

# UNDERSTANDING THE EFFECTIVENESS OF AGRICULTURAL TRAINING FOR WOMEN

A desk review of indicators, methods and best practices

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**This desk review provides an introduction to some of the indicators, methods, tools, challenges and best practices that will help development practitioners measure the effectiveness of agricultural training, specifically as it relates to women and women's economic empowerment.**

**Contracted by Oxfam, it is part of ongoing work to improve monitoring, evaluation and learning (MEL) for the organization's Women's Economic Empowerment programming.**

**This research report** was written to share research results, to contribute to public debate and to invite feedback on development and humanitarian policy and practice. It does not necessarily reflect the policy positions of Oxfam. The views expressed are those of the author and not necessarily those of the organization.



# CONTENTS

<b>Executive Summary</b>	<b>3</b>
<b>1 Purpose of the study</b>	<b>4</b>
<b>2 Definitions and distinctions</b>	<b>5</b>
<b>3 Theoretical models</b>	<b>5</b>
<b>4 Indicators</b>	<b>9</b>
<b>5 Methods and tools</b>	<b>10</b>
<b>6 Challenges, considerations and best practices</b>	<b>19</b>
<b>7 Conclusion</b>	<b>22</b>
<b>Acknowledgements</b>	<b>35</b>

# EXECUTIVE SUMMARY

This desk review provides a summary of indicators, methods, tools, challenges and best practices for measuring the effectiveness of agricultural training. It focuses on measuring the results of training activities – and in particular, how they link to women and women’s economic empowerment. The review is written to help development practitioners, and in particular livelihoods and monitoring, evaluation and learning (MEL) specialists.

The review has been developed through a synthesis of literature available on the Internet, through sources at Oxfam, and through sources and interviews with individuals at other organizations. It focuses on ‘intermediary results’ (changes in knowledge, application of knowledge), only briefly addressing output-counting and not covering longer-term impacts such as changes in income or women’s empowerment.

The report identifies four theoretical models that can guide the approach to monitoring and evaluation:

- **Logical Framework Approach:** the LFA is best thought of as a way to present the flow of programme goals, objectives, outputs and activities and how these relate to each other.
- **Results Framework Model:** A results framework, similar to a log frame, explains the relationship between inputs, outputs, outcomes and impacts. For each results level, indicators are chosen that serve to measure progress against targets.
- **Kirkpatrick Model:** Also referred to as the four-level approach to training, referring to the four defined evaluation tiers: reaction, learning, behaviour and results. This model was first developed in the 1950s as a way to evaluate formalised training programmes, particularly in the for-profit sector, in order to calculate return on investment against a company’s bottom line.
- **Countenance Model:** A model often used to evaluate higher education programmes, Stake’s Countenance Model distinguishes between antecedents (those conditions existing prior to teaching and learning), transactions (engagements that make up the process of training) and outcomes (the measurements of the impact of instruction.)

The report’s major contribution is its discussion of various indicators used to measure training results, in the short, medium and long term.

In the short term, it looks at mixed-methods approaches used in Papua New Guinea and Malaysia. In particular, it looks at the use of measurement tools to develop gendered needs assessments and to design and implement pre- and post-training questionnaires.

Examples of medium-term methods come from Bangladesh and Tanzania, respectively. The first looks at Oxfam in Bangladesh’s use of continuous household panels to track data on income and empowerment, as part of the River Island’s women’s empowerment programme. The second looks at an approach used by TechnoServe’s ‘The Coffee Initiative’, which actively tracked women’s participation and women’s adoption of production ‘best practices’ through regular project monitoring, including reporting forms and surveying.

The section on longer-term methods looks at questions of impact evaluation, and in particular the lessons from a mixed-method impact evaluation in Armenia and a ‘simplified quasi-experimental design’ in Guatemala.

The report concludes with a short summary of challenges and considerations for measurement in this area. It briefly touches on issues relating to gender sensitivity, participatory approaches, the use of mobile technology and budgeting. It acknowledges the tension between measuring formal and informal training or technical assistance – noting the relative ease of evaluating more formalized approaches.

The report provides a concise introduction to some of the issues and measurement approaches in this area. Attached appendices provide examples of some of the measurement tools referenced, along with an extensive bibliography for further reading.

# 1 PURPOSE OF THE STUDY

The purpose of this desk review is to provide a summary of indicators, methods, tools, challenges and best practices that will help development practitioners measure the effectiveness of agricultural training, specifically as it relates to women and women's economic empowerment. The study was contracted by Oxfam and will build on ongoing work to improve monitoring, evaluation and learning (MEL) for the Women's Economic Leadership programming in Asia.

Effectiveness may be measured through a range of approaches. The intent of this desk review is to explore methods for assessing the short and medium term outcomes of agricultural trainings. Identified outcomes include:

1. Quality of training
2. Understanding of training content
3. Appropriateness of training content
4. Application and adoption of training content

Although critical to evaluating training programmes as a whole, impacts that accrue over longer periods of time, such as changes in income or changes in women's empowerment, are not explicitly addressed within this review. Further, monitoring of outputs, such as the number of women attending trainings, will only be briefly addressed.

Both qualitative and quantitative methods are presented, and case studies of their utilization come from different sources and different locations. Although the purpose of this desk review is ultimately to synthesize how to measure effectiveness of training on women, most methods presented may be applied to both genders. In addition to methods, the review details several theoretical frameworks that are used to conceptualize training effectiveness. Common challenges that occur when monitoring and evaluating training outcomes are discussed, with emphasis on those specific to women participants. Finally, the review summarizes best practices and considerations to take into account when conducting M&E (monitoring and evaluation) activities on training effectiveness.

The primary method of data collection for this review was a comprehensive synthesis of literature available through the Internet, through sources at Oxfam, and through sources and interviews with individuals at other organizations. Literature includes both peer-reviewed and grey. Because the intent of this review is to provide methods and resources for widespread use, special emphasis was put on documents that are publicly available at no cost. Although there are no limits on the amount of information available, challenges existed in finding source documents that provided detailed methodological information and case studies. Often, when results of studies are published, there is little to no discussion of the specifics of the methodology utilized, and other documents that articulate methodologies do not provide actual details of how these methods were implemented. Readers of this review are encouraged to reference source documents and, in some cases, contact authors of documents to obtain data collection tools or additional information on how specific methodologies were implemented.

## 2 DEFINITIONS AND DISTINCTIONS

Monitoring and evaluation (M&E) is a discipline within international development that utilizes data to measure if a programme is being implemented in the most desirable way and to measure if a programme's intended outcomes and goals are being achieved. Although the two are commonly referred to in tandem, the process of monitoring and the process of evaluating serve distinct purposes and are often conducted by different individuals and with different methods.

**Figure 1: Monitoring versus evaluation for international development**

<i>Monitoring</i>	<i>Evaluation</i>
<ul style="list-style-type: none"><li>• Routine collection of information</li><li>• Tracking project implementation progress</li><li>• Measuring efficiency</li></ul>	<ul style="list-style-type: none"><li>• Analyzing information</li><li>• Ex-post assessment of effectiveness and impact</li><li>• Confirming project expectations</li><li>• Measuring impacts</li></ul>
<ul style="list-style-type: none"><li>• Question: "Is the project doing things right?"</li></ul>	<ul style="list-style-type: none"><li>• Question: "Is the project doing the right things?"</li></ul>

Source: Rajalahti, Woelcke, and Pehu, 2005.

Monitoring refers to the ongoing and systematic collection of information, generally collected by the programme implementer, which is used to assess progress towards achievement of objectives, outcomes and impacts (Governance and Social Development Resource Centre, 2007). Evaluations are used to analyze a programme in regards to its ability to meet impacts and goals. In contrast with monitoring, evaluations are usually conducted in discrete time periods, such as at baseline, mid-line, or end-line. In many cases, evaluations are conducted by third-party organizations to provide non-biased assessments.

This review describes methods that are utilized by practitioners as part of ongoing M&E. In order to comprehensively understand the effectiveness of a programme's agricultural training activities, it is highly recommended that a programme incorporate methods from both categories.

## 3 THEORETICAL MODELS

Within research literature, much attention is focused on theoretical models. Some models, specifically logical frameworks and results frameworks, provide theoretical structure to the overall implementation process, incorporating activities, outputs and impacts. These are aimed at a whole-programme approach and detail how each step in the implementation leads to results in the next step. Other theoretical models are specific to a topic – in this case, training evaluation. Four theoretical models are described in this section with the intent of familiarizing practitioners with different terminology and theoretical processes that are used to measure the accumulation of training activity benefits. The first two, the logical framework approach and the results framework approach, are often cited in international development, whereas the last two, the Kirkpatrick model and the Countenance model, are more generally referred to in the education sector.

# LOGICAL FRAMEWORK APPROACH

One of the most commonly referenced and utilized frameworks within international development is the Logical Framework Approach (LFA). The LFA methodology is a 'systematic, visual approach to designing, executing and assessing programmes which encourages users to consider the relationships between available resources, planned activities, and desired changes or results' (Kaplan, 2014). The LFA is best thought of as a way to present the flow of programme goals, objectives, outputs and activities and how each of these relates to one another. The Australian Agency for International Development (AusAID) describes the utility of the LFA as helping to identify and assess activity options; prepare the activity design in a systematic and logical way; appraise activity design; implement activities; and monitor, review, and evaluate activity progress and performance (AusAID, 2005).

