson 1. An Overview of the Program Development Process	Worksheet Discussion Lecture
1030	Break	
1100	Lesson 2. Conducting Rapid and Participatory Rural Appraisals to Identify Farmer Needs	Lecture on RPRA methods Role play appraisal method
1200	Lunch	
1330	Lesson 2. Continued	Group activity on analysis/interpretation Worksheet/discussion
1445	Break	
1500	Lesson 3. Sorting and Prioritizing Program Ideas	Lecture Worksheet Think-Pair-Share Discussion
1600	Daily Recap	Open Discussion Question & Answer
1630	Conclude	

Day 2 Overview

Daily lessons:

- *Lesson 4. Defining Program Outcomes and Impacts*. Explains the importance of defining program outcomes and impacts; outlines short, medium, and long-term outcomes using the integration of farmers into the value-chain as a contextual example; emphasizes linkages between outcomes and impacts.
- *Lesson 5. Developing Measurable Objectives*. Examines elements of measurable objectives and their use as tools for benchmarking progress towards attaining program outcomes; provides a template for the development of measurable objectives.
- *Lesson 6. Overview of Methods for Monitoring and Evaluation*. Develops linkages between outcomes in lesson 1 and objectives in lesson 2 with measurement concepts and tools. Includes assessing coverage of target audiences and disparities in participation, identifying and measuring the quality of program implementation, as well as strategies and tools for measuring outcomes.

Contributes to accomplishment of the following program objective(s):

1. By the end of the program, participants will be able to articulate and explain the major components of the program development process, as determined by responses to self-study exam questions.

Suggested Schedule:

Time	Activity	Teaching Strategies
0800	Lesson 4. Defining Program Outcomes and Impacts	Brainstorming activity Lecture on logic models Logic model worksheet Lecture on value chain linkages Logic model revision activity
1030	Break	
1100	Lesson 5. Developing Measurable Objectives	Group Activity Lecture Skills Practice Discussion
1200	Lunch	
1330	Lesson 6. Overview of Methods for Monitoring and Evaluation	M&E Expectations Discussion Lecture on M&E planning M&E Planning Worksheet
1445	Break	
1500	Lesson 6 Continued	Overview of strategies & tools Discussion
1600	Daily Recap	Open Discussion Question & Answer
1630	Conclude	

Day 3 Overview

Daily lessons:

- *Lesson 7. Planning Instructional Methods*. Provides an overview of instructional methods and key factors influencing their selection during program planning.
- *Lesson 8. Devising Transfer of Learning Plans*. Identifies the concept of transfer of learning; explains the importance of transfer of learning as a critical component for the effective application of learning by participants following program completion; provides strategies to enhance the transfer of learning process.
- *Lesson 9. Communicating Results*. Discusses the importance of communicating program results with community stakeholders, organizational counterparts, external organizations, and funding agencies; provides guidance for framing communications based on function, scope and audience, content, and format.
- *Lesson 10. Application of Skills*. Provides a structured setting and dedicated time for participants to utilize their knowledge and skills to develop and present a sample of a program plan that could be implemented with small-scale farmers.

Contributes to the accomplishment of the following program objective(s):

1. By the end of the program, participants will be able to articulate and explain the major components of the program development process, as determined by responses to self-study exam questions.
2. By the end of the program, participants will be able to create a sample of a program plan that could be implemented with small-scale farmers, as determined by responses on program planning worksheets.

Suggested Schedule:

Time	Activity	Teaching Strategies
0800	Lesson 7. Planning Instructional Methods	Lecture Group Activity/Worksheet Discussion
0900	Break	
0930	Lesson 8. Devising Transfer of Learning Plans	Lecture Group Activity/Case Study Discussion
1030	Break	
1100	Lesson 9. Communicating Results	Lecture on communication principles & strategies Group activity Discussion
1200	Lunch	
1330	Lesson 10. Application of Skills	Small group project planning Presentations
1630	Conclude	

Lesson 1: An Overview of the Program Development Process

Introduction
Provides a foundational view of the need for program development and its role in extension and advisory services; discusses traditional top-down approaches versus a contemporary emphasis on bottom-up/participatory approaches.

Learning Objectives
As demonstrated by their performance on an assessment, by the end of the lesson, learners will:

- Be able to correctly identify the three major phases of a program.
- Be able to correctly identify one example of a top-down approach and one example of a participatory approach to program development.

Time Required
60 minutes

Materials

- Computer
- Projector
- 2 extension cords
- Chalk/dry erase markers
- Copies of the Program Reflection worksheet
- Flipcharts
- Markers
- Tape
- Presentation handouts
- Electronic copy of the "1_Program Development_Presentation"
- Overview of Program Development assessments

Getting Ready
It is suggested that the instructor review the information contained in:

- Introduction and Concept of a Program sections of Israel, G. D., Harder, A., & Brodeur, C. W. (2011). *What is an extension program?* Florida Cooperative Extension Service Electronic Data Information Source. Retrieved from http://edis.ifas.ufl.edu/wc108
- Agricultural Knowledge & Information Systems (AKIS). (2000). *Decentralizing agricultural extension: Lessons and good practice*. The World Bank.
- Swanson, B. E., & Rajalahti, R. (2010). Overview of different extension models and approaches. In *Strengthening agricultural extension and advisory systems: Procedures for assessing, transforming, and evaluating extension systems* (pp. 13-25). Washington, DC: The International Bank for Reconstruction and Development/The World Bank.

Also, review instructor notes embedded in the "1_Program Development_Presentation".

For the Program Reflection activity, you will need to write a separate prompt from the worksheet on each piece of flipchart paper and hang the paper around the room, if possible, or plan to lay them out on separate tables.

Lesson 1: An Overview of the Program Development Process

Optional: Review these supporting references:

- Boone, E. J., Safrit, R. D., & Jones, J. (2002). *Developing programs in adult education*. Prospect Heights, IL: Waveland Press.
- Boyle, P. G. (1981). *Planning better programs*. USA: McGraw-Hill, Inc.

Procedure

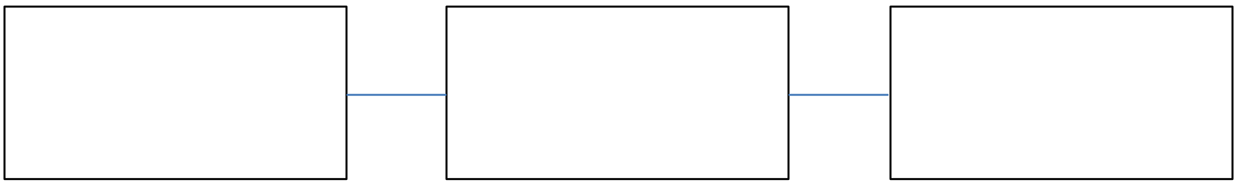
1. Introduce topic using Slides 1-2.
2. Preview the lesson by sharing the agenda on Slide 3.
3. Conduct the Activity on Slide 4.
4. Conduct the Activity on Slide 13.
    a. Provide participants with a copy of the Program Reflection worksheet.
    b. Instruct participants to complete the worksheet individually.
    c. Provide approximately 10 minutes for individuals to complete the worksheet.
    d. Once all the worksheets have been collected, redistribute randomly – this should help to make participants feel more comfortable that their responses won't be linked to them
    e. Provide approximately 10 minutes for the individual to write the responses from the worksheet that you gave them on the flipchart paper.
5. Use the Discussion questions on Slide 5 to help the participants reflect and generalize upon their experience.
    a. Use the flipcharts as context for the discussion.
6. Present and discuss information contained in Slides 6-8.
7. Recap the major points of the lesson on Slide 9.
8. Distribute the Overview of Program Development assessment.
9. Instruct participants to work individually to complete the assessments (Slide 10).
10. Provide approximately 5 minutes to complete the assessment.
11. Collect the assessments at the completion of the lesson for grading.

