4. Assessing the rollout, uptake and impact of training

4.1. Levels of assessment

4.2. Planning for monitoring and evaluation

4.3. Collecting data

4.4. Using M&E data

4.1 Monitoring the training cascade

As described in Chapter 1, national training programmes are intended to build the knowledge and commitment of field technicians and farmers so that they are able and willing to reduce unnecessary CPA use, select appropriate CPAs and manage CPAs responsibly. Training alone will not necessarily lead to changes in practice, but it will provide farmers with the know-how and instil in them recognition of the importance of following good practice.

The steps to designing and implementing a national training programme were described in previous chapters. Each of these steps must be monitored and assessed to determine whether goals have been met (Table 24). In order for farmers and field technicians to gain new knowledge and build commitment, the training programme must reach those who are in need of new information (Level 0: Training delivery) and the training programme must respond to the participants’ training needs and expectations, e.g. the curriculum must be appropriate and participants must feel that it is useful (Level 1: Trainee reaction). Trainees must learn the new material and be sufficiently convinced by it (Level 2: Learning), then they must change their practices and apply what they have learned on their own farms (Level 3: Implementation). This change in practice must ultimately have an impact and contribute to achieving the programme’s overall objectives and targets (Level 4: Impact). These changes can also lead to a business impact.

Table 24 Five levels of measurement for monitoring and evaluation of training programmes

<table>
<thead>
<tr>
<th>Measurement level</th>
<th>Measures for assessment</th>
<th>Means of verification</th>
<th>How the data can be used</th>
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</thead>
</table>
| 0. Training delivery | Materials adapted to local conditions  
Attendance, e.g. percentage of farmers and field technicians trained  
Costs | Adapted materials  
Participant lists (by gender)  
Budget and expenditure reports | Verify that targets have been met for the number of field technicians and farmers trained  
Ensure that trainings are taking place on time and within budget |
| 1. Trainee reaction | Relevance  
Importance  
Usefulness  
Concreteness  
New Information  
Motivation  
Appropriateness  
Intent to Use | Participant evaluation of training (by gender)  
Action plans by participants | Determine participant satisfaction level with the program  
Identify changes to be made to improve the training  
Determine participant needs  
Obtain quantitative data that can be communicated to management  
Link with follow-up data |
| 2. Learning | Knowledge
Understanding
Capability
Confidence
Perceptions
Skills | Data on farmer knowledge from baseline study and follow-up longitudinal surveys
Pre- and post-training knowledge and skills assessment
Interviews with participants | Provide individual feedback to build confidence
Ensure that learning has been acquired
Improve training programs |
| 3. Implementation | Use of Knowledge
Use of Skill
Following the Policy
Use of Procedure
Following Regulation | Data on farmer practices from baseline study and longitudinal surveys
Follow-Up questionnaires
On-farm observation
Follow-up interviews
Follow-up focus groups
Recommendations (e.g. policy briefs) | Determine whether behavioural changes have taken place
Identify enablers and barriers to implementation
Program improvement |
| 4. Impact | Productivity
Quality
Reduced incidents, e.g. residue hits
Compliance
Costs | Progress on outcome and objective level indicators (e.g. elimination of tox 1 and non-tobacco CPA residues, residues below MRL, etc.)
CPA records
Farmer records | Assess whether targets have been met and progress towards objectives
Determine whether to proceed to the next phase
Gauge whether program has been cost effective
Assess programme’s contribution to change |

### 4.2 Planning for monitoring and evaluation

Planning for monitoring and evaluation should take place before roll-out of the training programme. Plans typically include the following:

- Indicators for each level, these indicators should be “SMART” (specific, measurable, assignable, realistic and time bound). They should also relate directly to the country action plans and the global logframe.
- Specific measures for assessing whether these indicators have been met (see Table 24 for some examples at each level).
- Means of verification for each measure (see Table 24 for some examples at each level). The sources of the data that serve as the means of verification should be identified.
- The timeframe for collecting the data should be noted for each data collection method. This is particularly important for follow-up activities like surveys and questionnaires.
- Responsibility for collecting the data should be assigned.

Thought should be given to the time required for activities envisioned in the M&E plan and budget constraints. It is important to balance the resources required versus those available. Where possible, M&E should be aligned with existing systems for data collection. For example, can GAP audit data be used as a data source for some indicators of achievement?
4.3 Data collection

Once a plan for M&E has been established and the training programme is underway, implementation of M&E can begin. Data is at the core of M&E, and data collection for the different levels takes places at different times.

- For Level 1, expectations can be gauged at the start of the training workshop and participant evaluations can be collected at the end.
- For Level 2, pre- and post-training tests can be administered on either side of the training workshop.
- For Levels 3 and 4, assessment is generally less frequent and it only comes after the training activity, usually at the end of the stage or programme. While changes in behaviour can potentially be observed shortly after the training takes place, collection of data to assess any impact should be given more time.

For each of the above levels, some thought should be given to other factors such as the crop calendar, harvest, timing of measurement of residues, etc. since all of these things can also affect whether the data collected is meaningful.

4.4 Using M&E data

Data collected at each level of the M&E system can be used for different purposes. For example, regular collection and analysis of the data on training delivery (Level 0) is used to check whether implementation is on track, for example, whether the activities have been carried out on time and within budget. The findings can also be used for minor course corrections.

Participant feedback on the training (Level 1) can be used in a variety of ways to improve the trainings themselves, for example, to adjust the course contents, change how the material is presented or alter the facilitator’s style of leading the training sessions. Similarly, an assessment of learning (Level 2) can highlight whether the training provided has been pitched at the right level or whether adjustments need to be made to go further in-depth.

Information about the implementation of new skills (Level 3) can be gathered along with an explanation from the trainees about why, or why they are not, applying the new skills they have learned. Adjustments to the overall program can then be made to promote enablers of behaviour change and to address any barriers that stand in the way.

Information on impact (Level 4) seeks to assess whether the targets set at the start have been met and to attribute the cause of the change. This information can also be used to determine whether to proceed to the next phase. At this level it is also possible to make assessments of effectiveness. This can support programme improvements by seeking answers to the question of whether the programme worked and, if not, why not?