Although the LFA is often used to manage programme design and how each activity relates to the overall goals of the programme, the approach is most relevant to M&E practitioners through the logical framework matrix, commonly known as the log frame. For many donors, including the UK Department for International Development (DFID), log frames are highly recommended, if not required. Figure 2 shows an example of the general structure and content of a log frame. M&E practitioners are responsible for overseeing the indicators that are attached to each activity description. Indicators are generally categorized as goal or impact; purpose or outcome; component objectives or intermediate results; and outputs. These descriptions are particularly relevant in that they are also common to the Results Framework Approach, which is detailed in the next section. Means of verification are outlined, which, for M&E purposes, are the data collection methodologies that are used to measure each indicator. By conceptualizing activities, indicators, and methods for data collection prior to beginning a programme, practitioners position themselves to have a concrete understanding of what is necessary to effectively implement and assess the effectiveness of a training programme.

**Figure 2: Log frame structure and content example**

<b>Activity Description</b>	<b>Indicators</b>	<b>Means of Verification</b>	<b>Assumptions</b>
<b>Goal or Impact</b> – The long term development impact (policy goal) that the activity contributes at a national or sectoral level	How the achievement will be measured – including appropriate targets (quantity, quality and time)	Sources of information on the Goal indicator(s) – including who will collect it and how often	
<b>Purpose or Outcome</b> – The medium term result(s) that the activity aims to achieve – in terms of benefits to target groups	How the achievement of the Purpose will be measured – including appropriate targets (quantity, quality and time)	Sources of information on the Purpose indicator(s) – including who will collect it and how often	Assumptions concerning the Purpose to Goal linkage
<b>Component Objectives or Intermediate Results</b> – This level in the objectives or results hierarchy can be used to provide a clear link between outputs and outcomes (particularly for larger multi-component activities)	How the achievement of the Component Objectives will be measured – including appropriate targets (quantity, quality and time)	Sources of information on the Component Objectives indicator(s) – including who will collect it and how often	Assumptions concerning the Component Objective to Output linkage
<b>Outputs</b> – The tangible products or services that the activity will deliver	How the achievement of the Outputs will be measured – including appropriate targets (quantity, quality and time)	Sources of information on the Output indicator(s) – including who will collect it and how often	Assumptions concerning the Output to Component Objective linkage

↑ **Work program** (not usually included in the matrix itself)

Source: AusAID, 2005.

## RESULTS FRAMEWORK MODEL

Another highly common model within the international development community is the Results Framework Model, often referred to simply as the results framework. According to the World Bank, a results framework is ‘an explicit articulation of the different levels, or chains, of results expected from a particular intervention’ (Independent Evaluation Group, 2012). A results framework, similar to a log frame, explains the relationship between inputs, outputs, outcomes, and impacts. For each results level, indicators are chosen that serve to measure progress against targets.

A well-developed results framework should focus on programme outcomes, rather than activities and inputs, and because of the inclusion of specific indicators and targets relating to outcomes and impacts, results frameworks are often utilized by M&E practitioners to ensure that results are being achieved.

Results frameworks can be expressed in the form of a flow chart, which is particularly useful when articulating the overall goals, impacts and outcomes of a programme. Results frameworks are also presented in matrix form, as in Figure 3.

**Figure 3: Results framework example, Agro Pastoral Productivity and Markets Development Programme, Burundi**

Project outcomes indicators	Baseline	Target values					Data collection and reporting			
		YR1	YR2	YR3	YR4	YR5 (Target)	Frequency and reports	Data collection instruments	Responsibility for data collection	
Average yield of targeted commodities										
Rice (t/ha)	2.5	2.8	3.3	3.8	4.0	4.0	End of cropping season	Annual producer survey	PCU	
Banana (t/ha)	9.0	NA	12	14	16	16	End of annual marketing period	Annual producer survey	PCU	
Coffee (t cherries/ha)	0.4	0.5	0.6	0.7	0.8	0.8	End of annual marketing period	Annual producer survey	PCU	
Milk (l/yr)	360	400	500	650	800	950	End of annual marketing period	Annual producer survey	PCU	
Percent of production of commodity in targeted value chains marketed by participating producers	10	12	18	22	26	30	End of annual marketing period	Annual producer survey	PCU	
<b>Target values (cumulative)</b>										
Support to agricultural productivity and market process										
Percentage of participating farmers (male/female) adopting new technology packages (for production, post-harvest, processing, and so forth)	10	15	30	45	60	70	Cropping season/annually	Cropping season/annual sample survey	IPCU/PSP	
Percentage of producers adopting animal breeds and husbandry practices for milk production	10	15	30	45	60	70	Annually	Annual sample survey	IPCU/PSP	
Percentage of participating producer groups/associations/cooperatives having contractual arrangements with marketing agents	0	2	5	10	15	20	Annually	Annual sample survey	IPCU/PSP	

Source: Independent Evaluation Group, 2012.

## KIRKPATRICK MODEL

The Kirkpatrick Model was first developed in 1954 as a way to evaluate formalized training programmes, particularly in the for-profit sector, in order to calculate returns on investment for company bottom-line. The model is also referred to as the four-level approach to training, which refers to the four defined evaluation tiers: reaction, learning, behaviour and results. Level one, reaction, is used to assess training participants' reaction to the programme in regards to how well they liked it, as well as satisfaction with the quality of the instructor or the relevance of the content. Level two, learning, quantifies what was learned as a result of the training. Behaviour, the third level, addresses behaviour changes and outcomes that relate to the training content. Last, the results level measures the impact the training had on broader organizational goals and objectives (Bates, 2004).

This model is often applied to evaluate formalized learning programmes conducted by for-profit organizations, although it can also be used to conceptualize the effectiveness of agricultural training programmes. The process steps are clearly articulated and easily understood by a variety of audiences, and when all four levels are evaluated, a holistic assessment of training effectiveness, from the most basic to the most complex, can be provided. One critique, as presented by Reid Bates, is that the evaluation model heavily focuses on data that is collected after the training has taken place (Bates, 2004). As a result, learning and behaviour evaluation levels may not provide proof of causality, which is of great relevance to M&E practitioners. Particularly when proof of causal impact is desired – that is, when implementers desire to use data to prove whether or not changes in a trainee's learning and behaviour are a direct result of the training programme – the Kirkpatrick model's learning and behaviour evaluation levels would not be sufficient. A more formal evaluation design would be required, using pre- and post-programme data as well as advanced statistical methods, to determine if the changes in learning and behaviour can be directly attributed to the training.

# COUNTENANCE MODEL

A number of additional models for evaluating training effectiveness exist and are commonly used in the formal education sector the for-profit sector, and the international development sector. One that is most often utilized to evaluate higher education programmes is Stake's Countenance Model, which distinguishes between antecedents (those conditions existing prior to teaching and learning which may relate to outcomes, which may include baseline data in international development context), transactions (any engagements that make up the process of educational training), and outcomes (the measurements of the impact of instruction) (Stake, 1967).

Although this review takes into account the variety of training evaluation models that are utilized in and beyond the international development sector, it primarily describes methods within the context of the log frame and results framework models, referring to activities, outputs, outcomes, and impacts.

## 4 INDICATORS

Before methods are selected, and before programme implementation has begun, practitioners should use a log frame matrix or results framework to identify the indicators that will be used to measure progress and effectiveness of the programme. According to the World Bank, indicators are 'quantitative and qualitative variables that provide a simple and reliable means to measure achievement reflect changes connected to an intervention, or help assess the performance of an organization against the stated targets' (Rajalahti, Woelcke, and Pehu, 2005).

Choosing indicators for a programme should be a careful and intentional exercise, and many resources provide guidance on what makes a good indicator. A good indicator is often referred to as **SMART** – **S**pecific – **M**easurable – **A**chievable – **R**elevant – **T**imebound. More importantly, perhaps, is that an indicator is realistic: that there are time, resources and data available to measure it effectively (Governance and Social Development Resource Centre, 2007). Indicators are often categorized as output, outcome or impact, and these categories correspond to the levels in the programme log frame or results framework.

**Figure 4: Indicator categories**

Indicator category	Definition	Significance
<i>Output</i>	What your programme produces	The tangible and intangible products that result from programme activities
<i>Outcomes</i>	What your programme achieves	The benefits that a programme or intervention is designed to deliver
<i>Impact</i>	How your programme contributes to higher level strategic goals	The higher level goals to which you hope your programme will contribute

Source: Parsons, Gokey, and Thornton, 2013.

Common indicators for measuring agricultural interventions are abundant. Larger donors and implementers tend to have standardized indicators that are applied across programmes, while smaller entities, such as NGOs, have customized indicators that are created on a programme-to-programme basis. Nearly all agricultural programmes include indicators that measure the outputs of agricultural trainings – often expressed as the number of individuals trained – and indicators that measure the long-term outcomes or impacts of agricultural trainings. Less

prevalent, however, are indicators that measure the short-term effectiveness of agricultural trainings. Most indicators that are utilized by development practitioners are quantitative in nature, though qualitative indicators are sometimes included.

