



Food and Agriculture Organization  
of the United Nations

# Developing a Monitoring and Evaluation Plan for Food Security and Agriculture Programmes

## Choosing what to monitor

*Text-only version*



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## LEARNING OBJECTIVES

At the end of this lesson, you will be able to:

- identify the components of a results matrix, including assumptions and risks;
- apply a series of criteria to choose what to monitor; and
- describe a possible process for involving stakeholders in the monitoring and evaluation (M&E) system.

## INTRODUCTION

Setting up a monitoring and evaluation (M&E) system is all about providing yourself with the means to measure your results. But you need to know **what is important to know and why** both for you and your stakeholders. Choosing what to monitor will be the main topic of this lesson.

To identify your information needs, you can rely on the **results matrix** of your programme.

Reviewing the results matrix, defining your M&E questions and involving stakeholders in the M&E system will be the main topics of this lesson.

✗ **What does the results matrix say?**

✗ **What are the right M&E questions?**

✗ **How do we involve the stakeholders?**

## REVIEW THE RESULTS MATRIX

Once the programme has been approved and within the first months of its implementation, you will need to design and build the M&E system. The first step will be to review the **results matrix** of your programme and adapt it to your needs.

### What is a results matrix?

The results matrix explains how results are to be achieved, including causal relationships and underlying assumptions and risks. The results framework reflects a more strategic level across an entire organization for a country programme, a programme component within a country programme, or even a project (Source: *UNDP RBM handbook*). The results matrix is a variation of the **logical framework**<sup>1</sup> (or logframe). Today, most projects and programmes are designed using logframe and results matrix tools.

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<sup>1</sup> **Logical framework** - a tool aimed at improving the quality and clarity of the design, implementation, monitoring and evaluation of programmes and projects. It involves identifying the expected results (inputs, outputs, outcomes, impact) and their causal relationships, indicators, and



### Where are you in the results-based management programme process?

In this diagram, you can see that the first step involves "setting the vision", i.e. defining the programme's rationale and its goals. The **second step is where the development of an M&E system starts**, with the construction of a sound, realistic **results matrix**.



Other steps follow: planning for M&E, implementing monitoring activities and doing the evaluation.

See what some colleagues say about results matrices.

*'The logframe has been our programme's M&E roadmap: you need to update it at regular intervals, but then it really helps when reviewing our progress towards our objectives.'*

Take a look at any results matrix built at the design stage after a few years of implementation and it will look very theoretical. The phrasing will sound odd. Perhaps you will not even recognize the objectives that you are following. However, if you use it as a **living document** that you regularly update and adapt to your needs, it will become a very useful tool.

*"I've done tons of logframes in the past because donors ask for them. But when we needed to use them for evaluation, they were almost obsolete and useless."*

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the assumptions or risks that may influence success and failure. (Partially based on the "OECD DAC glossary").

This observation is often the case. The people in charge frequently say that when the results matrix is constructed at the early stage of the programme, it rapidly becomes obsolete. In some cases, too, the results matrix is done in a hurry, or by someone in an office far from the field, so that it does not accurately reflect the objectives. Often, too, it lacks detail to help with understanding. In these conditions, of course, they are right to see problems with results matrices.

Do you remember Sharifa's programme? The programme aims at improving food security at country level by helping small farmers increase their productivity with different activities. Here, we focus on Priority 3 of the programme, which aims at enhancing the legal framework for farmers. The "indicator" column has been removed because, for now, it is important to focus on **the intervention logic (or results chain)**<sup>2</sup> of the programme.

#### The results matrix for Sharifa's programme

Level of result	Expected result
<b>Impacts</b>	Rural people living on agriculture benefit from the new policy framework. Their rights are more secure and they gain better access to such things as credit, training and markets.
<b>Outcomes</b>	Government officers use their newly acquired skills and knowledge to develop new policies or investment programmes that aim at improving the livelihoods of rural people. Agriculture stakeholders (i.e. extension officers, community workers, farmers groups) support the implementation of these policies. These policies and programmes are actually implemented. They include an M&E system. They are implemented in an effective way.
<b>Outputs</b>	Government officers complete the courses and along with other instruments, acquire necessary skills and knowledge. They are convinced that their policies should aim to improve the livelihoods of rural people living on agriculture. Agriculture stakeholders participate in organized events and meet with government officers to share their points of view.
<b>Activities</b>	Government officers are targeted with training sessions and awareness-raising seminars, the production of guidance materials (e.g. leaflets, handbooks, a

