Monitoring and Evaluation Manual

Paolo Scalia, Team Leader
Elena Grilli, Training Expert

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MONITORING AND EVALUATION

SESSION 1 OVERVIEW

MONITORING OF EXCURSION
- Control panel and fuel gauge
- Map and itinerary
- Kids in the backseat
- Time
- Expenditures

DECISIONS ON:
- Fueling
- Coffee stop
- Speed
- Others

EVALUATION OF EXCURSION

Whether the destination is still relevant
The itinerary is satisfactory
Excursion matches family expectations

Decisions on:
- Destination
- Itinerary
- Future trips

Checking at half way or at destination
1 MONITORING: Definitions

An effective definition of “Monitoring” is:

“The continuous analysis of project progress toward a project objective with the purpose of improving project management”

The strength of this definition lays in the fact that it points directly to the core, underlying concept: it’s a process that is strictly related to the definition and the achievement of the project goal.

We could also see monitoring as “The systematic collection, analysis and use of information meant to support project management and decision making to achieve project goals”. This definition focuses more on the role of monitoring for data processing, specifying means of collection, analysis and, last but not least, USE of the information.

Another useful definition is the following: “the examination of the degree of advancement of project activities and of the achievement of targets according to a calendar and indicators identified before the beginning of the intervention” With this definition we start looking into operational aspects of monitoring and the key tools for its implementation (planning and indicators).

All definitions underline the same important features of monitoring:
- A continuous activity
- Management support process
- Its key function is to assist in achieving a project objective

We recommend keeping a broad flexible definition, avoiding rigid interpretations.

2 EVALUATION: Definition

A short evaluation definition reads as follow:

“The impartial assessment against defined plans and objectives of programme / project design, relevance, performance (efficiency), effectiveness (outcomes), impact (positive and negative, intended or not) and sustainability”
This statement highlights a few key points:

- As we have seen for monitoring, also evaluation is a concept deeply intertwined to the statement of project objectives: these define the standard for the assessment of a project.

- As with monitoring, the evaluation is a project / programme management tool, albeit users and objectives might be different.

- To understand evaluation, we first need to clarify the meaning of the key assessment parameters.

- Evaluation is external and is carried out at a precise time (while monitoring is a continuous activity).

We propose also the following definition, which is adopted by the Project Cycle Management Manual of the EC Commission:

“Assessment, as systematic and objective as possible, of an ongoing or completed project, programme or policy, its design, implementation and results. The aim is to determine the relevance and fulfillment of objectives, developmental efficiency, effectiveness, impact and sustainability. An evaluation should provide information that is credible and useful, enabling the incorporation of lessons learned into the decision-making process of both recipients and donors”.

This statement covers more completely what evaluation is about and points to a central concept: the evaluation is about learning from project experiences.

### 3 M&E: key differences

Monitoring and evaluation are both management tools.

To understand how monitoring and evaluation work and key differences between them, let us consider a simple example such as a weekend family trip (see box in the following page).

This example allows for some interesting considerations:

- Even a common, simple endeavor can be structured as a project and adhere to a cause – effect logic;

- Most of our daily efforts, whenever “goal-oriented” fall within a “project logic” and will contain key intervention logic elements (objective, results, activities, resources);

- Monitoring and evaluation are management tools applied within a project logic in order to improve our progress toward defined objectives:

Monitoring is a continuous activity while evaluation happens at a precise time during or after an intervention. Monitoring is like a video sequence filming all through the intervention; evaluation is a “snapshot” freezing the image at a certain moment.
Monitoring tends to be an internal management tool, but evaluation needs objectivity and often relies on external resources.

Monitoring informs decision-making to improve performance and the achievement of results and objectives. Evaluation is, by contrast, designed to assess results in order to steer management decisions or to improve design of new projects and programmes.

Monitoring focuses on performance, relating inputs with the achievement of project results; the evaluation assesses performance and impact, exploring the relationship between what is done and the achievement of project objectives.

Differences between monitoring and evaluation are summarized in Table 1.1 below.

### Table 1.1 Key differences between monitoring and evaluation

<table>
<thead>
<tr>
<th></th>
<th>Monitoring</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Frequency</strong></td>
<td>• Periodic, regular</td>
<td>• Episodic</td>
</tr>
<tr>
<td><strong>Main action</strong></td>
<td>• Keeping track</td>
<td>• Appraisal</td>
</tr>
<tr>
<td><strong>Basic purpose</strong></td>
<td>• Improve progress in implementation, efficiency, adjust work plan</td>
<td>• Improve relevance, effectiveness, impact, future programming</td>
</tr>
<tr>
<td><strong>Horizon</strong></td>
<td>• Short term</td>
<td>• Long term, beyond scope of specific programme</td>
</tr>
<tr>
<td><strong>Focus on programme cycle</strong></td>
<td>• Inputs, process, outputs</td>
<td>• Also outcomes and impact</td>
</tr>
<tr>
<td><strong>References for comparison</strong></td>
<td>• Workplans, performance targets and reference indicators (this may include early warning indicators for problem areas)</td>
<td>• Programme objectives and strategy, programme performance targets as well as more widely accepted benchmarks and standards such as human rights, organisational policy</td>
</tr>
<tr>
<td><strong>Information sources</strong></td>
<td>• Routine or sentinel systems, field observation, progress reports, rapid assessments</td>
<td>• Same, plus specific surveys, studies</td>
</tr>
<tr>
<td><strong>Undertaken by</strong></td>
<td>• Programme managers, community workers, primary stakeholders, supervisors, funders</td>
<td>• Same, if approach is participatory, plus external evaluators</td>
</tr>
<tr>
<td><strong>Users</strong></td>
<td>• Programme managers, community workers, primary stakeholders, supervisors, funders</td>
<td>• Same, if approach is participatory, plus policy-makers, wider range of external stakeholders</td>
</tr>
</tbody>
</table>
BOX 1: The weekend excursion: a family project