Annex I provides a summary of illustrative indicators from different entities that have been used to measure the outputs and outcomes of agricultural training programmes. Indicators come from donors and from programmes and cover a range of intended results. Some indicators require rating scales and computation of scores, while others are counts of activity participants. In order to best measure the effectiveness of agricultural training, multiple indicators should be included within a programme's log frame or results framework. These indicators should not only assess the quality of the training, but also whether trainees perceived the trainings to be appropriate and whether the programme created behaviour changes and impacts.

It is highly recommended that gender disaggregates are required for all relevant indicators so that results can be analyzed separately for male and female participants. For example, if a practitioner collects data for the World Bank standard indicator, 'rating of client satisfaction with new technologies or management recommendations', it is crucial that the data collection tool captures the gender of the respondent. This way, when viewing results, a programme can analyze whether female participant ratings differ from male participant ratings. Programme staff can then make implementation adjustments as necessary or explore gender discrepancies with additional methods, such as needs assessments or focus groups.

## 5 METHODS AND TOOLS

When conducting monitoring and evaluation of development programmes, a primary consideration should be the intended timing of data collection. If information is collected continuously, it is easier to make adjustments to programme implementation based on results. However, this often doesn't allow the practitioner to evaluate benefits of the programme that may take longer to accrue. For example, if a practitioner is interested in assessing the effectiveness of a particular training module, the most ideal time in which to measure participant satisfaction would be immediately after the training was conducted. If the goal is to measure whether or not the particular training module led to an outcome, such as adoption of good water management practice during planting, it would not be advised to measure this immediately after the training, but rather a few months down the line when the participant has planted her crop.

This section will detail different data collection methods that are utilized in the monitoring and evaluation of agriculture development programmes and, when available, data collection tools have been included as annexes. Methods are divided into three categories:

1. **Short-term:** those that are best employed closely before or after training;
2. **Medium-term:** those that are best employed on a semi-annual or annual basis; and
3. **Long-term:** those that are best employed in mid-term or end-line evaluations.

All methods seek to answer the four identified outcomes on which this review is focused (quality of training; understanding of training content; appropriateness of training content; application and adoption of training content). The intent of providing three categories of methods is to allow the practitioner to choose which best fit the intent of their data collection. That is, if the practitioner desires to incorporate rapid information and modify programme implementation, or whether the practitioner wishes to assess the overall efficacy of a programme in regards to outcomes and impacts. Although these methods are presented in different categories, this does not indicate that only one should be applied. *Indeed, it is highly recommended that methods*

*from more than one category are used during a programme in order to make implementation as successful as possible and to ensure that outcomes and impacts were achieved.*

The case studies below are intended to serve as examples but are not inclusive of all potential methods to measure effectiveness of agricultural trainings. Additional methods and case studies can be found in the annotated bibliography in Annex 4, which also includes hyperlinks to source documents.

Further, most programmes that engage in M&E activities during implementation collect data related to output indicators. The most common indicators related to outputs are counts of training participants, often disaggregated by gender or age. Programmes should have systems in place to track output data, whether through paper registration forms, tablets or other information and communication technology (ICT) methods or databases. Methods for collecting output data are not explicitly covered in this review, but all programmes should have solid procedures in place to track this information. Participant names are necessary in order to conduct data collection using the methods that are discussed in this section. For more detailed information on output-level data and suggested methods for data collection, see: Parsons, Gokey, and Thornton, 2013; The World Bank, 2013; Rajalahti, Woelcke, and Pehu, 2005.

## SHORT TERM

Short-term data collection, meaning data that is collected immediately before or after a training, has the potential to capture a significant amount of information about the agricultural training sessions. Short-term data collection may be conducted before and after training in order to assess the quality, level of understanding of content by the trainee, and the appropriateness or relevance of training topics from the perspective of the participant. In many cases, short-term data methods take the form of a pre- and post-test. Some particularly innovative methods incorporating ICT can be used to capture the reaction of trainees, both in regards to training content as well as effectiveness of the trainer.

A strong argument for the use of short-term data collection is the ability to rapidly incorporate results from data collection into programme implementation. Because this feedback is continually captured, it better positions development practitioners to make adjustments to the training content as well as to the way in which training is provided. The examples below provide details on programme M&E methods that have been used to measure reactions and learning of training participants in a continuous manner.

### Example one: Mixed methods in Papua New Guinea

<i>Programme/Programme title</i>	Increasing vegetable production in Central Province, Papua New Guinea, to supply Port Moresby markets
<i>Qualitative vs. Quantitative</i>	Mixed
<i>Type of methods</i>	Needs assessment/collaborative problem-solving methodology (CPSM) Pre-tests/post-tests On-farm observations Focus groups Post-post-tests
<i>Outcomes measured</i>	Understanding of training content Appropriateness of training content Application and adoption of training content

In January of 2010, the Australian Centre for International Agricultural Research (ACIAR) began implementing a programme in Central Province, Papua New Guinea, to supply Port Moresby markets with horticultural products. Implementation was conducted by a variety of local partners, and one of the primary objectives of the programme was to ‘establish more efficient, effective, and sustainable vegetable value chains in order to provide improved economic returns expressed as profitability and household income security for chain participants’ (Seta-Waken, Chambers, Palaniappan, and Birch, 2013). The programme also specifically intended to create an enhanced role for women in horticultural production and marketing.

In February 2011, approximately one year into the programme, focus groups were held with programme participants to deduce the appropriateness of training content that would be or had already been administered. Using a collaborative problem-solving methodology (CPSM) (Palaniappan, Chambers, Bonney, and Birch, 2013), programme implementers realized that women and men participants had significantly different needs that they hoped would be addressed by the trainings. ACIAR accordingly held a needs-assessment workshop with programme participants, and the results of this workshop provided implementers with training themes that were of the highest priority and most relevance to programme participants by gender (Figure 4).

**Figure 4: Results of training needs assessment among women and men smallholders**

Task	Ease of task		Gender difference in training needs?	Task allocation
	Women	Men		
Horticultural production activities				
Soil preparation	Easy	Very difficult	Yes	Men
Planting	Easy	Quite difficult	Yes	Men
Irrigation	Very difficult	Very difficult	No	Men and women
Crop management	Quite difficult to very difficult	Very difficult	Slight	Men and women
Marketing activities				
Harvesting	Easy to quite difficult	Easy	Slight	Women
Packaging	Easy to quite difficult	Easy to quite difficult	No	Men and women
Marketing	Quite difficult to very difficult	Quite difficult	Slight	Men and women
Business activities				
Banking	Easy	Easy	No	Men and women
Bookkeeping	Easy	Quite difficult to very difficult	Yes	Men and women
Transport	Very difficult	Quite difficult to very difficult	Slight	Men and women

Source: Palaniappan, Chambers, Bonney and Birch, 2013

Following the development of appropriate training curriculums for male and female participants, ACIAR and implementation staff utilized pre-tests and post-tests with 28 female farmers who were trained by the programme. These tests consisted of questions relating to basic information about horticultural practices, including soil management, irrigation and weed, pest and disease control, and were aimed at understanding learning – that is, whether or not participants understood and comprehended the training content (Figure 5. For further examples see Annex 2). The results of these tests were supplemented by observations, focus-group discussions, and interviews with participants.

Additional data collection occurred in the form of a post-post-test, which was conducted to determine participants’ perceptions of the adoption of training knowledge, skills and attitudes, as well as on the suitability of the training in regards to their adoption. These follow-on surveys, which were accompanied by observational data on horticultural practices collected by

programme staff, took place as long as ten months after training. Although post-post-test survey would generally be characterized under medium-term data collection, the M&E strategy for the programme combined short-term collection with medium-term collection to answer the reaction, learning and behaviour changes that occurred as a result of trainings. This example also articulates methods – in this case a needs assessment prior to training – that sought to ensure that training priorities for female participants were addressed.