<sup>2</sup> **Intervention logic (or results chain)** -A results chain is the causal sequence for a development intervention that stipulates the necessary steps to achieve desired objectives - beginning with inputs, moving through activities and outputs, and culminating in outcomes and impacts. (Source: UNDP RBM handbook).

dedicated Web site) adapted to local issues, technical assistance for the production of studies and technical assistance for the development of M&E systems. Agricultural stakeholders are targeted with the organization of events to disseminate guidance and support better collaboration. All these activities are directly organized by the national offices of Sharifa's organization.

<b>Inputs</b>	A budget of USD 10 million and a permanent team of 20 are dedicated to this programme, for the next 5 years.
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### *TIP: writing the results matrix*




Note that the expected results (from outputs onwards) are expressed in sentences in which the subjects are the **programme targets**. Avoid verbless sentences, which can be cryptic for non-specialists: identifying your targets clearly will also help you define your indicators later on.

Also, be sure to be quite detailed and to identify **all the relevant steps** in the intervention logic. For instance, here, it is important to take into consideration the fact that we not only want government officers to learn new skills, but to become convinced that they should develop new policies to improve the livelihoods of rural people. (This is the objective of awareness-raising events).

Start by checking your programme. There is a good chance that it already contains an initial version of the results matrix which you can start with and improve. The results matrix is about helping you assess your progress towards your objectives.

### *Be sure to make the difference*

The goal is why you are doing it	The objective is how you expect to do it
 <p>The <b>goal</b> (or rationale) of Sharifa's programme is to improve the livelihoods of rural people living on agriculture.</p>	 <p>The <b>objective</b> of the programme is to do so by supporting the development of a favourable policy environment.</p>

Identify the main stakeholders of your programme:

- ↳ The **operator** (or implementing agency) of activities is Sharifa's organization.
- ↳ Government officers and agriculture stakeholders are the **target groups**, that is the people or organizations whose attitudes and practices need to change in order to solve the

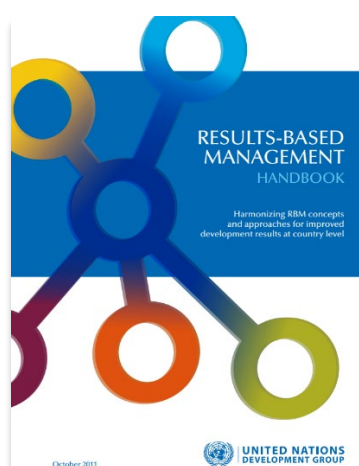
problem; (in this case, those who need to take into consideration the living conditions of rural people).

- ↳ The rural people are the **beneficiaries** that is the people who will benefit from the programme if it is done well.

Your results chain will usually flow from activities performed by the operator to outputs/outcomes of target groups and outcomes/impacts of beneficiaries.

## ADDING THE ASSUMPTIONS AND RISKS

Although the programme's objectives seem logical, we know that things are not that simple: the programme intervenes in a **certain context** that should also be taken into consideration. This is done by adding the assumptions and risks that apply to the intervention logic.



### What are assumption and risks?

- ➔ **Assumptions** are the variables or factors that **need to be in place** for results to be achieved. They can be internal or external to the particular programme or organization.
- ➔ **Risks** corresponds to a **potential future event**, fully or partially beyond one's control that may (negatively) affect the achievement of results.

**UNDP results-based management handbook:**

<https://undg.org/wp-content/uploads/2014/06/UNDG-RBM-Handbook-2012.pdf>

It is easier to identify assumptions and risks **after a few months of implementation**, when you will better perceive the situation and will start facing difficulties. Let's go back to our results matrix and add the assumptions and risks that apply to each step.