Assessment
Use the "Overview of Program Development_Rubric" to score the worksheets. The suggested threshold for a "passing" score is 4 out of 5 points, but this threshold can be adjusted according to the audience at the instructor's discretion.

Overview of Program Development

Assessment

1. Label each phase of the program development process.



2. A program that is developed, implemented, and evaluated in conjunction with farmers is an example of what type of programming approach?

3. A program that is developed by an organization and distributed to extension and advisory personnel for implementation with farmers is an example of what type of programing approach?

Overview of Program Development

Assessment – Grading Rubrics

5 points possible

1. Label each phase of the program development process.

Program Planning	Program Implementation	Program Evaluation
(+1)	(+1)	(+1)

2. A program that is developed, implemented, and evaluated in conjunction with farmers is an example of what type of programming approach?

Participatory or bottom-up approach - (+1)

3. A program that is developed by an extension organization and distributed to extension and advisory personnel to encourage farmers to adopt a new technology is an example of what type of programing approach?

Top-down approach - (+1)

Lesson 2: Conducting Rapid and Participatory Rural Appraisals to Identify Farmer Needs

Introduction

This lesson outlines the options for involving and empowering small-scale farmers as key drivers of the needs assessment process through RRA/PRA and related tools and techniques.

Learning Objectives

- Be able to identify needs assessment methodologies and locate these on a participation/empowerment continuum.
- Demonstrate skill in using a rapid appraisal method to collect data and identify farmer needs

Time Required

135 minutes

Materials

- Computer
- Projector
- 2 extension cords
- Flipchart or similar oversized paper
- Tape
- Markers
- Copies of Sondeo Interview Questions and Sondeo Data Analysis Worksheets
- Presentation handouts
- Electronic copy of the “1_Conducting Rapid and PRA_Presentation”

Getting Ready

It is suggested that the instructor review the information contained in the documents entitled “Using Sondeos for Program Development and Evaluation” (Galindo-Gonzalez and Israel, 2007) and “Using Focus Group Interview for Planning or Evaluating Extension Programs” (Israel and Galindo-Gonzalez, 2008). The Sondeos publication is available at: http://edis.ifas.ufl.edu/wc067 (also available as PDF file “2_Sondeos for Program Development and Evaluation_Background)”). The Focus Group publication is available at: http://edis.ifas.ufl.edu/pd036 (also available as PDF file “2_Using Focus Group Interviews_Background)”.

Review instructor notes embedded in the “1_Conducting Rapid and PRA_Presentation”.

Procedure

1. Distribute presentation handouts.
2. Introduce topic using Slides 1-2.
3. Preview the lesson by sharing the agenda on Slide 3.
4. Present and discuss information contained in Slides 4-11.
5. Conduct the Practice activity on Slide 12.
    a. Instruct participants to form groups of 4, with two members acting as farmers and two as advisors.
    b. Provide participants with the advisor roles with the Sample Sondeo Interview Questions Worksheet.

   c. Instruct “Advisors” to listen carefully so as to remember as much information as possible.
   d. Provide approximately 10-15 minutes to conduct the Sondeo interview.
   e. Instruct Advisors to make notes on the completed interview and Farmers to do the same.
   f. Instruct the Advisors and Farmers in each group to compare their notes
   g. Provide individual assistance to participants as needed.
6. Use the questions on Slide 13 to help the participants reflect upon their experience.
7. Present and discuss information contained in Slides 14.
8. Conduct the Practice Sondeo Data Analysis activity on Slide 15.
   a. Instruct participants to re-form the same groups.
   b. Provide participants with the Sondeo Data Analysis Workseet.
   c. Instruct participants to identify themes and subthemes OR to create a concept map.
   d. Provide 20 minutes to complete the analysis.
   e. Select 3 groups (or all if time allows) to present their findings.
   f. Provide constructive feedback, as appropriate.
9. Present and discuss information contained in Slides 16-17.
10. Use the Discussion questions on Slide 18 to help the participants reflect and generalize upon needs assessment methods and empowerment techniques.
11. Collect the Sondeo Data Analysis worksheets at the completion of the lesson for grading.

Assessment
Use the “Sondeo Data Analysis_Rubric” to score the Sondeo Data Analysis worksheets. The suggested threshold for a “passing” score is 5 points, but this threshold can be adjusted according to the audience at the instructor’s discretion.

Sample Sondeo Interview Questions - Worksheet

The following questions can be used or modified for the Sondeo Role Play activity.

Focal Question:

- What are the main issues that affect farmers' income in this area?

Conversation Topics:

- Production aspects
  - Soil conditions
  - Water
  - Crop inputs (seed, fertilizer, etc.)
  - Labor
- Harvesting
- Markets
  - Local markets
  - Buyers & brokers
- Money for loans or capital improvements
- Regulations, Taxes & Fees

Sondeo Data Analysis - Worksheet

Use the following headings to organize the information from the Sondeo Interview. Note: concept maps can be drawn freehand on this sheet.

Example:

Theme: Droughts during the dry season cause reduced yields and crop failure

Subtheme: Installation of a well would provide water during the dry season
Subtheme: Drought tolerant cultivars are not available

Theme #1:

- Subtheme #1.1:
- Subtheme #1.2:
- Subtheme #1.n:

Theme #2:

- Subtheme #2.1:
- Subtheme #2.2:
- Subtheme #2.n:

Theme #3:

- Subtheme #3.1:
- Subtheme #3.2:
- Subtheme #3.n:

Sondeo Data Analysis - Grading Rubric

Use the following headings to organize the information from the Sondeo Interview. Note: concept maps can be drawn freehand on this sheet.

Example:

Theme: Droughts during the dry season cause reduced yields and crop failure

Subtheme: Installation of a well would provide water during the dry season
Subtheme: Drought tolerant cultivars are not available

Theme #1:

- Subtheme #1.1:
- Subtheme #1.2:
- Subtheme #1.n:

Theme #2:

- Subtheme #2.1:
- Subtheme #2.2:
- Subtheme #2.n:

Theme #3:

- Subtheme #3.1:
-
- Subtheme #3.2:
- Subtheme #3.n:

Grading:

Assign 1 point for each theme or subtheme listed on the work sheet. Subthemes also must be topically related to the associated theme to earn a point. Note: the example earns 3 points.

For a spider style concept map, there should be a central theme (1 point) linked with two or more secondary themes (1 point each), There also may be tertiary themes linked to secondary themes (1 point each, if logically connected)

Lesson 2: Conducting Rapid and Participatory Rural Appraisals to Identify Farmer Needs

Program Reflection Worksheet

Please answer each of the following questions to the best of your ability.

1. What is an extension or rural advisory services program?

2. How do you determine when a program is needed?

3. How do you determine what topic(s) a program should address?

4. How do you determine which instructional methods to use for delivering a program?

5. How do you know when a program has been successful?

Lesson 3: Sorting and Prioritizing Program Ideas Lesson Plan

Introduction
Provides a participatory tool for engaging community stakeholders in the prioritization of programming that addresses needs identified during the rapid and participatory rural appraisals.

Learning Objectives
By the end of the lesson, learners will:

- Understand the importance of involving stakeholders in the prioritization of programming needs.
- Be able to correctly identify programming and non-programming needs.
- Be able to systematically sort and prioritize programming needs using a five-step process.