**Figure 5: Soil management knowledge: Pre- and post-test questionnaires**

Pre-test survey responses	Number of responses	Proportion of total respondents (%)
1. Methods used to manage soil in the gardens are:		(n = 28)
a) Mulching with dry banana stems, maize leaf etc.	18	64
b) Applying organic composts	7	25
c) Weeding	0	0
d) Applying fertilisers	1	4
e) Other: slash and burn/fallowing	16	57
2. The methods of soil management were learnt through:		(n = 28)
a) Parents	23	82
b) Relatives/friends	4	14
c) Formal training from agricultural extension officers	8	29
d) Other: read posters	1	4
3. Are you able to follow these methods?		(n = 28)
a) Yes	28	100
b) No	0	0
4. Are there any other methods you know about soil management?		(n = 28)
a) Yes	24	86
b) No	4	14
4.1. If yes, the other methods of soil management known are:		(n = 20)
a) Slash and burn	3	15
b) Soil erosion-reduction techniques	1	5
c) Fallow/crop rotation	3	15
d) Other: drainage/applying food peelings	13	65

Post-test survey responses	Number of responses	Proportion of total respondents (%)
1. Are there any new methods you know about soil management?		(n = 28)
a) Yes	28	100
b) No	0	0
2. New soil management methods learnt were:		(n = 28)
a) Fallowing	3	11
b) Green manuring/crop cover	12	43
c) Drainage	13	46
d) Crop rotation	13	46
e) Mulching	20	71
f) Applying fertiliser	2	7
3. These new soil management methods were learnt through:		(n = 28)
a) Parents	2	7
b) Relatives/friends	0	0
c) Attending this training	28	100
d) Other	0	0
4. Are you able to follow these methods?		(n = 28)
a) Yes	27	96
b) No	1	4
5. Are there any challenges in following these methods?		(n = 28)
a) Yes	20	71
b) No	8	29
5.1. If yes, the challenges are:		(n = 20)
a) Finance/funding for implements needed to try out the new method	19	95
b) Convincing family, relatives or friends in trying out new methods	3	15
c) Lack of support from family, relatives or friends	9	45
d) Other	0	0

Source: Seta-Waken, Chambers, Palaniappan and Birch, 2013

## Example two: Mixed methods in Malaysia

<i>Programme/Programme title</i>	Agriculture Entrepreneurs Scheme livestock training
<i>Qualitative vs. Quantitative</i>	Mixed
<i>Type of methods</i>	Pre-tests/reaction tests/ post-tests Semi-structured interviews Telephone interviews On-farm observations
<i>Outcomes measured</i>	Quality of training Understanding of training content Appropriateness of training content Application and adoption of training content

During the late 2000s, the Government of Malaysia held livestock farming training courses through various training centres located throughout the country as part of its agrarian reform strategy. These training courses had the main objective of improving on-farm competencies, skills and capabilities to lead to improved farm practices and productivity.

Khairul Baharein Mohd Noor and Kamariah Dola of the University Selangor and University Putra Malaysia, respectively, conducted research with the goal of identifying the level of productivity improvement after training, the knowledge, skills and ability transfer from training to workplace, and the benefits and improvements to farmers (Noor and Dola, 2011). In order to operationalize these research objectives, they collected data utilizing a variety of methods based on the Kirkpatrick model of training evaluation. The first was a series of structured surveys that were distributed to trainees prior to training (pre-tests), immediately after training (reaction tests), and three to six months after training (post-tests) (see Annex 3). Pre-tests were used to capture the

baseline understanding of farmers in regards to the training materials. Reaction tests were administered to measure whether the skills provided during the training were relevant to the farmers, both in terms of understanding of content and applicability of content to their daily activities. Finally, the researchers distributed a post-test to trainees by mail in order to measure farmer perceptions of how the training had benefitted them in the short term. By collecting structured survey data at three different periods of time, the researchers were able to capture information on the reaction and learning of trainees in the short term.

In their findings, the researchers mention that response rates on the post-test surveys were somewhat low due, particularly due to incorrect home addresses, low levels of literacy among farmers and lack of commitment and obligation. In order to mitigate the non-response challenge, researchers supplemented the structured surveys with semi-structured interviews and telephone interviews with purposively selected trainees. The purpose of these additional interviews was to elaborate upon themes that arose through the reaction and post-test surveys, as well as to follow up with trainees who had not responded to post-test surveys. Further, in order to measure behaviour change and improvements in productivity, the researchers conducted on-farm visits and observations to determine the actual application of competencies and skills, as well as to measure the impacts of behaviour changes on farmers' productivity.

## MEDIUM TERM

Development practitioners often desire or are required to report on a select number of output and outcome indicators each year throughout the life of a programme. This medium-term data – which, for the purposes of this review, is considered as semi-annual or annual – has the ability to reflect learning and changes in farmer behaviour that take slightly longer to accrue. These medium-term outcomes include technology use and adoption, and though not as 'real-time' as short-term data, semi-annual or annual data can still be utilized to inform how implementation is progressing. If, for example, farmers do not seem to be adopting a particular technology, and they state during data collection that this is because they did not understand the training module about this technology, practitioners may still have time to modify training content to better ensure trainee comprehension and adoption.

One common way in which information on training utility is collected is through household surveys. In addition to the Papua New Guinea example of post-post-tests, practitioners are also utilizing panel datasets and post-harvest data collection forms in order to track what was learned from training and how training impacted technology adoption.

### Example one: Continuous household panels in Bangladesh

<i>Programme/Programme title</i>	REE-CALL – Bangladesh
<i>Qualitative vs. Quantitative</i>	Quantitative
<i>Type of methods</i>	Continuous household panels
<i>Outcomes measured</i>	Understanding of training content Application and adoption of training content

Oxfam GB, in conjunction with Oxfam Bangladesh, developed the idea of utilizing continuous household panels to track income, empowerment and other data. The River Islands women's empowerment programme in Bangladesh, which is part of the larger REE-CALL programme implemented by Oxfam, has been conducting panel surveys on 600 households for over two years. The concept for these panel surveys was based on measurement tools used by consumer marketing companies, and surveys are conducted every six months.

Of particular relevance within the larger household survey are the sections that address training content, application and adoption. Households are asked a series of questions to gauge effectiveness in regards to whether respondents had received training, what they had learned, what the perceived benefits of training were and whether training knowledge had been applied (see Annex 4). The continuous household panel method is particularly useful as it incorporates measures of training effectiveness into a survey that collects data required to fulfil contractual obligations. By incorporating training questions into the continuous household panels, Oxfam has created an M&E system that allows for the programme to continually collect information necessary to assess the effectiveness of its training activities. Because this information comes every six months, the programme can also make adjustments as necessary to maximize the impact on beneficiaries.

## Example two: Best practice adoption surveys in Tanzania

<i>Programme/Programme title</i>	The Coffee Initiative – Tanzania
<i>Qualitative vs. Quantitative</i>	Quantitative
<i>Type of methods</i>	Agronomy practices survey Annual income self-reporting forms
<i>Outcomes measured</i>	Application and adoption of training content

The Coffee Initiative, implemented by TechnoServe and funded by the Bill and Melinda Gates Foundation, was a programme that intended to leverage the coffee value chain to increase incomes of 10,000 poor female and male smallholder farmers throughout Tanzania (Kanesathasan, Jacobs, Young, and Shetty, 2013). Because coffee has been traditionally viewed as a man’s crop in the country, TechnoServe took great efforts throughout the implementation and M&E of the programme to ensure that gender norms and constraints that had kept women out of coffee production in the past were addressed.

TechnoServe tracked women’s participation in the programme in detail in order to observe attendance, as well as attendance by module. This output information helped inform which trainings were of most importance to women, and it also allowed the programme to observe if there appeared to be a difference in female training participation depending on the gender of the trainer. This information was fed into a monitoring system that was used to measure progress in agronomy practice application at the household level. Called Best Practice Adoption surveys, these surveys were administered by village-based data collectors, and in some cases included questions regarding satisfaction with training activities (Kanesathasan, Jacobs, Young, and Shetty, 2013). Female and male training participants also filled out forms that were used by TechnoServe to track annual income data (see Annex 5).

The Best Practice Adoption survey serves as an example of how short-term methods that track farmer attendance at the output level can feed into medium-term methods that measure farmer application and adoption of training content. These surveys are most useful when collected at the end of harvests, when farmers have the ability to more accurately recall information on their technology application.

## LONG TERM

Many programmes conduct evaluations that seek to measure if a programme was effective in achieving its intended outcomes and impacts in the long-term – that is, after the programme has ended. These evaluations often take the form of performance evaluations – which focus on the evaluation of the implementation of a programme – or impact evaluations – which focus on the measurable results against stated objectives of the programme. Depending on programme

budget and M&E plans, data collection for evaluations most often takes place at baseline and at the end of programmes, although some programmes also collect mid-term data. Because data is collected infrequently, evaluations are best applied when practitioners want to use data as a way to understand why outcomes or impacts were not achieved. Evaluations are not generally used to make modifications to implementation during a programme, though results can influence the design of future programmes.

Although evaluations are not ideal when programme staff desire to incorporate feedback into ongoing implementation, this does not negate their utility. Information from evaluations can be used to explore the relationship between effectiveness of training and accrual of longer-term benefits; and these findings can be used to inform future programmes. Further, because evaluations often use control groups, practitioners who utilize evaluations to measure the effectiveness of agricultural training can better isolate the changes that were a direct result of the development programme. Many long-term evaluations utilize quantitative methods such as randomized controlled trials and quasi-experimental methods, although many programmes incorporate qualitative techniques into their data collection to further explore why results look the way they do.

## Example one: Mixed-method impact evaluation in Armenia

<i>Programme/Programme title</i>	Water-to-Market – Armenia
<i>Qualitative vs. Quantitative</i>	Mixed
<i>Type of methods</i>	Randomized controlled trial Key informant interviews Focus groups Observations of trainings
<i>Outcomes measured</i>	Quality of training Appropriateness of training content Application and adoption of training content

In August 2013, Mathematica Policy Research published a paper entitled *Should Foreign Aid Fund Agricultural Training? Evidence from Armenia*, which summarized results of a clustered randomized controlled trial of the Armenia Water-to-Market (WtM) training programme (Blair, Fortson, Lee, and Rangarajan, 2013). Funded by the Millennium Challenge Corporation (MCC), WtM was delivered in two modules, and both modules utilized classroom sessions and on-farm demonstrations in order to help farmers adopt new and efficient irrigation techniques and to help farmers adopt better agricultural practices. As a goal, the programme intended to increase and diversify agricultural production, increase sales and profits, and, over time, increase household well-being.