Level of result	Assumptions and risks
<b>Impacts</b>	<p>There is no or limited embezzlement of investment funds.</p> <p>The funds, grants or investments go to the rural people who really need it.</p> <p>National and international economic conditions remain the same or improve.</p> <p>There are no situations of civil unrest.</p>
<b>Outcomes</b>	<p>Livelihoods of rural people is a priority for politicians.</p>

	<p>The content of the newly designed policies actually reflect the key messages conveyed by the training sessions and technical assistance. The policies are endorsed by key decision-makers and opinion leaders, including among agriculture stakeholders. The state administration and control capacity are sufficient to ensure that the approved policies are actually implemented. There is sufficient capacity among local officers who will be in charge of enforcing the law.</p>
<b>Outputs</b>	<p>Government officers not only attend the courses, but understand them. The trainers and experts are good enough to convey the key messages that attendees should bear in mind. Government officers were already disposed to improve the livelihoods of rural people.</p> <p>Agriculture stakeholders are informed of the events. They have the financial means to come. Government officers are present at the event. They agree to meet and discuss.</p>
<b>Activities</b>	<p>Trainers are available to do the sessions and experts are available for technical assistance. The training content is relevant to the needs of the government officers.</p> <p>It is possible to organize events with agriculture stakeholders in the country.</p>
<b>Inputs</b>	<p>Budget and team are available.</p>

Making the **assumptions explicit** is very important in a monitoring context, because you can expect that if the outputs have been delivered and your assumptions have been verified, it is more likely that you will achieve the expected outcomes.

Of course, only evaluations will be able to tell you if you actually did so. You may also decide to monitor some of these assumptions, as explanatory variables of the intervention in your M&E system.

The more you progress in the implementation of the programme, the more you will be able to **refine and improve your assumptions**. It is, therefore, good practice to continuously improve your results matrix by updating the assumption column after the interim evaluation, and perhaps every year, by putting it on the agenda of M&E events.



## ASSESS THE RESULTS MATRIX

To conclude, here are a few tips to quickly assess your results matrix, based on Conell and Kubisch (1998).

Your results matrix should be...

- ✓ **plausible** ➤ Does common sense or prior evidence suggest that the activities, if implemented, will lead to the desired results?
- ✓ **agreed** ➤ Is there reasonable agreement with the intervention logic as postulated?
- ✓ **embedded** ➤ Is the intervention logic specific enough to measure its expected results in credible and useful ways?
- ✓ **testable** ➤ Is the intervention logic embedded in a broader social and economic context, where assumptions and risks likely to influence the desired results are identified?

And we could add this one: Is it **clear and simple** enough that you can explain it to a newly arrived coworker?

## DEFINE YOUR M&E QUESTIONS

Once you have revised your results matrix, it will be time to choose **what to monitor**. We will do this by asking questions that we will call **M&E questions**, but that are also sometimes called **performance questions**.



### Consider the needs of all stakeholders

The programme manager is usually the main user of the information and analysis generated by the M&E system. Do not overlook other needs, though, as they will also contribute to make your M&E system more relevant to all stakeholders.

To define your M&E questions, you can use the following key questions: **To whom? When? To do what? What are the right M&E questions?**

	Manage the programme, measure progress action, if needed	...be accountable to donors and stakeholders	...gain new knowledge
Programme manager		"Did government officers develop new policies in line with our guidance?"	"Does the involvement of agriculture stakeholders improve the

			relevance of the new policies?"
<b>Project officer in charge of training</b>	"Are government officers convinced enough after the training sessions? Do they need the awareness-raising sessions, too?"		
<b>Agriculture stakeholders</b>			
<b>National government</b>	"Did government officers gain new knowledge and competencies that can be useful in other contexts?"		
<b>International donor</b>		"How is food security evolving in the country?"	

### What are the most critical steps in the results chain to obtain the expected impacts?

This is where we come back to the results chain itself. It is important to begin by asking: What is the most useful information? Then, you need to go back to the results matrix to assess your needs systematically. Of course, each audience has different needs. Each audience will be interested in different steps of the results chain. The programme manager will usually need to have a broad view, from inputs to outcomes, but will focus on evidences that the programme's activities are successful and yield the expected outputs and outcomes. On the other hand, project officers would be more interested in activities and outputs, and international donors in outcomes and impacts.

When **monitoring at the programme level**, you would typically concentrate on the **output and outcome** levels. You can simply synthesize information coming from the project(s) to know if everything is going as expected or not (i.e. assuming projects have an M&E system).

You will need more information only if the project **does not** have an M&E system. For instance, if a **large proportion** of the attendees of a training session later declare that they did not learn anything new, Sharifa will launch **further investigations** to understand why: Was the course content not relevant to the needs of the audience? Was the teacher not good enough? Then, she can work to improve the programme.