Time Required
60 minutes

Materials

- Computer
- Projector
- 2 extension cords
- Chalk/dry erase markers
- Copies of Sorting and Prioritizing Program Priorities worksheet
- Presentation handouts
- Electronic copy of the "3_Sorting and Prioritizing Program Ideas_Presentation"
- Sorting and Prioritizing Program Ideas Assessments

Getting Ready
It is suggested that the instructor review the information contained in:

- Harder, A. (2010). *Determining program priorities*. Florida Cooperative Extension Service Electronic Data Information Source, Document WC105. Retrieved from http://edis.ifas.ufl.edu/wc105 (also available as PDF file "3_Determining Program Priorities_Background")

Also, review instructor notes embedded in the "3_Sorting and Prioritizing Program Ideas_Presentation".

Optional: Instructors desiring additional information may find Chapter 7 in *Planning Programs for Adult Learners* (Caffarella, 2002) to be helpful.

- Caffarella, R. S. (2002). *Planning programs for adult learners* (2nd ed.). San Francisco: CA: Jossey-Bass.

Procedure

Lesson 3: Sorting and Prioritizing Program Ideas Lesson Plan

1. Introduce topic using Slides 1-2.
2. Distribute presentation handouts.
3. Preview the lesson by sharing the agenda on Slide 3.
4. Present and discuss information contained in Slides 4-8.
5. Conduct the Practice activity on Slide 9.
    a. Provide participants with a copy of the Determining Program Priorities worksheet.
    b. Instruct participants to complete the worksheet individually.
        i. Participants will need to generate a sample list of needs for the purpose of the exercise.
        ii. Remind them that this exercise is the ONLY time that Step 1 should be based on their opinions; formal needs assessments should be conducted when working with stakeholders.
    c. Provide approximately 10 minutes for individuals to complete the worksheet through Step 5.
    d. Instruct participants to share their work with a partner.
        i. Encourage them to compare and contrast the items they considered programming versus non-programming needs.
        ii. Encourage them to share the criteria they considered appropriate for ranking the program ideas.
    e. Provide approximately 10 minutes for partnering.
    f. Provide assistance to participants and partners as they work through the exercise.
6. Use the Discussion questions on Slide 10 to help the participants reflect and generalize upon their experience.
    a. Use the worksheets as context for the discussion.
7. Recap the importance of sorting and prioritizing program ideas on Slide 11.
8. Distribute the “3_Sorting and Prioritizing Program Ideas_Assessment”.
9. Instruct participants to work individually to complete the assessments (Slide 12).
10. Provide approximately 5 minutes to complete the assessment.
11. Collect the assessments at the completion of the lesson for grading.

Assessment

Use the “3_Sorting and Prioritizing Program Ideas_Rubric” to score the worksheets. The suggested threshold for a “passing” score is 12 out of 15 points, but this threshold can be adjusted according to the audience at the instructor’s discretion.

Lesson 3: Sorting and Prioritizing Program Ideas Lesson Plan

Sorting and Prioritizing Program Priorities

Step 1: Conduct a needs assessment.

What needs exist in your community?

Step 2: Discard non-programming needs.

Cross out any needs in the list above that would be more appropriately addressed by an alternative intervention.

Step 3: Refine the educational programming list.

For each of the remaining needs, consider the following questions.

- Do people lack the knowledge or skills necessary to resolve the need?
- Are the organizational climate and environment conducive to delivering an educational program to address the need?
- Do the benefits of addressing the needs outweigh the costs?

If the answer to any of these questions is no, then planning a program is not likely to be the best solution for addressing the need.

Step 4: Select a group of people to help you determine your program priorities.

For example, key community members, past or potential participants, content experts, colleagues, or volunteers.

Lesson 3: Sorting and Prioritizing Program Ideas Lesson Plan

Step 5: Use a system to determine program priorities.

- *Develop a list of criteria you think are important for assessing the feasibility of delivering a program to address an identified need. The group of people identified in the previous step will be asked to indicate the extent to which they agree or disagree (1 = Strongly Disagree; 4 = Strongly Agree) with each criteria.*
- *Using the same criteria, repeat this process for each of the needs remaining after Step 3.*
- *Collect this information using a written or oral survey, depending upon the literacy level of the survey participants.*
- *Once scores are collected from the group, average them to determine the program(s) with the highest average scores.*
- *The highest scoring program(s) should be prioritized.*

Example A program designed to **Decrease Farmer-Herdsmen Conflicts**	Scale SD SA
Requires realistic costs and resources	1 2 3 4
Addresses a critical societal issue, concern, or need	1 2 3 4
Has a large enough pool of possible participants	1 2 3 4
Conforms to the moral standards of the community	1 2 3 4
Uses or promote safe practices	1 2 3 4
Provides valuable skills to participants	1 2 3 4
Is not unnecessarily costly to participants	1 2 3 4

Lesson 3: Sorting and Prioritizing Program Ideas Lesson Plan

Potential Program:	Scale SD SA
	1 2 3 4
	1 2 3 4
	1 2 3 4
	1 2 3 4
	1 2 3 4
	1 2 3 4
	1 2 3 4
	1 2 3 4
	1 2 3 4
	1 2 3 4
	1 2 3 4

Lesson 3: Sorting and Prioritizing Program Ideas Lesson Plan

Sorting and Prioritizing Program Ideas

Assessment

1. **Why is it important for the sorting and prioritizing of program ideas to be a participatory process?**

2. **Indicate if each of the following needs is a *programming* or *non-programming* need by checking the appropriate box.**

Need	Type
Farmers lack knowledge of how to limit pest-related crop loss.	☐ Programming ☐ Non-Programming
Farmers do not have a nearby facility for processing their milk.	☐ Programming ☐ Non-Programming
There are not enough extension/advisory officers available to serve the community.	☐ Programming ☐ Non-Programming
Women lack understanding of how to access microloans to support entrepreneurial efforts.	☐ Programming ☐ Non-Programming
Continuous conflicts exist between herdsmen and farmers over land rights.	☐ Programming ☐ Non-Programming

3. **List the five steps, in order, used to sort and prioritize program ideas.**

Lesson 3: Sorting and Prioritizing Program Ideas Lesson Plan

Sorting and Prioritizing Program Ideas

Assessment – Grading Rubric

1. **Why is it important for the sorting and prioritizing of program ideas to be a participatory process?**

Possible Answers: Critical for establishing trust with clientele, helps develop programs reflective of actual needs; stakeholder input helps to validate the process and provides valuable expertise

Award 5 points for any response including one or more of the possible answers.

2. **Indicate if each of the following needs is a programming or non-programming need by checking the appropriate box.**

Need	Type
Farmers lack knowledge of how to limit pest-related crop loss.	☒ Programming ☐ Non-Programming
Farmers do not have a nearby facility for processing their milk.	☐ Programming ☒ Non-Programming
There are not enough extension/advisory officers available to serve the community.	☐ Programming ☒ Non-Programming
Women lack understanding of how to access microloans to support entrepreneurial efforts.	☒ Programming ☐ Non-Programming
Continuous conflicts exist between herdsmen and farmers over land rights.	☐ Programming ☒ Non-Programming

Award 1 point for each correct response. 5 points possible.

3. **List the five steps, in order, used to sort and prioritize program ideas.**

Answer: Conducting a needs assessment, discarding non-programming needs, refining the educational programming category, selecting people to help determine program priorities, and using a system to determine program priorities.

Award 1 point for the appropriate identification of each step. *5 points possible*.

Lesson 4: Defining Program Outcomes and Impacts

Introduction
Explains the importance of defining program outcomes and impacts; outlines short, medium, and long-term outcomes using the integration of farmers into the value-chain as a contextual example; emphasizes linkages between outcomes and impacts.