Mathematica collected baseline data from 4,715 households in late 2007/early 2008 and end-line data in late 2010/early 2011 from 3,547 households. This data was quantitative in nature, and contained questions in regards to land cultivation and irrigation, as well as specific crop information, such as production, sales and crops. Information on household earnings and consumption was also collected, as were data on agricultural technologies used, training attendance and basic demographic information. The overall intent of the quantitative data was to assess whether or not the programme was effective in achieving its goal of increasing production, profits and household well-being.

Qualitative data was also collected for use in the evaluation. Using a combination of document review, in-depth interviews with farmers and stakeholders, community interviews and observations, Socioscope, an Armenian-based NGO, sought to qualitatively evaluate the implementation of the WtM programme (Socioscope, 2010). Evaluation questions explored by Socioscope through the qualitative data included, among others:

1. Who are the targeted beneficiaries?
2. What are the perceptions of programme intervention according to different stakeholders?
3. How was the implementation process?

In order to answer these questions, Socioscope conducted approximately 100 focus groups and interviews and observed more than 20 trainings and demonstration farms. Further, the programme implementer conducted surveys of trained farmers to specifically measure technology adoption rates. These were conducted on an annual basis and were used to report to programme management and to donors.

## Example two: Simplified quasi-experimental design in Guatemala

<i>Programme/Programme title</i>	ORGANIC – Guatemala
<i>Qualitative vs. Quantitative</i>	Mixed
<i>Type of methods</i>	Quasi-experimental ('simplified') Field visits Semi-structured stakeholder interviews
<i>Outcomes measured</i>	Application and adoption of training content

Between the years of 1998 and 2000, the ORGANIC programme was implemented in the province of Totonicapán in western Guatemala. One of the components was a training programme that was focused on promoting low external input agriculture (LEIA) for small-scale agriculture in the area. It consisted of a total of 18 courses, including practical training at experimental, or demo, farms. Training participants were given homework and were periodically visited by the extension workers who had administered training content. Some trainings participants were also hired as trainers after their completion of the course (Vaessen and de Groot, 2004).

Prior to programme implementation, donor and ORGANIC staff designed an evaluation study to be enacted by an external evaluator. The intent of the evaluation study was to assess the changes in outcomes and impacts that occurred as a result of the training programme. In particular, the study looked at adoption of agricultural practices, diffusion of agricultural practices, changes in soil quality, changes in yields, percent of harvest sold, changes in farm income and changes in organizational and managerial capacities (Vaessen and de Groot, 2004). Because of a small population size (120 farm households) and budget constraints, a formal quasi-experimental design with matching techniques and sufficient statistical power was deemed to be unrealistic. As a result, the final evaluation design was described as a mixed-method evaluation, primarily consisting of a simplified quasi-experimental design that was supplemented by data from field visits and semi-structured stakeholder interviews.

A baseline survey and an ex post survey were conducted on the same participant households in 1998 and 2001. In 1998, baseline data was collected from 56 households, and this data was collected from 48 households after programme implementation in 2001. Also during the ex post survey, a control group of 38 households was selected to provide comparison data. Attention was taken to ensure that control group households had comparable characteristics to participant households and that control households had not had contact with the ORGANIC programme or programme participants. Results from data collection, both quantitative and qualitative, indicated that knowledge of LEIA agricultural practices had increased as a result of training, though impacts were more muted (Vaessen and de Groot, 2004).

This type of simplified quasi-experimental design, with small sample sizes and use of a control group only after programme implementation, is fairly unconventional methodology. However, it does have the ability to show shifts in treatment groups and, by adding a control group, indicate potential causality. The evaluation was, as admitted by researchers, not particularly strong in measuring impacts, both due to a lesser ability to indicate causality and because the ex post data collection did not occur long enough after programme implementation for results to accrue. With the addition of qualitative data to corroborate findings, this type of simplified quasi-experimental mixed method study has the ability to assess training outcomes without complex statistical models and within a limited budget.

## 6 CHALLENGES, CONSIDERATIONS AND BEST PRACTICES

There are a number of cross-cutting challenges, considerations and best practices that apply to all data collection methods, several of which are detailed below.

### GENDER SENSIVITY

Gender-related issues should be considered when conducting agricultural training and collecting data to measure the effectiveness of the training. In addition to ensuring that content is relevant to female participants – through needs assessments, focus groups, participant feedback, or other methods discussed above – implementers should also be sensitive to the gender of the trainer in order to ensure meaningful inclusion of women in training programmes. The relationship between female training participation and the gender of the trainer can be explored in many of the methods described, as well as in stakeholder interviews. In some contexts, it may be more effective to train women separate from men with a female trainer, whereas in other contexts it may not have a great impact on participation rates. Implementers should, when possible, explore how the quality of training and the understanding of training content are impacted by these gender relationships.

When collecting data from female training participants, whether the information is general or when the information is more sensitive, there are a number of best practices to consider. Kanesathasan, Jacobs, Young, and Shetty discuss a number of these in their report, *Capturing the Gender Effect: Guidance for Gender Measurement in Agriculture Programmes* (2013), including:

1. Consider interviewing men and women separately. Sometimes when women and men are interviewed together, especially couples, they may censor their responses due to the presence of the other. When interviewed individually, men and women may feel able to respond more freely.
2. Consider that your sample may need to include different kinds of women and men. For example, the responses from a widowed female head of household and a married head of household may differ, so the potential presence of these different kinds of female and male participants should be taken into account when selecting samples.
3. Dig deeper when it comes to asking about agricultural decision making. Often, participants are asked about who is the main decision maker, when, in practice, the response is more

nuanced. Consider asking more specific questions about decision making, such as who decides what to grow, who decides when to harvest, who decides to what market to sell, etc.

4. Be considerate of context when entering a community. In many cases, partners or elder males in the family need to provide approval before women are allowed to participate in an interview. Being respectful of these cultural norms and addressing the participation of women with men or the family prior to interview facilitates the job of data collection and may pave the way for more thoughtful and honest answers.

Other considerations include ensuring that data collection teams comprise both females and males. Similar to having female trainers, it is necessary to recognize that, in some instances, responses will be more honest or free when enumerators and respondents are of the same gender. Further, when designing focus groups or questionnaires that are specific for women, practitioners should consider the time resources that are being devoted to programme M&E activities instead of to household tasks. Though this is also relevant for men, it is particularly acute for women, who often have household caretaking activities for which they are responsible.

## PARTICIPATORY METHODS

In conventional M&E, systems and methodologies, including many of those discussed above, are designed and implemented by technical specialists, whether they be nationals or international experts. Within the international development community, there is an alternative to the conventional M&E approach called participatory M&E. Defined as the 'involvement of stakeholders in deciding how the programme or programme should be measured, in identifying and analyzing change, and in acting on results' (GSDRC, 2015), participatory methods differ from conventional M&E approaches in five key ways: why the evaluation is being done, how the evaluation is done, who does the evaluating, what is evaluated and for whom the evaluation is being done (Sette, 2015).

There are often fundamental differences between the methods that are used in conventional M&E and in participatory M&E. Conventional M&E approaches tend to be more formalized and technical, often consisting of lengthy questionnaires. Methods in conventional M&E are often quantitative, and analysis may require a significant amount of technical skill. Participatory approaches, on the other hand, are more informal and qualitative. Methods include self-assessment, stakeholder evaluation, participatory social mapping, participatory rural appraisal, scoring, causal-linkage and trend and change diagramming, and community workshops (GSDRC, 2015). In most cases, participatory approaches are conducted by members of the community where the programme is being implemented, and often, by programme participants themselves.

There are mixed opinions on which M&E approach is preferred. A more likely scenario is that a programme's M&E approach should mix both participatory methods and conventional methods in order to understand training effectiveness from the perspective of participants who may otherwise be marginalized. For example, participatory methods that consist of mapping or diagramming may be appropriate for illiterate participants or those who are less comfortable discussing technical issues. Many proponents of participatory M&E cite that it is more cost-effective and sustainable than conventional approaches, though in some cases the M&E costs are not necessarily less, but are instead borne by programme participants who are engaged in the participatory processes.

# INFORMATION AND COMMUNICATION TECHNOLOGIES

New advances in technology have great potential to influence the M&E field, and many of these new tools have already become common practice among the international development community. Mobile phones can be used to collect real-time feedback on the quality of training content and the trainer, and there are a number of software platforms available that allow programme participants to submit more detailed data through their cell phones. Mobile data collection tools, through analogue phones, smartphones and tablets, have the potential to significantly reduce data collection costs and the time necessary to conduct surveys and data entry. For more information on the use of ICT for agriculture and training programmes, see: *The World Bank, 2013; Liu and Palmisano, 2012.*

## OTHER CONSIDERATIONS

### **Budget**

Although M&E activities are often contractually required, many organizations and practitioners underestimate both the time and the budget necessary to enact comprehensive M&E systems. Programme indicators and data collection methodologies should be, when possible, articulated at the beginning of programme implementation, and M&E activities should be explicitly planned for the entire life of a programme. USAID recommends that five to 10 percent of total programme resources are allocated for M&E, while DFID suggests 10–15 percent of programme budget as a rule of thumb (DFID, 2005).

