

Module 4: Step Three: How to Collect Data

Session 1: Sources of Information and Methods of Data Collection

Welcome to module four of the designing and implementing monitoring and evaluation systems course. In this module we will explore Step 3 of establishing an M&E system – How to collect data. Specifically, this will look at:

- Sources of Information
- Methods for data collection; and
- Frequency and Responsibility for collection

Let's begin.

Sources of information is the fifth column in the monitoring and evaluation plan.

Sources of information refers to where, from what or from who the information will come from

These sources need to be defined for each indicator

Sources are not the tools used to collect the information

Sources of information can be

- Primary such as people from targeted communities, individuals, groups, staff, government officials, etc.; OR
- Secondary existing documents such as census, district health surveys, reports, etc.

Using the example of an expected result of Enhanced economic empowerment and food security amongst target groups in Region X, with an indicator of Percentage of households with sufficient basic food for the last 12 months (disaggregated by geographic area and target group), the source of information may be: Household members (preferably older females) in 6 districts

The sixth column in the monitoring and evaluation plan is methods of data collection – the HOW data will be collected

Methods of data collection refer to the way information will be collected.



Here we ask the question, "How will we obtain the information we need from our sources?"

We also consider what tool we may use to obtain this information.

From our previous example of households with sufficient basic foods, our source of information was household members in six districts. In terms of the method, we have selected a sample household survey.

Let's explore how we determined that this was the most appropriate method of data collection.

When selecting a method, we need to consider various things:

What type of information do you need – Is the information quantitative or qualitative?

What information or data points do you need to calculate the indicator

What is the level of statistical precision with which you want to be able to generalise your data?

What resources and time is required to use this method

Is there any information that is already available from other reliable sources that can be used

The ; AND

How often will you need to collect data – the frequency of data collection

Next, in selecting a method, we need to determine whether we need a quantitative method or a qualitative method.

A qualitative approach, or method, is used when:

- We want narrative or in-depth information
- Do not need to quantify our results
- Answers the "Why and How" questions

Quantitative methods on the other hand are used when:



- We want to conduct statistical analysis of the data we collect
- Want to be precise
- We want to cover a large group or population
- Answers the "what" question

There are various types of methods based on these approaches.

Some examples of quantitative methods include:

- Sample Surveys when we collect information from a representative group within the population of interest. Examples of sample surveys include cross-sectional surveys, longitudinal and panel surveys
- Census when we collect information from all members of a population of interest
- Polls
- Document review Data that have been already collected which can be used to answer questions about result statements

Some examples of qualitative methods include:

- Individual interviews
- Focus Group Discussions small groups of people, usually between 8 and 10, that are brought together to discuss specific topics under the guidance of a facilitator
- Key Informant Interviews interviews conducted with selected individuals that have knowledge on a particular topic
- Participatory methods which is the active involvement of target communities in the collection and analysis of information. Examples include transect walks, seasonal calendars, or development of natural resource maps. This method is useful when you want to learn about local conditions and local people's perspectives and priorities to design more responsive and sustainable interventions
- Field Observation: AND
- Document Review of qualitative information



It is important to combine methods to understand the information more fully, especially for complex indicators at the higher levels. This means that we may use multiple methods to gather the same information.

It is also important to remember that the method aligns to your indicator. So, if our indicator was quantitative in nature, we will want to select a quantitative indicator. If our indicator was qualitative, we would then select a method that allows us to collect information in a qualitative way.

In Summary, methods are the way in which we collect data and information on our indicators.

Combining methods often provides the richest information

Selecting methods is dependent on various things such as the type of information needed – whether we need qualitative or quantitative information, and what we are trying to measure.

Congratulations, you have completed Session 1.

For further information and additional resources on methods for data collection, click on on the resources section for this session.

The next step would be also to take the quiz by clicking on the quiz section for this session to test your knowledge and understanding on this topic.

After that, try to complete the self-directed exercise for this session.



Session 2: Frequency and Responsibility of Data Collection

In this session, we will continue with Step 3 of establishing an M&E system – How to collect data. Specifically, the session will look at the frequency of which data is collected, analysed and reported and who is responsible for each of these.

Frequency and responsibility for data collection are the seventh and eighth columns in the M&E plan.

At the end of the session, you will be able to determine the most appropriate frequency for each method selected in the previous session. You will also be able to determine who may be the most appropriate person or group of people to collect, analyse and report on the information and data that was collected.

To start, the frequency for data collection refers to how often data are collected for each indicator.

When selecting frequencies, we must consider the methods chosen for each indicator. For example, if we selected a sample survey for a particular indicator, we may not want to collect this information on a monthly or quarterly basis as the level of effort required to administer a sample survey is quite high.

Also, we need to consider things such as the seasons, school semesters, major activities, and our reporting schedules. For example, if we are carrying out monitoring for an agriculture project, the collection of data will need to take into consideration when crops are being planted and harvested.

As a general rule, the higher the level of result, the less frequent the less frequently you would collect information, analyse and report on findings.

This is because change at the goal and higher level outcomes happens at a slower degree and collection of information more frequently is unlikely to provide useful information about change.

In our example, at the goal level, you can see that the frequency is noted as every three years.

In the second row you can see that the field observation frequency is set at semi-annual, or after each harvest period.

At the lower level outcome, the document review is conducted each semester.

While at the output level, this occurs on a monthly basis.



While this is a general rule, it is important to consider also beneficiaries' time, particularly that of women. It is important to consider when selecting frequencies as ensuring that participation does not increase women's workload. This means planning out carefully how many times you will collect information from the same target population.

Next in developing the M&E Plan is determining who will be responsible for collection, analysis and reporting of the indicator. This is the last column of the M&E Plan.

When we determine responsibilities, we need to consider who is responsible for:

- 1. Data Collection
- 2. Data Analysis
- 3. Reporting and communicating findings.

These people are often not the same. This is dependent on the size of the unit, the structure of the unit – whether there is a separate M&E unit or not, the structure of the programme, etc. In some cases for instance, those that collect data may or may not be the same as those who analyse and report on findings as well.

Ideally however, everyone is involved in routine monitoring and it is not simply a function of the M&E unit or of Programme staff alone. That a system and flow of information collection to reporting must be put in place, based on the context of the unit.

Responsibilities for studies, surveys and periodic assessments follow a similar principle. All programme staff need to be involved during various phases of the study or evaluation. In cases where studies, assessments or evaluations are conducted internally, M&E staff would be responsible for the overall coordination and planning. However programme staff would be consulted during the design of tools, facilitate visits for enumerators, etc.

Their involvement is key to carrying out a successful study.

In cases where studies, assessments and evaluations are conducted by external consultants, M&E staff may act as the liaison between programme staff and consultants. Programme staff involvement is still critical.

Congratulations, you have completed session 2 on frequencies and responsibilities. You have also successfully completed Module 4.



The next step is to take the quiz on this session by clicking on the quiz section for this session to test your knowledge and understanding on this topic.

Once you have completed this, click on the Exercises section to complete the self-directed exercise for this session.