Learning Objectives
Assuming a need for an extension program has been identified through a rapid participatory rural appraisal and priority setting process, learners will:

- Be able to identify appropriate elements of program process and outcome sequence, including short-term, intermediate, and long-term outcomes.
- Be able to link program elements and outcomes to specific audiences in a value-chain.
- Develop a logic model for an on-going or intended program

Time Required
150 minutes

Materials

- Computer
- Projector
- 2 extension cords
- Flipchart or similar oversized paper
- Tape
- Markers
- Copies of Logic Model Worksheet
- Presentation handouts
- Electronic copy of the "4_Defining Program Outcomes and Impacts_Presentation"

Getting Ready
It is suggested that the instructor review the information contained in the documents entitled "Logic Model Basics" (Israel, 2010) and "Using Logic Models for Program Development" (Israel, 2001), included as an Appendix in this curriculum (specifically as PDF files "4_Logic Model Basics_Background" and "4_Logic Models for Program Development_Background"). These publications are also available at: http://edis.ifas.ufl.edu/wc106 and http://edis.ifas.ufl.edu/wc041, respectively.

Review instructor notes embedded in the "4_Defining Program Outcomes and Impacts_Presentation".

Procedure

1. Introduce topic using Slides 1-2.
2. Preview the lesson by sharing the agenda on Slide 3.
3. Conduct the Brainstorming Program Outcomes Activity on Slide 4.
    a. Instruct participants to work by themselves.
    b. Provide each individual with a piece of paper, marker, and tape.
    c. Instruct participants to write the end result, as well as associated behavior changes and learning, for an educational program that they would teach or have taught in the past. Share examples of program topics.

    d. Provide participants with approximately 10 minutes to develop the objective.
    e. Ask participants to hang their sheets of paper on the wall and then return to their seats.
    f. Instruct participants that you will return to these outcomes later in the lesson.
4. Distribute presentation handouts.
5. Present and discuss information contained in Slides 5-13.
6. Conduct the Application activity on Slide 14.
    a. Instruct participants to work in groups of 2-4 persons
    b. Provide participants with the “4_Logic Model_Worksheet”.
    c. Instruct participants to select an individual’s program and to identify elements in each section of the logic model worksheet.
    d. Provide approximately 20-25 minutes to complete the worksheet
    e. Provide individual assistance to participants as they work
    f. After each group copies the logic model to flip chart paper, select 3 groups (more if time allows) to present their model
    g. Use the Discussion questions on Slide 13 to help the participants critique the logic models.
7. Present and discuss information contained in Slide 15.
8. Conduct the Further Application activity in Slide 16.
    a. Instruct participants to work in the same groups and use the same program
    b. Provide participants with a second copy of the “4_Logic Model_Worksheet”
    c. Instruct participants to identify elements related to a second audience in the value chain who can affect the outcomes identified in the first activity
    d. Provide approximately 20-25 minutes to complete the worksheet
    e. Provide individual assistance to participants as they work
    f. After each group copies the logic model to flip chart paper, select 3 groups (more if time allows) to present their model
    g. Provide feedback on the strengths and weaknesses of each model
9. Briefly summarize the workshop objectives and participants development of skills on using logic models. Emphasize causal connections between the components of the model.
10. Collect the worksheets at the completion of the lesson for grading.

Assessment
Use the “4_Logic Models_Rubric” to score the logic model worksheets. The suggested threshold for a “passing” score is 12 (out of 16 possible) points, but this threshold can be adjusted according to the audience at the instructor’s discretion.

Logic Model - Worksheet

Program Title: ____

Outcomes
Long-term:
Intermediate:
Short-term:
Outputs
Participants:
Activities:
Inputs
Situation

Logic Model - Grading Rubric

Program Title: ____

Outcomes	**Grading Guidelines**
Long-term:	+1 for an long-term outcome which contains an social, economic, or environmental condition (e.g., increased food security, increased farmer income, reduced soil erosion)
Intermediate:	+1 for a behavior change outcome (e.g., planted a variety of crops that produce food throughout the year, planted a new high-yield variety, added terraces to reduce water run-off) +1 for explicitly linking intermediate outcomes to long-term outcome (that is, related to the same audience or topic)
Short-term:	+1 for a KASA change +1 for explicitly linking short-term outcomes to intermediate outcomes
Outputs	
Participants:	+1 for specifying a relevant audience +1 for linking the audience to short-term outcomes
Activities:	+1 for specifying teaching activities +1 for specifying participant recruitment strategies +1 for specifying follow up to ensure intermediate and long-term outcomes +1 for identifying products to be used in delivering the program (e.g., handouts, posters, etc.)
Inputs	
	+1 for human resources +1 for financial resources +1 for social resources
Situation	
	+1 for specifying the current situation +1 for identifying the preferred situation or gap

Lesson 5: Developing Measurable Objectives

Introduction
Examines elements of measurable objectives and their use as tools for benchmarking progress towards attaining program outcomes; provides a template for the development of measurable objectives.

Learning Objectives
Given a stated need for an extension program, learners will:

- Be able to develop three objectives that are (a) time framed, (b) specific, (c) achievable, (d) measurable, and (e) relevant.

Time Required
90 minutes

Materials

- Computer
- Projector
- 2 extension cords
- Flipchart or similar oversized paper
- Tape
- Markers
- Chalk/dry erase markers
- Copies of worksheet
- Presentation handouts
- Electronic copy of the "5_Developing Measurable Objectives_Presentation"

Getting Ready
It is suggested that the instructor review the information contained in the document entitled "Writing SMART Objectives" (Guion, Baugh, & Marcus, 2010).

Review instructor notes embedded in the "5_Developing Measurable Objectives_Presentation".

Procedure

1. Introduce topic using Slides 1-2.
2. Preview the lesson by sharing the agenda on Slide 3.
3. Conduct the Warm-Up Activity on Slide 4.
    a. Instruct participants to work by themselves if the group is fewer than 10 individuals; larger groups should work as partners.
    b. Provide each individual or partnership with a piece of paper, marker, and tape.
    c. Instruct participants to write an objective for an educational program that they would teach or have taught in the past. Share examples of program topics.
    d. Provide participants with approximately 10 minutes to develop the objective.
    e. Ask participants to hang their sheets of paper on the wall and then return to their seats.
    f. Instruct participants that you will return to these objectives later in the lesson.
4. Distribute presentation handouts. Note: You cannot do this earlier, as it will disrupt the effectiveness of the Warm-Up Activity.
5. Present and discuss information contained in Slides 5-11.

6. Ask participants to suggest revisions for the objective presented on Slide 12. Write revised version on chalkboard/whiteboard.
7. Conduct the Practice activity on Slide 13.
    a. Provide participants with a different colored marker than they used during the Warm-Up Activity.
    b. Instruct participants to revise the objectives they wrote during the Warm-Up Activity using the SMART acronym as a guide.
    c. Provide approximately 10-15 minutes to revise the objective.
    d. Provide individual assistance to participants as they work to make their revisions.
8. Use the Discussion questions on Slide 14 to help the participants reflect and generalize upon their experience.
    a. Use the revised objectives as context for the discussion.
9. Recap the importance of using measurable objectives for programming on Slide 15.
10. Distribute the "5_SMART Objectives_Worksheet".
11. Instruct participants to work individually to complete the worksheets (Slide 16).
12. Provide approximately 20 minutes to complete the worksheet.
13. Provide individual assistance to participants as they work to make their revisions.
14. Collect the worksheets at the completion of the lesson for grading.

Assessment

Use the "5_SMMART Objectives_Rubric" to score the worksheets. The suggested threshold for a "passing" score is 12 out of 15 points, but this threshold can be adjusted according to the audience at the instructor's discretion.