### **Formal training versus informal training**

In many agricultural development programmes, formalized training and informal trainings – often referred to as technical assistance – are conducted by programme staff. Both types of assistance have the capacity to influence farmer learning and behaviour. However, it is often more straightforward to measure formal trainings, as there are established curriculum topics that can be evaluated. Little formal guidance on evaluating informal training exists, though many of the methods above can be applied to technical assistance-types of interventions. It is imperative, however, that practitioners have in place a formalized system that can record both types of training interventions and keep track of the trainees who received each intervention, as well as information about the type of training received. For example, in cases in which formal trainings are conducted, trainers often require trainees to register on a sign-in sheet. Trainees can then be registered into a database that tracks their training attendance and the topics in which they received training. In order to capture the impacts of informal training, trainers should be encouraged to also keep a log of the informal technical assistance they provided, to whom and on what topics. Thereby, when surveys or interviews are conducted with farmers who received training, whether formal or informal, the programme database will have records of the types of assistance they received and evaluate the information accordingly.

# 7 CONCLUSIONS

This review provides a summary of indicators, methods, tools, challenges and best practices that will help development practitioners measure the effectiveness of agricultural training, specifically as it relates to women and women's economic empowerment. By examining case studies that exhibit a variety of methods, both quantitative and qualitative, and both conventional and participatory, practitioners have a toolkit from which they can access new ideas for measuring effectiveness of trainings on their programmes. By mixing methods and by utilizing M&E approaches in the short, medium and long term, programme implementers will be able to better understand the effectiveness of their training and the overall outcomes and impacts on beneficiaries.

# ANNEX 1

## Illustrative indicators

Indicator name		
Average monthly frequency of face-to-face meetings with farmers	Rajalahti, Woelcke, and Pehu, 2005	Output
Awareness about conservation-oriented practices among men and women	The World Bank, 2015	Outcome
Clients who have adopted an improved agricultural technology promoted by the programme (number)	The World Bank, 2015	Outcome
Competence of women in soil and water conservation	The World Bank, 2015	Outcome
Number of additional hectares under promoted technologies	GAFSP, 2011	Outcome
Number of adopters of new practices or technologies	Rajalahti, Woelcke, and Pehu, 2005	Outcome
Number of client days of extension services provided to farmers, community members, etc.	GAFSP, 2011	Output
Number of client days of non-farm related vocational training	GAFSP, 2011	Output
Number of client days of training to raise agricultural productivity provided to scientists, extension agents, agro-dealers, farmers, community members, etc.	GAFSP, 2011	Output
Number of farmer requests for extension services	Rajalahti, Woelcke, and Pehu, 2005	Outcome
Number of farmer training courses conducted	Rajalahti, Woelcke, and Pehu, 2005	Output
Number of farmer-led trainings conducted	Rajalahti, Woelcke, and Pehu, 2005	Output
Number of farmers trained, contacted, visited	Rajalahti, Woelcke, and Pehu, 2005	Output
Number of farmers who have adopted promoted technologies	GAFSP, 2011	Outcome
Number of individuals who have received USG supported short-term agricultural productivity or food security training	Feed the Future, 2014	Output
Number of targeted male and female clients who are members of an association as a percentage of number of targeted male and female clients	The World Bank, 2015	Outcome
Number of women reached by programme education activities	Kanesathan, Jacobs, Young, and Shetty, 2013	Output
Number of women's groups reached by extension services	Rajalahti, Woelcke, and Pehu, 2005	Outcome
Percent change in farmer knowledge, skills, attitudes, or understanding of technologies and practices	Rajalahti, Woelcke, and Pehu, 2005	Outcome
Percent of farmers aware of extension activities	Rajalahti, Woelcke, and Pehu, 2005	Outcome
Percentage of programme beneficiaries who are female	The World Bank, 2015	Outcome
Percentage of targeted clients satisfied with vocational training	GAFSP, 2011	Outcome
Percentage of women among livestock producers, especially of cattle	The World Bank, 2015	Outcome
Percentage of women among the contract farmers	The World Bank,	Outcome

	2015	
Percentage/number of women and men producers satisfied with access to and quality of extension services	The World Bank, 2015	Outcome
Percentage/number of women and men who are satisfied with support services	The World Bank, 2015	Outcome
Percentage/number of women in community and producer organizations	The World Bank, 2015	Outcome
Percentage/number of women in leadership positions	The World Bank, 2015	Outcome
Proportion of women with access to agricultural extension services and inputs	Kanesathasan, Jacobs, Young, and Shetty, 2013	Outcome
Quality of gender-focused extension messages produced	The World Bank, 2015	Outcome
Rating of client satisfaction with new technologies or management recommendations	Rajalahti, Woelcke, and Pehu, 2005	Outcome
Satisfaction with educational activities	Kanesathasan, Jacobs, Young, and Shetty, 2013	Outcome
Targeted clients satisfied with agricultural services (number) as a percentage of targeted clients of agricultural services (number)	The World Bank, 2015	Outcome
Use of at least one new agricultural technique/variety	Kanesathasan, Jacobs, Young, and Shetty, 2013	Outcome
Vulnerable and marginalized people in the programme area who are aware of programmes investments and benefits (number) as a percentage of people in the programme area (number)	The World Bank, 2015	Outcome
Vulnerable and marginalized people in the programme area who are programme beneficiaries (number) as a percentage of vulnerable and marginalized people in the programme area	The World Bank, 2015	Outcome

## ANNEX 2: DATA COLLECTION TOOLS – MIXED-METHODS IN PAPUA NEW GUINEA

Pre-test survey responses	Number of responses	Proportion of total respondents (%)
1. Methods used to irrigate the gardens are:		(n = 28)
a) Irrigation system	1	4
b) Carrying buckets, containers, drums etc.	16	57
c) Using water pump to pump water	7	25
d) Do not irrigate food crop garden	6	21
e) Other	0	0
2. The methods of irrigation were learnt through:		(n = 28)
a) Parents	20	71
b) Relatives/friends	4	14
c) Formal training from agricultural extension officers	6	21
d) Others	0	0
3. Are you able to follow these methods?		(n = 28)
a) Yes	28	100
b) No	0	0
4. Are there any other methods you know about irrigation?		(n = 28)
a) Yes	16	57
b) No	12	43
4.1. If yes, the other irrigation methods known are:		(n = 16)
a) Other irrigation systems	8	50
b) Water pump	5	31
c) All of the above	2	13
d) Other	1	6

Post-test survey responses	Number of responses	Proportion of total respondents (%)
1. Are there any new methods you know about irrigation?		(n = 28)
a) Yes	28	100
b) No	0	0
2. These new methods of irrigation were learnt through:		(n = 28)
a) Parents	0	0
b) Relatives/friends	0	0
c) Attending this training	28	100
d) Other	0	0
3. Are you able to follow these methods?		(n = 28)
a) Yes	19	68
b) No	9	32
4. Are there any challenges in following these methods?		(n = 28)
a) Yes	24	86
b) No	4	14
4.1. If yes, the challenges are:		(n = 24)
a) Finance/funding to purchase materials for irrigation	17	71
b) Attitude of community in trying out new methods	6	25
c) Road infrastructure	6	25
d) Lack of support from family, relatives or friends	2	8
4.2. There are no challenges because:		(n = 4)
a) Financially secure	0	0
b) Support from family, relatives or friends	4	100
c) Other	0	0

Pre-test survey responses	Number of responses	Proportion of total respondents (%) (n = 28)
1. The main plants that compete in the main crop gardens are weeds such as:		
a) Nut grass	1	4
b) Kunai grass	1	4
c) Elephant grass	2	7
d) Others, such as milkweed, mimosa etc.	0	0
e) All of the above	25	89
2. The management practices used to manage weeds in the gardens are:		
a) Hand weeding	28	100
b) Spraying with herbicides	0	0
c) Do nothing	0	0
3. The pests that damage crops in the gardens are:		
a) Ladybirds	2	7
b) Caterpillars (green/brown/black)	12	43
c) Grasshoppers (small/big)	3	11
d) Beetles	2	7
e) All of the above	13	46
f) Other: rats/birds	7	25
4. The practices used to manage insect pests in the gardens are:		
a) Picking them off by hand	7	25
b) Using pesticide	3	11
c) Do both (a) and (b)	16	57
d) Other: belief that weeding helps to keep the insect pests away	2	7
5. Diseases observed in the gardens are:		
a) Plants dying from wilting	11	39
b) Plants changing colour	13	46
c) Fruits ripening immaturity	2	7
d) Leaves curling	1	4
e) Other: white spots/rotting before ripening/stunted plants/black spots	22	79
6. The practices used to manage diseased crops in the gardens are:		
a) Does nothing, due to lack of knowledge on how to manage diseased crops	10	36
b) Culling and destroying of affected plants	5	18
c) Spraying of fungicides/bactericides	7	25
d) Other: sterilising soil before nursery/applying wood ashes on infected crop area	6	21