A family project

We have been planning for some time to get out with our family to visit relatives living some 500 km away. We considered various options of transportation (plane, train, car), and we decided that our car was the most flexible and inexpensive option.

It’s interesting to notice how a simple, commonplace endeavor, such as this family trip may be considered a project. It has the key elements we expect to find in a project:

- Objective
- Results
- Activities
- Resources
- Beneficiaries

A strategy has been laid out to achieve our objective. A plan of activities and expenses is set for the weekend adventure. Let us now consider how we can apply the concepts of monitoring and evaluation to this trip.

**Monitoring** will be carried out all through the trip to check whether we progress according to plans and if we will be able to achieve our objective.

We have a number of instruments that we use to gauge our progress:

- We check the time to see if we are on schedule
- We verify the fuel meter to check consumption
- We keep a constant eye on the kids in the backseat to detect signs if a break is needed
- We follow our itinerary on a map to monitor our route and progress

This data will be used to make some decisions that will improve our chances of passing an enjoyable weekend with our relatives (achievement of our goal): we may decide to hurry up because of the risk of being late, buy more fuel, stop to get ice cream for the children, or eventually choose another road as the current one looks a bit bumpy.

The **evaluation** of the trip will be carried out at a certain time during or after the trip.

We will focus less on the activities and more on the achievement of the objective, on the benefits expected from the family holiday. We will also consider whether the trip has been financially affordable and if it has gone according to plans. Mostly we try to learn lessons for future trips: what we liked the most, how the kids behaved during the experience. These lessons are then applied to make future trips even more enjoyable. With the evaluation, we learn to increase our present or future capacity to achieve our goals.
AID EFFECTIVENESS AND M&E

The strengthening of Monitoring and Evaluation in development work reflects a deep cultural change that has brought concepts such as improved performances, accountability, participation and achievement of results on to the agenda of development interventions. It is useful to recall Paris Declaration principles and see how M&E are key tools to put these principles into practice.

Result Based Management (RBM): Development work needs to be based on results, on the achievement of sustainable benefits. M&E is a key RBM tool that allows us to keep our focus, at all times, on results. Linkages of RBM and M&E are further developed in session 2 of our M&E course.

Accountability: Development interventions and actors need to be fully accountable for their work and the considerable resources governments and others are pouring into the development effort. At the heart of the concept of accountability is a sound M&E and audit system, providing transparency and clear understanding of both achievements and shortcomings.

Mutual responsibility: Development efforts require that both Governments and International actors assume full and mutual responsibility for their roles in projects and programmes. M&E helps to understand how this is achieved.

Participation and ownership: Stakeholders need to be associated to the achievement of results and to the measurement of performances and impact. M&E can be used as a powerful tool of participation and consultation (for further details of M&E and participatory approach see session 3).

The Paris Declaration includes an explicit commitment to M&E to follow up the implementation of the agenda for aid effectiveness (Box 1.2).

THE GOAL-ORIENTED APPROACH

Under the cause – effects logic all means are precisely focused to achieve their end in a rigorous step-by-step process.

As in mountain climbing, the project is executed through simpler stages and the achievement of each stage is dependent on the fulfillment of previous ones. All efforts are accurately aimed to achieve one objective.

The project is structured according to its various components: financial resources, inputs, activities, results and objectives. Every component (mean) is designed to achieve the following level (end) up to the attainment of the project goal (objective).
The ends to means sequence of the Logical framework produces a cause – effects chain. This chain is what we call the “intervention logic”.

The sequence could read as follow:

• Thanks to the availability of project financial resources (cause) will be able to implement activities (effect);
• The implementation of activities (cause) will allow us to produce project services or outputs (effects);
• The delivery of outputs (cause) will result into the achievement of benefits or outcomes (effect);
• As a result of several outcomes (cause) it will eventually be possible to attain our project objective (effect).

Each step represents a change - a measurable change.

Change measurability
The M&E conceptual framework relies in the quantification of the causes and of the effects, which will allow us to appreciate and measure the change.

Every element of the cause effect chain expressed by the intervention logic needs to be measurable and quantified in order to fit to this logic:

• Financial activities have to be precisely quantified;
• Activities need to be specifically defined;
• Outputs, outcomes and project objective need to be properly specified and quantified.

Each of these steps can be seen as a passage from a point A (situation before change) to a point B (desirable situation, achieved after change).