Developing SMMART Objectives - Worksheet

1. **Briefly describe the need for one of your programs.**

2. **Develop at least one SMART objectives for your program using the following format. Complete each part for each objective.**

Time frame for completing the objective	Who is the learner? What percentage will complete the objective?	What will the learner do and to what degree? Be **Specific** and keep it **Achievable.**	How will the outcome be evaluated? Make it **Measurable**.	Is the objective **Relevant**?

Developing SMMART Objectives - Example

1. Briefly describe the need for one of your programs.

Example: Small scale dairy farmers are failing to maximize profits because of poor herd management practices, such as inadequate livestock housing, poor sanitary practices, and lack of knowledge for how to identify and treat mastitis.

2. Develop three SMART objectives for your program using the following format. Complete each part for each objective.

Time frame for completing the objective	Who is the learner? What percentage will complete the objective?	What will the learner do and to what degree? Be **Specific** and keep it **Achievable.**	How will the outcome be evaluated? Make it **Measurable**.	Is the objective **Relevant**?
After participating in a 2-hour educational meeting,	95% of attending dairy farmers	Will be able to three identify symptoms of mastitis.	As determined by an oral examination.	Yes.

Developing SMMART Objectives – Grading Rubric

Directions:
In order to pass the SMART Objectives module, a participant will need to:

- Briefly describe the need for one of their programs. (Yes/No)
- Earn at twelve points or more on the objectives section. The objectives should be graded by awarding a point for each component of an objective that is written correctly (5 points/objective, 15 points possible).
- The first example is well-written. The second example is missing points.

Time frame for completing the objective	Who is the learner? What percentage will complete the objective?	What will the learner do and to what degree? Be **Specific** and keep it **Achievable**.	How will the outcome be evaluated? Make it **Measurable**.	Is the objective **Relevant**?
By the end of an eight week farmer field school, +1	85% of participating farmers +1	Will be able to identify two biological controls to reduce cassava crop loss +1	As determined by an oral examination +1	Yes. +1
By the end of the weeklong field school, +1	Women farmers 0: Failure to indicate percentage of women farmers, or specify only women farmers who attended weeklong program.	Will be able to safely apply fertilizer to their crops 0: Under what conditions? According to what standards or guidelines? Which fertilizers? What types of crops?	As determined by a supervised demonstration of safety skills. +1: Although the action is not specified in the previous column, enough is known to say that a skills test would be an appropriate way to evaluate safe fertilizer application.	Yes +1

For an additional resource to look at when grading, EDIS Publication on SMMART Objectives: http://edis.ifas.ufl.edu/fy824

Lesson 6: Overview of Methods for Monitoring and Evaluation

Introduction
Develops linkages between outcomes in Lesson 4 and objectives in Lesson 5 with measurement concepts and tools. Includes assessing coverage of target audiences and disparities in participation, identifying and measuring the quality of program implementation, as well as strategies and tools for measuring outcomes.

Learning Objectives
Given the outcomes and objectives identified earlier, learners will:

- Be able to identify actions to identify monitoring and evaluation expectations.
- Develop a monitoring and evaluation (M&E) plan to meet stakeholder expectations
- Select appropriate strategies for collecting M&E data and provide reasons for doing so

Time Required
195 minutes

Materials

- Computer
- Projector
- 2 extension cords
- Flipchart or similar oversized paper
- Tape
- Markers
- Copies of the Monitoring and Evaluation Plan worksheet
- Presentation handouts
- Electronic copy of the "6_Monitoring and Evaluation_Presentation"

Getting Ready
It is suggested that the instructor review instructor notes embedded in the "6_Monitoring and Evaluation_Presentation".

Procedure

1. Distribute presentation handouts.
2. Introduce topic using Slides 1-2.
3. Preview the lesson by sharing the agenda on Slide 3.
4. Conduct the Monitoring & Evaluation Expectations Discussion on Slide 4.
5. Present and discuss information contained in Slides 5-17.
6. Conduct the Practice activity on Slide 18.
    a. Instruct participants to work in groups of 2-4 persons
    b. Provide participants with the MEAS Monitoring and Evaluation Plan Worksheet
    c. Instruct participants to select an individual's program and to answer each of the questions
    d. Provide approximately 20-25 minutes to complete the worksheet
    e. Provide individual assistance to participants as they work
    f. After each group copies their plan to the flip chart paper, select 3 groups (more if time allows) to present their model

   g. Solicit comments from other groups, as well as provide constructive feedback on the plans
7. Present and discuss information contained in Slides 19-28.
8. Conduct the Practice activity on Slide 29.
   a. Instruct participants to work individually
   b. Provide participants with the "6_Monitoring and Evaluation Questions_Worksheet"
   c. Provide approximately 20 minutes to complete the worksheet
   d. Provide individual assistance to participants as they work
   e. After everyone has completed the worksheet, solicit ideas about revisions for each question and use the grading rubic for guidance
9. Present and discuss information contained in Slides 30-32.
10. Recap the lesson using slide 33.
11. Collect the worksheets at the completion of the lesson for grading.

Assessment

Use the "6_Monitoring and Evaluation Questions_Rubric" to score the Evaluation Questions Worksheets. The suggested threshold for a "passing" score is 5 out of 8 points, but this threshold can be adjusted according to the audience at the instructor's discretion.

Monitoring and Evaluation Plan Worksheet

Focusing the evaluation	Link with logic model	What are the key activities and outcomes?	
	Evaluation questions	What do you want to know?	
	Indicators	What will be measured?	
	Sources	Who will have the information?	
Collecting the data	Methods	How will you gather the data?	
	Managing	When will the information be collected? By whom? What resources are available?	
Analyzing & Reporting	Analysis	How will the data be analyzed and displayed?	
	Reporting	To whom and how will the results be communicated? How will you use the results?	

Lesson 6: Overview of Methods for Monitoring and Evaluation

Evaluation Questions - Grading Rubric

For each question below, modify the question, the answers, or both question and answers.

	Initial Question	Your Revision
1.	How satisfied were you with the accuracy of the information provided in the farmers' field school? ☐ Satisfied ☐ Neither satisfied nor dissatisfied ☐ Dissatisfied	+1 for adding "or dissatisfied" to the question +1 for adding "Very satisfied" and "Very dissatisfied" to the responses
2.	Was the information from the agricultural advisor easy to understand and relevant to your situation? ☐ Yes ☐ No ☐ Don't know	+1 for separating into two questions: 1) easy to understand and 2) relevant to your situation
3.	Please identify the correct answer. What method does <u>not</u> reduce soil erosion? a. Hillside terracing b. Conservation tillage c. Planting cover crops d. None of the above	+1 for removing "not" from the question and changing "None of the above" to "All of the above"
4.	How often does the agricultural advisor visit your farm? ☐ All the time ☐ Occasionally ☐ Rarely ☐ Never	+1 for changing the response options to the following or a similar format: ☐ Once a week ☐ Once a month ☐ Once or twice a year ☐ Never
5.	Do you favor or oppose regulations to protect farmers from pesticide residues while harvesting vegetables? 1 Favor 2 Neither favor nor oppose 3 Somewhat oppose 4 Strongly oppose	+1 for balancing the response scale by adding another "favor" response or deleting one of the "oppose" responses
6.	Years farming? _____ years	+1 for changing the question to a complete sentence
7.	How do you fertilize your maize?	+1 for aspects of the fertilization process, e.g., What month do you fertilize maize, how much is applied per hectare, and what type of fertilizer to you use?

Lesson 7: Planning Instructional Methods Lesson Plan

Introduction
Provides an overview of instructional methods and key factors influencing their selection during program planning.

Learning Objectives
As demonstrated by their performance on an assessment, by the end of the lesson, learners will:

- Be able to correctly identify three examples of methods according to nature of contact, form of communication, and technique.
- Be able to accurately describe the three types of functions served by instructional methods.
- Be able to identify at least four of the seven factors to consider when selecting instructional methods.