Post-test survey responses	Number of responses	Proportion of total respondents (%)
1. Are there any other weeds/pests/diseases you now know affect your garden?		(n = 28)
a) Yes	21	75
b) No	7	25
2. Other weeds/pests/diseases that affect the crops in the gardens are:		(n = 21)
a) Beneficial/harmful weeds	2	7
b) Diseases caused by fungi/bacteria	3	11
c) Sucking/chewing/cutting insects	2	7
d) All of the above	17	61
3. I know that these weeds/pests/diseases affect the crops in the gardens through:		(n = 28)
a) Parents	8	29
b) Relatives/friends	0	0
c) Attending this training	28	100
d) Other: seeing occurrence in the gardens/experiencing it on crops	17	61
4. Are you able to follow the new methods suggested?		(n = 28)
a) Yes	28	100
b) No	0	0
5. The methods used to manage weeds/pests/diseases are:		(n = 28)
a) Hand weeding	10	36
b) Using plant-derived pesticides for insect pests	2	7
c) Culling diseased crops	4	14
d) Spraying chemicals for insect pests/diseases	7	25
e) All of the above	18	64
6. Are there any challenges in implementing these methods?		(n = 28)
a) Yes	27	96
b) No	1	4
7. The challenges in following these management methods are:		(n = 27)
a) Finance/funding for implements needed to try out the new methods	22	81
b) Convincing family, relatives or friends in trying out new methods	4	15
c) Lack of support from family, relatives or friends	16	59
d) Other: attitude of community/land disputes	2	7

Post-test survey responses	Number of responses	Proportion of total respondents (%)
1. Are there any new methods you know about irrigation?		(n = 28)
a) Yes	28	100
b) No	0	0
2. These new methods of irrigation were learnt through:		(n = 28)
a) Parents	0	0
b) Relatives/friends	0	0
c) Attending this training	28	100
d) Other	0	0
3. Are you able to follow these methods?		(n = 28)
a) Yes	19	68
b) No	9	32
4. Are there any challenges in following these methods?		(n = 28)
a) Yes	24	86
b) No	4	14
4.1. If yes, the challenges are:		(n = 24)
a) Finance/funding to purchase materials for irrigation	17	71
b) Attitude of community in trying out new methods	6	25
c) Road infrastructure	6	25
d) Lack of support from family, relatives or friends	2	8
4.2. There are no challenges because:		(n = 4)
a) Financially secure	0	0
b) Support from family, relatives or friends	4	100
c) Other	0	0

## ANNEX 3: DATA COLLECTION RESULTS – MIXED-METHODS IN MALAYSIA

### Farmer's perception of productivity as a consequence of training

Statements	Percentage					Mean	Std. Div
	1	2	3	4	5		
I increase my networking	0.0	0.0	0.0	65.3	34.7	4.35	.479
The knowledge and skills acquired enable me to perform my job better	0.0	0.0	6.7	73.3	20.0	4.13	.502
My job performance level has increased after training	0.0	2.7	6.7	66.7	24.0	4.12	.636
I am more motivated towards my job now	2.7	4.0	8.0	54.7	30.7	4.07	.890
I can complete my work faster	0.0	4.0	12.0	61.3	22.7	4.03	.716

Note: 1=Strongly Disagree, 2=Disagree, 3=Unable to Judge, 4=Agree, 5=Strongly Agree

### Ability of farmers to transfer skills, knowledge and abilities from training to workplace

Statements	Percentage					Mean	Std. Div
	1	2	3	4	5		
The course content is relevant to my job	0.0	1.3	6.7	57.3	34.7	4.25	.639
Almost everything learnt can be applied at work	0.0	5.3	9.3	66.7	18.7	3.99	.707
It is not difficult to practically apply what has been learnt	1.3	16.0	12.0	62.7	8.0	3.60	.900
I found that the skills and knowledge that can be applied is high	2.7	24.0	10.7	54.7	8.0	3.41	1.028
I feel that I can coach other farmers.	0.0	21.3	30.7	34.7	13.3	3.40	.973

Note: 1=Strongly Disagree, 2=Disagree, 3=Unable to Judge, 4=Agree, 5=Strongly Agree

### Farmers' perception of whether training has been beneficial

Question	Percentage					Mean	Std. Dev.
	1	2	3	4	5		
This course should be given to all farmers	1.3	0.0	1.3	36.0	61.3	4.56	.663
I would certainly attend following courses	0.0	2.7	1.3	60.0	36.0	4.29	.632
I have benefited from this training	0.0	5.3	2.7	50.7	41.3	4.28	.763
I am able to share information with other trainees	2.7	2.7	1.3	57.3	36.0	4.21	.827
The course has made me a better farmer.	0.0	1.3	4.0	66.7	28.0	4.21	.576
My job satisfaction level has increased after attending the course.	0.0	2.7	1.3	72.0	24.0	4.17	.578

Note: 1=Strongly Disagree, 2=Disagree, 3=Unable to Judge, 4=Agree, 5=Strongly Agree

### Farmer's perception of the extent of benefits, knowledge and skills gained from training

No.	Items	Percentage										Total %
		10	20	30	40	50	60	70	80	90	100	
1.	% of new skills/ knowledge gained	0	1.4	4.3	4.3	17.2	4.3	28.6	27.1	10	2.8	100%
2.	% of new skills/ knowledge practiced	1.4	2.8	7.14	7.14	20	8.57	17.2	25.7	8.57	1.4	100%
3.	% of time savings for work completed faster and easier	3	4	6	7.5	29.8	7.5	16.4	14.9	10.4	0	100%

Source: Noor and Doula, 2011

# ANNEX 4: CONTINUOUS HOUSEHOLD PANELS IN BANGLADESH

**Table 2: Training Effectiveness**

	Baseline (2012)	MEL 4	MEL 5 (#)	MEL 5 (%)
<b>Number of Training Received</b>				
<i>No Training</i>	86%	8%	6%	39
<i>1 to 2</i>	14%	68%	55%	337
<i>3 to 4</i>		23%	27%	163
<i>More than 4</i>		1%	11%	70
<b>Learning from Training</b>				
<i>Modern cultivation</i>		52%	68%	354
<i>Post harvest Mgt</i>		62%	68%	357
<i>Disaster Resilient in AG</i>		40%	48%	253
<i>Disease and pest</i>		56%	69%	362
<i>Animal husbandry</i>		24%	42%	220
<i>Animal husbandry during disasters</i>		15%	16%	85
<i>DRR</i>		11%	11%	56
<i>Alternative livelihood</i>		5%	5%	25
<i>Business management</i>		12%	12%	65
<i>Women Empowerments</i>		10%	10%	54
<b>Perception on the applicability and relevance of the training</b>				
<i>Yes</i>		69%	73%	412
<i>No</i>		31%	29%	161
<i>Total</i>				
<b>Application of training knowledge</b>				
<i>Yes</i>		69%	71%	399
<i>No</i>		31%	28%	159
<i>Total</i>				
<b>Impact of training knowledge in productivity/ income</b>				
<i>Increased</i>		93%	97%	571
<i>Unchanged</i>		7%	3%	15
<i>Decreased</i>		0%	1%	4

Source: Oxfam Bangladesh REE-CALL internal document

# ANNEX 5: DATA COLLECTION TOOL – BEST PRACTICE ADOPTION SURVEYS IN TANZANIA

## Example of farmer's logbook

MAPATO		2011	2012	2013	2014
SHS	Mapato yatokanayo na kahawa ya maganda				
	Mapato yatokanayo na kahawa kavu iliyozindikwa nyumbani				
A	JUMLA YA MAPATO				
<b>MATUMIZI</b>					
SHS	Gharama za mboles				
	Gharama za viutilifu				
	Gharama za matandazwa				
	Gharama za vibarus				
	Gharama za wachumaji				
	Gharama nyinginezo				
B	JUMLA YA MATUMIZI				
A-B	FAIDA KWA MWAKA (Jumla ya mapato toa jumla ya matumizi)				

Source: Kanesathasan, A., Jacobs, K., Young, M., & Shetty, A., 2013

# ANNEX 6: BIBLIOGRAPHY AND FURTHER READING

Agbarevo, M. N. (2013). Farmers' Perception of Effectiveness of Agricultural Extension Delivery in Cross-River State, Nigeria. *IOSR Journal of Agriculture and Veterinary Science*, 1-7.

Keywords: Methodology; case study; quantitative

AusAID. (2005, October 27). The Logical Framework Approach. In AusAID, *AusGuideline*. Commonwealth of Australia. Retrieved from AusGuideline: [http://www.sswm.info/sites/default/files/reference\\_attachments/AUSAID%202005%20The%20Logical%20Framework%20Approach.pdf](http://www.sswm.info/sites/default/files/reference_attachments/AUSAID%202005%20The%20Logical%20Framework%20Approach.pdf)

Keywords: Theoretical model; logical framework model; theory

Bates, R. (2004). A Critical Analysis of Evaluation Practice: The Kirkpatrick Model and the Principle of Beneficence. *Evaluation and Programme Planning*, 341-347.