Also, take into consideration **the time** when the data will be needed. Data related to **inputs and activities** can be crucial in the very first months of a programme, and will be needed less often later on. However, data related to the **programme's outcomes** will be important at its end.

What are the **main risks or assumptions** that may influence the achievements of the programme?

Which of them are already monitored?

Be careful when looking at the results matrix to also take into considerations assumptions and risks when asking your questions. For example: Is the political climate favourable to our programme? Do governments follow our organization's strategic objectives with these new policies?

It is likely that for many risks and assumptions, especially at the outcome and impact levels, the information will be available or already monitored by another organization. But for some of them, you may need to **gather the data yourself**.

**In any case, the information that you need is:**

↳ **Information that you do not already have by other means**

Concentrate on what you could learn. For instance, the results of an innovative action should be scrutinized in your M&E system, because you will be very uncertain about its results and the conditions of its success. On the other hand, you can make do with less information for those activities that have proven their effectiveness.

↳ **Information that may trigger a decision**

For example, data that informs you about the success or failure of an activity at the output and outcome levels may not be that important in this context. Purely descriptive information is often irrelevant to an M&E system.

↳ **Information about events that could make your action irrelevant or inadequate**

In addition, contextual information such as the government attitude towards rural development or climatic conditions that could ruin your efforts are also irrelevant here.

↳ **Information that you can discuss with stakeholders and donors**

You should seek stakeholder involvement: sometimes, to support their own effort; sometimes, to celebrate your work.

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**Is there any information that you will need to provide to an international organization?**



This is a very basic yet important question. International donors tend to request more and more information that usually adds to the information that is important to you. Try, as much as possible, to find synergies between your needs and their needs, to avoid duplication of efforts.

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## INVOLVE THE STAKEHOLDERS

It is good practice to **involve the programme's stakeholders in the design and implementation of the M&E system**, especially when revising the logframe and defining the right M&E questions.

Involvement is important not only for the sake of participation. Experience has shown that a system is much **more likely to function well** when the suppliers and users of the information have been involved in its creation from the beginning. By contrast, a closed group of specialists will be tempted to construct an expensive, technically ideal system, which may never be operational.



### *Who are your stakeholders?*

Your stakeholders include:

- All the organizations that are **involved in the implementation** such as international donors and organizations, and NGOs.
- All the organizations that will actually be **targeted by the programme**.
- All **suppliers and users** of the information, who may be internal members of your organization.

### **How to involve stakeholders?**

You can follow the process below to define an M&E system by involving your stakeholders:

First, someone should be nominated to be **responsible for the M&E process**. This person could be either the programme manager or another officer who will devote his/her time to this task.

Then, appoint an **M&E committee** composed of six to eight future (internal and external) users of the system (i.e. implementing partners, government counterparts, donors, programme stakeholders). Their tasks will be to define information **needs** and to identify the information **sources** and **indicators** that can be used.

The committee should be able to hear or invite **external stakeholders** (e.g. donors) **and information suppliers** (e.g. project operators) to gain a better understanding of the opportunities.

Information related to the context is often drawn from **statistics**. It is, therefore, advisable to involve an expert with recent and complete knowledge of exploitable **statistical data**, when designing the system. Depending on the case, this expert will belong to a statistics institute or a university or, if possible, to your organization.

Finally, the programme manager will decide what to integrate in the M&E system based on the committee's propositions and his/her own requirements.

## SUMMARY

The first step to design and build a monitoring and evaluation (M&E) system is to review the **results matrix** of your programme. The results matrix provides information about goals, objectives, stakeholders and expected results for each stage of the programme, including assumptions and risks.

Once you have reviewed and revised your results matrix, it is time to choose **what to monitor**, that is, to define your **M&E questions** (also called **performance questions**).

M&E questions can be identified by answering the following questions: **What information is the most likely to be useful? To whom? To do what? When?**

Each audience will be interested in different steps of the results chain. Monitoring at the programme level usually concentrates on the **output and outcome** levels.

Involving stakeholders in the process is crucial. This can be done by involving both users and suppliers of information when designing the M&E system. It is also advisable to involve an expert with recent and complete knowledge of exploitable **statistical data**.