Time Required
60 minutes

Materials

- Computer
- Projector
- 2 extension cords
- Chalk/dry erase markers
- Copies of Selecting Instructional Methods worksheet
- Presentation handouts
- Electronic copy of the “7_Planning Instructional Methods_Presentation”
- Planning Instructional Methods assessments

Getting Ready
It is suggested that the instructor review the information in:

- Campbell, D. A., & Barker, S. C. (1997). Selecting appropriate content and methods in programme delivery. In B.E. Swanson, R. P. Bentz, & A.J. Sofranko (Eds.), *Improving agricultural extension: A reference manual* (pp. 1-9). Rome: Food and Agriculture Organization of the United Nations.
- Seevers, B., Graham, D., & Conklin, N. (2007). *Education through Cooperative Extension*. Columbus, OH: Ohio Agricultural Education Curriculum Materials Service.

Also, review instructor notes embedded in the “7_Planning Instructional Methods_Presentation”.

Optional: Instructors desiring additional information want to review the information in:

- Cole, J. M. (1981). Selecting extension teaching methods. *Journal of Extension, 19*(5) [On-line]. Retrieved from http://www.joe.org/joe/1981/september
- Lionberger, H. F. (1968). *Adoption of new ideas and practices*. Ames, IA: Iowa State University Press.
- Ota, C., DiCarlo, C. F., Burts, D. C., Laird, R., & Gioe, C. (2006). Training and the needs of adult learners. *Journal of Extension, 44*(6) [On-line]. Retrieved from http://www.joe.org/joe/2006december/tt5.php

- Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). New York, NY: Free Press.

Procedure

1. Introduce topic using Slides 1-2.
2. Distribute presentation handouts.
3. Preview the lesson by sharing the agenda on Slide 3.
4. Present and discuss information contained in Slides 4-12.
5. Conduct the Activity on Slide 13.
    a. Provide participants with a copy of the “7_Planning Instructional Methods worksheet.
    b. Instruct participants to complete the worksheet in small groups.
    c. Provide approximately 10 minutes for individuals to complete the worksheet.
    d. Provide assistance to small groups as they work through the exercise.
6. Use the Discussion questions on Slide 14 to help the participants reflect and generalize upon their experience.
    a. Use the worksheets as context for the discussion.
7. Recap the importance of selecting instructional methods on Slide 15.
8. Distribute the Selecting Instructional Methods assessment.
9. Instruct participants to work individually to complete the assessments (Slide 16).
10. Provide approximately 8-10 minutes to complete the assessment.
11. Collect the assessments at the completion of the lesson for grading.

Assessment
Use the “7_Planning Instructional Methods_Rubric” to score the worksheets. The suggested threshold for a “passing” score is 13 out of 16 points, but this threshold can be adjusted according to the audience at the instructor’s discretion.

Lesson 7: Planning Instructional Methods Lesson Plan

Planning Instructional Methods - Assessment

1. **Identify one method that you could use to instruct small-scale farmers for each category:**

Individual Contact	
Group Contact	
Mass Contact	
Written Communication	
Spoken Communication	
Visual Communication	
Information-Giving Techniques	
Skill-Acquiring Techniques	
Knowledge-Applying Techniques	

2. **Describe the three types of function served by instructional methods.**

Information Delivery	
Educational Program Delivery	
Problem Solving	

3. **There are seven factors that you should consider when selecting which instructional methods to use. List at least four of them in the space provided below.**

Lesson 7: Planning Instructional Methods Lesson Plan

Planning Instructional Methods - Assessment – Grading Rubric

1. Identify one method that you could use to instruct small-scale farmers for each category:

Individual Contact **(+1)**	Farm or home visit; office visit; telephone calls; personal correspondence; result demonstrations
Group Contact **(+1)**	Meetings, method demonstrations, leader training, tours and field days, organized groups, farmer field schools, community forums, short courses, workshops, teleconferencing
Mass Contact **(+1)**	News stories, radio, newsletters, publications, interactive conferences, computer-aided instructional learning, exhibits, Internet
Written Communication **(+1)**	Bulletins, leaflets, fact sheets, news articles, personal letters, newsletters, e-mail
Spoken Communication **(+1)**	Meetings, farm/home visit, office call, telephone call, radio
Visual Communication **(+1)**	Result demonstrations, exhibits, posters, slides, videos, charts, television, Web sites
Information-Giving Techniques **(+1)**	Lectures, question-and-answer, panel presentations, debates
Skill-Acquiring Techniques **(+1)**	Workshops, laboratories, demonstrations, role-playing, drill, case studies, simulations
Knowledge-Applying Techniques **(+1)**	Group discussions, workshops, laboratories, group activities, case studies

2. Describe the three types of function served by instructional methods.

Information Delivery **(+1)**	Used to deliver information from organization to clientele, not part of a structured program, such as a news article, meeting, or consultation
Educational Program Delivery **(+1)**	Used to teach knowledge and skills, change behaviors, and improve social, environmental, or economic conditions
Problem Solving **(+1)**	Used as a bottom up approach to addressing needs, clientele-driven

3. There are seven factors that you should consider when selecting which instructional methods to use. List at least four of them in the space provided below.

Each correct factor is worth one point; four points possible

Target audience, desired change, subject matter, learning theory, function, need and time, availability of method

Lesson 8: Devising Transfer of Learning Plans

Introduction
Identifies the concept of transfer of learning; explains the importance of transfer of learning as a critical component for the effective application of learning by participants following program completion; provides strategies to enhance the transfer of learning process.

Learning Objectives
Given a case study, learners will:

- Be able to select appropriate strategies for facilitating transfer of learning before, during, and after a program.

Time Required
60 minutes

Materials

- Computer
- Projector
- 2 extension cords
- Chalk/dry erase markers
- Copies of case studies
- Copies of assessment worksheets
- Presentation handouts
- Electronic copy of the “8_Transfer of Learning_Presentation”

Getting Ready
It is suggested that the instructor review the information contained in:

- Caffarella, R. S. (2002). Devising transfer-of-learning plans. In *Planning programs for adult learners: A practical guide for educators, trainers, and staff developers* (pp. 203-221). San Francisco, CA: Jossey-Bass.
- Subedi, B. S. (2004). Emerging trends of research on transfer of learning. *International Education Journal, 5*(4), 591-598. Retrieved from http://iej.cjb.net

Review instructor notes embedded in the “8_Transfer of Learning_Presentation”.

Procedure

1. Introduce topic using Slide 1.
2. Distribute presentation handouts.
3. Preview the lesson by sharing the agenda on Slide 2.
4. Present and discuss information contained in Slides 3-14. Note: A considerable amount of information is included in the Notes section for Slides 5 and 6.
5. Distribute the case study examples and accompanying worksheet to partners or small groups of participants.
6. Introduce the “8_Transfer of Learning_Citrus Workers_Case” assessment on Slide 12. Instruct the participants to complete the “8_Transfer of Learning_Citrus Workers_Worksheet”.
    a. Provide approximately 15 minutes for participants to complete the worksheet.

7. Discuss the case studies with the participants using Slide 13 to help the participants reflect and generalize upon their experience.
8. Collect the worksheets for assessment.
9. Recap the major aspects of devising transfer of learning plans and their importance on Slides 14-15.

Assessment

There are two options for assessment with this lesson. The first option is to implement the lesson as described. The assessment will then be an assessment of the ability of partners/small groups to select appropriate strategies for transfer of learning. The second option is to have participants work individually to complete the case study worksheets.