Keywords: Theoretical model; Kirkpatrick model; theory

Bennington, K., and Laffoley, T. (2012). Beyond Smiley Sheets: Measuring the ROI of Learning and Development. Chapel Hill: UNC Executive Development.

Keywords: Theoretical model; Kirkpatrick model; theory

Blair, R., Fortson, K., Lee, J., and Rangarajan, A. (2013). *Should Foreign Aid Fund Agricultural Training? Evidence from Armenia*. Mathematica Policy Research.

Keywords: Methodology; mixed methods; quantitative; qualitative; case study; quasi-experimental design

Danida. (2004). Farm Women in Development: Impact Study of Four Training Programmes in India. Copenhagen: Danida.

Keywords: Methodology; quantitative; case study; quasi-experimental design

DFID. (2005). Monitoring and Evaluating Information and Communication for Development (ICD) Programmes. London: DFID.

Keywords: Theory; methodology

Feed the Future. (2014). Volume 6: Measuring the Gender Impact of FTF. Washington, DC: United States Agency for International Development.

Keywords: Gender; M&E

Fuller, R. (2014). Effectiveness Review: Promoting Sustainable Livelihoods for Women and Vulnerable Groups in Chiradzulu District, Malawi. Oxford: Oxfam GB.

Keywords: Methodology; evaluation; quasi-experimental design; quantitative; gender; case study

Fuller, R. (2014). Women's Empowerment in Ethiopia: Evaluation of Women's Beekeeping and Access to Financial Services. Oxford: Oxfam GB.

Keywords: Methodology; evaluation; quasi-experimental design; quantitative; gender; case study

GAFSP. (2011). Monitoring and Evaluation Plan. GAFSP.

Keywords: Theory; M&E

Garbarino, S., and Holland, J. (2009). Quantitative and Qualitative Methods in Impact Evaluation and Measuring Results. Birmingham: GSDRC.

Keywords: Theory; methodology; case study

Gebremedhin, B., Getachew, A., and Amha, R. (2010). Results-based Monitoring and Evaluation for Organizations Working in Agricultural Development: A Guide for Practitioners. Addis Ababa: International Livestock Research Institute.

Keywords: Theory; methodology

Governance and Social Development Resource Centre. (2007). Monitoring and Evaluation Topic Guide. Edgbaston, Birmingham: Governance and Social Development Resource Centre.

Keywords: Theory; M&E

GSDRC. (2015, January 12). Participatory Methods and Approaches. Retrieved from Measuring Results: <http://www.gsdrc.org/go/topic-guides/measuring-results/participatory-tools-and-approaches>

Keywords: Methodology; participatory

Independent Evaluation Group. (2012). Designing a Results Framework for Achieving Results: A How-To Guide. Washington, DC: International Bank for Reconstruction and Development/The World Bank.

Keywords: Theoretical model; results framework model; theory

Kanesathasan, A., Jacobs, K., Young, M., and Shetty, A. (2013). Capturing the Gender Effect: Guidance for Gender Measurement in Agriculture Programmes. Washington, DC: International Center for Research on Women.

Keywords: Methodology; mixed methods; qualitative; quantitative; gender; case study

Kaplan, J. (2014, January 13). Logframe. Retrieved from BetterEvaluation: <http://betterevaluation.org/evaluation-options/logframe>

Keywords: Theoretical model; logical framework model; theory

Ligero Lasa, J., Espinosa Fajardo, J., Mormeneo Cortés, C., and Bustelo Ruesta, M. (2014). Making Evaluation Sensitive to Gender and Human Rights. Madrid: Spanish Ministry of Foreign Affairs and Cooperation.

Keywords: Theory; methodology; gender

Liu, A. T., and Palmisano, M. (2012). Mobile Applications for Monitoring and Evaluation in Agriculture. Washington, DC: USAID.

Keywords: Best practices; ICT

Marsland, N., Abeyasekera, S., and Kleih, U. (2000). A Methodological Framework for Combining Quantitative and Qualitative Survey Methods. DFID.

Keywords: Methodology; mixed methods; quantitative; qualitative; theory

Understanding the effectiveness of agricultural trainings on women: A desk review of indicators, methods and best practices

Muller-Praefcke, D. (2010). *The Use of Monitoring and Evaluation in Agriculture and Rural Development Programmes: Findings from a Review of Implementation Completion Reports*. Rome: Food and Agriculture Organization of the United Nations.

Keywords: Theory; methodology

Njuki, J., Kruger, E., and Starr, L. (2013). *Increasing the Productivity and Empowerment of Women Smallholder Farmers: Results of a Baseline Assessment from Six Countries in Africa and Asia*. CARE International.

Keywords: Methodology; quantitative; gender; case study

Noor, K. M., and Dola, K. (2011). *Investigating Training Impact on Farmers' Perception and Performance*. *International Journal of Humanities and Social Science*, 145-152.

Keywords: Methodology; mixed methods; quantitative; qualitative; Kirkpatrick model

Ousman, S. (2007). *Effectiveness of Agricultural Development Training Programme: The Cases of Tef and Livestock Farmers of Alaba Woreda, Southern Ethiopia*. Dire Dawa: Haramaya University.

Keywords: Methodology; evaluation; case study; quantitative

Palaniappan, G., Chambers, B., Bonney, L., and Birch, C. (2013). *Comparing training preferences by gender in Central Province, Papua New Guinea*. *Socioeconomic agricultural research in Papua New Guinea* (pp. 67–74). Lae: Papua New Guinea.

Keywords: Methodology; needs assessment; qualitative; gender

Parsons, J., Gokey, C., and Thornton, M. (2013). *Indicators of Inputs, Activities, Outputs, Outcomes and Impacts in Security and Justice programming*. London: DFID.

Keywords: Theory; M&E

Pasteur, K. (2014). *Livelihoods Monitoring and Evaluation: A Rapid Desk Based Study*. UK: Evidence on Demand.

Keywords: Theory; best practices; livelihoods; M&E

Pehu, E., Poutiainen, P., Mackedon, J., and Rygnestad, H. (2012). *Gender Issues in Monitoring and Evaluation in Agriculture*. Washington, DC: International Bank for Reconstruction and Development/The World Bank.

Keywords: Toolkit; gender; methodology

Rajalahti, R., Woelcke, J., and Pehu, E. (2005). *Monitoring and Evaluation for World Bank Agricultural and Research Extension Programmes: A Good Practice Note*. Washington, DC: International Bank for Reconstruction and Development/The World Bank.

Keywords: Theory; methodology

Sabo, E. (2006). *Participatory Assessment of the Impact of Women in Agriculture Programmeme of Borno State, Nigeria*. *Journal of Tropical Agriculture*, 52-56.

Keywords: Methodology; quantitative; case study

Sarma, H., Talukdar, R., and Mishra, P. (2011). Impact of Training on Adoption of Integrated Rice-Fish Farming Practices. *Indian Res. J. Ext. Edu*, 87-90.

Keywords: Methodology; quantitative; case study

Seta-Waken, P., Chambers, B., Palaniappan, G., and Birch, C. (2013). Impact of training on horticultural practice adoption by women smallholders in Central Province, Papua New Guinea. *Socioeconomic Agricultural Research in Papua New Guinea* (pp. 75-84). Lae: Papua New Guinea.

Keywords: Methodology; mixed methods; quantitative; qualitative; needs assessment; focus group; case study; gender

Sette, C. (2015, January 12). *Participatory Evaluation*. Retrieved from Better Evaluation [http://betterevaluation.org/plan/approach/participatory\\_evaluation](http://betterevaluation.org/plan/approach/participatory_evaluation)

Keywords: Methodology; participatory

Socioscope. (2010). Qualitative Process Analysis of Irrigation Infrastructure Activity of Irrigated Agriculture Programme. Socioscope.

Methodology; qualitative; focus group; case study

Stake, R. E. (1967). *The Countenance of Educational Evaluation*. Retrieved from <http://education.illinois.edu/circe/Publications/countenance.pdf>

Keywords: Theoretical model; Countenance model; theory

The World Bank. (2013). ICT for Data Collection and Monitoring & Evaluation: Opportunities and Guidance on Mobile Applications for Forest and Agricultural Sectors. Washington, DC: International Bank for Reconstruction and Development/The World Bank.

Keywords: Methodology; mixed methods; ICT

The World Bank. (2015). *Tools and Resources by Module*. Retrieved from Gender in Ag: <http://www.genderinag.org/content/tools-and-resources-module#16>

Keywords: Toolkit; M&E

Vaessen, J., and de Groot, J. (2004). Evaluating Training Programmes on Low External Input Agriculture: Lessons from Guatemala. London: Agricultural Research & Extension Network.

Keywords: Methodology; evaluation; mixed methods; quantitative; qualitative; case study; quasi-experimental design

World Food Programme. (2009). Guide to Facilitators: Designing Knowledge Assessment Tests (KATs). World Food Programme.

Keywords: Methodology; knowledge assessment tool; mixed methods; qualitative

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