Instructional Plan and Transfer of Learning Worksheet

1. **Identify the method(s) that you could use to instruct small-scale farmers for each category:**

Individual Contact	
Group Contact	
Mass Contact	
Written Communication	
Spoken Communication	
Visual Communication	
Information-Giving Techniques	
Skill-Acquiring Techniques	
Knowledge-Applying Techniques	

Lesson 8: Devising Transfer of Learning Plans

2. Identify the method(s) that you could use to facilitate the transfer of learning to practice by farmers.

At the start of the program, communicate what is to be applied	
Use active learning techniques	
Try skills in learners' own setting	
Use job aids	
Develop application plans	
Organize support groups	
Follow-up coaching, mentoring or farm visits	

Lesson 8: Devising Transfer of Learning Plans

Adoption of Safety Glasses by Haitian Citrus Workers

The Partnership for Citrus Worker Health (PCWH) is a collaborative effort of university researchers, community members, migrant farm workers and citrus companies working to improve health and safety among migrant and seasonal citrus harvesters in Florida (Monaghan, et al., 2008). Begun in 2001 with funding from the Centers for Disease Control and Prevention, the various stakeholder groups were convened in southwest Florida by faculty from the College of Public Health at the University of South Florida. The effort was guided by a planning process known as Community-based Prevention Marketing, which combines community organizing with the principles of social marketing to improve health-related prevention projects (Bryant, Forthofer, McCormack Brown, Landis, & McDermott, 2000). Soon after strategy sessions with the community advisory board began, the partners agreed by consensus to direct their attention to the overlooked problem of eye safety and injury reduction among Florida's Haitian citrus harvesters.

In order to increase worker acceptance of safety glasses, this project combined two methodologies, community based prevention marketing and a train the trainer program (also called camp health aides). The prevention marketing approach helped the team define a target audience, specify what behavior was to be encouraged, and develop and test hypotheses about why the target audience would choose to change their behavior. The research findings were then incorporated into a social marketing strategy that includes the "4Ps" of marketing: Product, Price, Placement and Promotion (Andreasen, 1995). The "product" promoted in this project included both the actual safety glasses but also the beneficial results; a reduction in pain, irritation and lost time with fewer eye injuries. The "price" or cost of wearing the safety glasses was recognized as some initial discomfort when getting used to wearing the glasses in the humid Florida environment, which is significant when one considers that it was an entirely new way of working and was not the norm. The "placement" of the product was the importance of having safety glasses on hand when workers were most likely to make the decision to use them (Andreasen, 1995). The "placement" and the "promotion" (the outward marketing through advertising and spokespersons) were both carried out by the trained camp health aides. They acted as spokespersons for the use of safety glasses and they distributed them in the fields and encouraged their use.

The Partnership for Citrus Worker Health identified the barriers to the adoption of the selected behaviors through the use of focus groups with citrus workers and interviews with employers. Harvesters believed safety glasses would fog easily, collect sweat, and obstruct their vision with the dirt and dust that is so prevalent in the groves. The time lost to cleaning the glasses and the added annoyance of the increased heat, sweat, and fogging all contributed to a perception that safety glasses were not a feasible alternative to the risk of eye injury. Most eye injuries were not reported by workers for a variety of reasons, including inadequate health care services, lack of immigration documentation, and cultural barriers such as language. Employers tried to implement mandatory safety glasses programs among their workers, but the lack of supervision in the groves and the need to keep good workers to complete the harvest often forced employers to abandon these programs. Employers also lacked information on the proper safety glasses that would be most suitable in the environmental conditions of the citrus groves.

Lesson 8: Devising Transfer of Learning Plans

Identifying and Adapting a Camp Health Aide Program for Safety

Early in the process of designing a social marketing campaign for citrus workers, the partners teamed up with another research team (the Great Lakes Partnership for Agricultural Safety and Health - GLPASH). These researchers had created an eye safety program and curriculum for farm workers utilizing trained camp health aides (Forst et al., 2004). The camp health aide approach has been used for many years in developing countries to provide community training in health care. It relies on local non-professionals who receive training in particular health issues and act as educators, advocates, and providers of first aid in a variety of situations, from vaccinations to pre-natal care. The model had not been widely used to provide health or safety training in the workplace. In January of 2004, seven citrus workers were trained in eye safety and first aid and they began serving their peers in each of seven harvesting crews. While the pilot test was a success, the curriculum was determined to need extensive revision to be more focused on citrus-related injuries and a low-literacy audience. In addition, because the camp health aides were the workers themselves, their training and supervision had to be extensively modified to reflect their employment situation and their relationship with their peers on the citrus harvesting crews.

The modified curriculum and program design was much streamlined from the original designed by GLPASH, and focused on decreasing the barriers to safety glasses use (various negative perceptions by workers) and improving eye injury treatment. The effectiveness of the strategy was evaluated during the fourth year of the PCWH initiative.

Usage During and Immediately After the Program

The larger study of six total days of observation in the groves demonstrated the intervention crews with a camp health aide had significantly higher rates of safety glasses use. The usage of glasses among control crews was 2.4% over the course of the three observations before the intervention. Post-intervention, usage rates remained low (2.6%) for the control crews. Among intervention crews the overall usage during the three baseline observations was 11.1% and use rates climbed steadily after the intervention to a high of 35.5% on the last day of observation for a post intervention average of 27.5%.

Nearly half of workers in the treatment group who received help from the camp health aide were observed using the safety glasses. Workers in the treatment group who knew the camp health aide but did not receive help were somewhat less likely to use the glasses (nearly one-third) and only one-quarter of those who did not know the identity of the camp health aide used the safety glasses. Finally, less than one-tenth of the workers in the control group were observed using the safety glasses.

Excerpted from:

Mashburn, D., Monaghan, P., Harder, A., Israel, G., & Irani, T. (2009, May). Lessons learned from a camp health aide safety program for farm workers. *Proceedings of the Annual Conference of the Association of International Agricultural and Extension Education, 25*, 322-330.

Lesson 8: Devising Transfer of Learning Plans

Citrus Workers: Transfer of Learning

1. Before the program, the Partnership for Citrus Worker Healthy met with focus groups of citrus workers and interviewed employers to better understand barriers to safety glass adoption. What other steps could have been taken prior to the program to plan for transfer of learning?

2. During the program, camp health aides were used as educators and coaches. What other techniques and/or strategies could have been implemented to promote transfer of learning during the program?

3. After the program, little was done to promote the continued adoption and use of safety glasses in the citrus groves. What could have been done to ensure continued transfer of learning?

Lesson 9: Communicating Results

Introduction
Discusses the importance of communicating program results with community stakeholders, organizational counterparts, external organizations, and funding agencies; provides guidance for framing communications based on function, scope and audience, content, and format.

Learning Objectives
Considering information obtained during the monitoring and evaluation process, learners will:

- Be able to identify strategies for meeting stakeholder expectations for information
- Apply the three principles of communicating results while developing a communication plan
- Distinguish strong statements of program impacts from weak ones

Time Required
60 minutes

Materials

- Computer
- Projector
- 2 extension cords
- Flipchart or similar oversized paper
- Tape
- Markers
- Copies of “9_Communicating Results_Worksheet” and “9_Reporting with Impact_Worksheet”
- Presentation handouts
- Electronic copy of the “9_Communicating Results_Presentation”

Getting Ready
It is suggested that the instructor review the information contained in the document “Writing Program Success Stories, available at: www.ces.ncsu.edu/AboutCES/Factsheets/stories.html.

Review instructor notes embedded in the “9_Communicating Results_Presentation”.

Procedure

1. Distribute presentation handouts.
2. Introduce topic using Slides 1-2.
3. Preview the lesson by sharing the agenda on Slide 3.
4. Present and discuss information contained in Slides 4-8.
5. Conduct the Application activity on Slide 9.
    a. Instruct participants to select a partner
    b. Provide the Communicating Results Plan worksheet to participants
    c. Instruct participants to work alone and complete the “My Plan” column of the worksheet, then to share the worksheet with their partner
    d. Instruct partners to add ideas to strengthen the plan in the “Partner’s Suggestions” column and then to explain these suggestions
    e. Provide 15 minutes for the activity
    f. Instruct participants that you will discuss the plans later in the lesson

6. Present and discuss information contained in Slides 10-14.
7. Conduct the Application activity on Slide 15.
    a. Provide the Reporting with Impact worksheet to participants
    b. Instruct participants to read the two samples and to record strong and weak points about each one in the space below the samples
    c. Provide 15 minutes
    d. Select 2 or 3 participants to highlight the strengths and weaknesses
8. Discuss the questions on Slide 16 and provide a brief summary of the lesson.
9. Collect the worksheets at the completion of the lesson for grading.

Assessment

Use the "9_Reporting with Impact_Rubric" to score the worksheets. The suggested threshold for a "passing" score is 6 out of 10 points, but this threshold can be adjusted according to the audience at the instructor's discretion.

Reporting with Impact - Worksheet

Success Story #1	Success Story #2
Ever since he went to the university, Daryl Peat knew he had a knack for marketing. In fact, he chose a career in export sales. A few years later, the economic downturn forced him to reconsider his career. After learning his parents had a need for him on the family farm, he realized that he could incorporate his skills into the farm operation. His parents welcomed Daryl and his wife into the family business. Incorporating another member into an active role in the family farm can be a happy occasion but the transition can also be wrought with difficulties. The stresses of running a farming business intertwined with family relationships can sometime lead to misunderstandings. To address this, agricultural economists developed a series of workshops called "Keeping the Family Farming". For many farms and ranches, planning for the future of the business is informal. Often, a better approach is to develop a more strategic and participatory management style beginning with both the management team and stakeholders sharing their vision of where they want the business to go. In the Peat's case, once Daryl came back to the farm, a division of responsibilities evolved. He buys inputs and seed for the family business, in addition to selling crops to local and export markets.	Finding the time, gaining the knowledge, and obtaining the funds to market their products can be a major hurdle for many small family farms. To tackle this problem, One farmer established a farmers' alliance for small farmers in her region, with supporting grants from the agricultural ministry's Cooperative Marketing program. The alliance enables farmers to sell many of their products through a network of grocery stores in urban areas of the region. Products include eggs, milk, honey, various kinds of vegetables and fruits, as well as meat products. The agriculture ministry's program helped to provide extra income for the participating farmers and a series of quality products for the consumers. All of the products sold under the farmers' alliance label are local, fresh, and of a higher quality than comparable products. The alliance started with 30 farms, and today over 100 family farms participate. These farm families reported increasing their income by 25% over 2 years and they are now food secure.
Strengths and Weaknesses:	**Strengths and Weaknesses:**

Reporting with Impact - Grading Rubric

Success Story #1	Success Story #2
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Strengths and Weaknesses: +1 for each of the following: Strengths include 1) focusing on benefit to an individual client, 2) describing what the program did, and 3) describing why the program was developed Weaknesses include 1) lack of concrete numbers on change in sales to the export market and 2) no report on the number of farmers helped by the program (beside Daryl Peat)	**Strengths and Weaknesses:** +1 for each of the following: Strengths include 1) identifying a problem (or need) facing farm families, 2) describing the role of the agricultural ministry (i.e., what the program did), 3) identified the number of farms benefitting, and 4) identified the average increase in income Weaknesses include 1) lack of an individual farmer's experience as a success story to add spice

Communicating Results Plan Worksheet

	My Plan	Partner's Suggestions
With whom will you communicate?		
What decision will stakeholders be making?		
What information will you include?		
How often and when will you communicate?		
How will you communicate with stakeholders?		

Lesson 10: Application of Skills

Introduction
Provides a structured setting and dedicated time for participants to utilize their knowledge and skills to develop and present a sample of a program plan that could be implemented with small-scale farmers.

Learning Objectives
Learners will use the preceding lessons for this capstone exercise and will:

- Build a program plan that includes an assessment of needs, rationale for the priority program focus, a logic model incorporating short-term, intermediate and long-term outcomes, SMART objectives, appropriate teaching strategies, a plan for monitoring and evaluation, as well as a plan for communicating results

Time Required
180 minutes

Materials

- Computer
- Projector
- 2 extension cords
- Flipchart or similar oversized paper
- Tape
- Markers
- Copies of the set of planning worksheets
- Presentation handouts
- Electronic copy of the "10_Application of Skills_Presentation"

Getting Ready
Review instructor notes embedded in the "10_Application of Skills_Presentation".

Procedure

1. Distribute presentation handouts and worksheets.
2. Introduce topic using Slides 1-2.
3. Preview the lesson by sharing the agenda on Slide 3.
4. Conduct the Application activity on Slide 4.
    a. Instruct participants to form groups of 2-4 persons
    b. Provide a set of the planning worksheets to participants
        i. "2_Sondeo Data Analysis _Worksheet"
        ii. "4_Logic Model _Worksheet"
        iii. "5_ SMART Objectives _Worksheet"
        iv. "6_ Monitoring and Evaluation Plan _Worksheet"
        v. "8_Instructional Plan" and "8_Transfer of Learning _Worksheet"
    c. Instruct participants to select a program different from the previous one(s) used in the earlier lessons and to work through the sequence of planning worksheets, beginning with a review of the Sondeo interview notes and data analysis
    d. Provide 120 minutes for groups to complete the plan and instruct groups to move to the next component of the plan, as necessary, in order to complete a draft in the allotted time

e. Provide individual assistance to participants as they work
f. Instruct participants to transfer worksheet information to flipchart paper for their presentation

5. Facilitate presentations by each group as indicated on slide 5 (if there is insufficient time for each group to present, randomly select 3-4 groups).
    a. Provide participants with a copy of the “10_Presentation Scoring_Worksheet”
    b. Instruct participants *who are not presenting at the moment* to play the role of supervisor or funding agent
        i. Instruct participants to provide an overall score for the plan
        ii. Instruct participants to make recommendations for improvement
    c. Moderate the presentation process
    d. Provide 60 minutes for the presentations and participant comments
6. Provide a brief summary to wrap up the application of skills exercise or ask the discussion questions in slide 6.
7. Collect the worksheets at the completion of the lesson for grading.

Assessment
Apply the same grading criteria as used in the previous lessons for all worksheets except “8_Instructional Plan” and “8_Transfer of Learning_Worksheet”. For the “8_Instructional Plan” and “8_Transfer of Learning_Worksheet” use the “7_Planning Instructional Methods_Rubric” for the first section only.

Presentation Scoring Worksheet

Title of presentation being evaluated: ____

Mark you rating of content for each of the following topics and for the overall presentation:

		------------------------ Rating	--------------------------					
1.	Specific need identified from Sondeo	1	2	3	4	5	6	7
2.	All elements of logic model included	1	2	3	4	5	6	7
3.	Elements in logic model have a clear connection and flow	1	2	3	4	5	6	7
4.	Objectives meet SMART criteria	1	2	3	4	5	6	7
5.	Instructional plans match farmers' content needs and preferred methods	1	2	3	4	5	6	7
6.	Transfer of learning plans connect learning to practice	1	2	3	4	5	6	7
7.	All elements included in evaluation plans	1	2	3	4	5	6	7
8.	Clarity and organization of the presentation	1	2	3	4	5	6	7
9.	Overall rating for funding the program	1	2	3	4	5	6	7

Write specific, constructive recommendation for the presenting team:

Key References

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