The project itself can be represented as a process of passage from a situation A (undesirable before-the-project situation, expressed by the problem statement) to a situation B, (sustainable benefits or positive changes achieved by the project, expressed by the project objective).
The specific objective is the most important and central notion in any project.

Projects are objectively oriented and project components turn around the definition of their objective:

- The project is designed around and in function of the specific objective.
- Budget, resources, activities and results are specifically dimensioned to achieve the specific objective.
- Management will aim to achieve the specific objective and implementation needs to keep constantly focused on it.
- Monitoring is defined according to the objective specification.
- The evaluation will assess the project against the specific objective definition.

**Project Objective Definition:**

The project objective specifies sustainable benefits gained by beneficiaries as a result of project services.
• The project costs and benefits will be defined according to the project objective.

• Project beneficiaries are defined by the project specific objective.

### 6.1 PROJECT OBJECTIVE SPECIFICATION

Project specific objective definition should always clearly spell:

- Sustainable benefits changes (benefits)
- Project beneficiaries
- Project area
- Time

<table>
<thead>
<tr>
<th>PROJECT OBJECTIVE DEFINITION: EXAMPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMPROVEMENT OF WATER SUPPLY FOR THE VILLAGE OF MINWANGA (ZOMBIA DISTRICT)</td>
</tr>
<tr>
<td>1. Improved, unspecified, not measurable objective definition</td>
</tr>
<tr>
<td>IMPROVEMENT OF WATER SUPPLY FOR THE VILLAGE OF MINWANGA 800 new households will have access to drinkable water (average 25 L/day) written 3 months</td>
</tr>
<tr>
<td>2. Improved definition of project objective</td>
</tr>
</tbody>
</table>

The project objective is always specific and measurable.

The example on the left illustrates how the project objective needs to be specified. The extent of the change brought in by the project has to be described otherwise the scope of the intervention will be undefined and arbitrary.

Does the project intend to provide water to 5, 100 or 1200 households? Will the project achieve its goal in 5 months or three years? Will it deliver 5 L or 25 L per household?

According to our objective specification we may have entirely different projects, varying in costs, results, activities, timeframes, beneficiaries and benefits delivered.

While building the logframe we need to understand whether the specification of the objective should be included in the first column of the logical framework (intervention logic, objective definition) or in the second (indicators).

- The first column should articulate the project target and fully specify benefits, beneficiaries, area and timeframe.
- The indicator will state how we will measure the achievement.

In the case of the water supply example we may, for instance, consider the following potential objective indicators:

1) Number of water buckets filled daily;
2) Number of women fetching water daily;
3) As a proxy measure we may choose to appraise the change in water-related health hazards as the % of under-five brought to the local clinic with intestinal diseases;
4) We may also decide to directly measure the benefit as specified in the target definition and launch a household survey to evaluate the quality and amount of water received in the village.
7 OVERALL OBJECTIVE

Overall objectives are the higher goals in the means to ends chain of the logical framework. They establish links between the intervention and programs, plans and strategies.

The definition of overall objectives is an opportunity to appropriately link the project to programs, regional or national strategies, and sectoral plans.

While defining the overall objective, we should be careful of defining few but relevant higher goals that provide justification for our intervention and linkage to broader interventions, plans and strategies.

Example

The building of a community health center needs to be related to district, regional and national health plans and strategies.

If relevant, the small community project will be tied to the donors regional or national goals related to the health sector.

It could be relevant to articulate how the project contributes to the health target for the Millennium Development Goal (MDG) or to other national or regional health plans.

8 RESULTS

If the specific objective is the vault stone of the project, the results may be considered the pillars.

Once we have defined our specific objective, the second most challenging task of project design is to understand and specify ALL the results required to attain that objective.

The quality of project performances may be measured in the ability of the project to deliver results.

The delivery of results should lead to the achievement of the project specific objective. In project design and assessment it is very important to understand if any important result is missing, as this would weaken the means to ends logic and would eventually prevent the achievement of the proposed objective.

A good definition of results will not only lead to a good design and sound intervention logic, but it will also significantly contribute to:

A result is a quantifiable change produced by project activities.
• Accountability of resource allocation and use,
• Assessment of project performance,
• Result-based management, and
• Proper communication and visibility of project services.

All results should be relevant to the objective definition, and all results should be assessed for relevance to beneficiaries’ needs (problem analysis) and project objective. If result is determined irrelevant, the result should be removed from the project design.

Results need to be specific and quantified. The logical framework theory is built around a sound specification of all the elements of the project. All results should be very specific and properly quantified.

Other aspects to be considered when defining the results of our intervention:

• Results should be realistically set;

• Results are management tasks and Management should be assessed according to result delivery;

• Results should be fully understood and endorsed by project beneficiaries and other stakeholders:

• Results should be measurable;

• Number of results should be kept to a manageable amount. (There is no rule on what is the number of results required to achieve an objective but is important to keep the number within practical limits.)

Wording of results in the logframe:

Results in the logical framework are worded as “a product or a service is delivered”…

• A borehole is delivered.
• A training session is organized.

8.1 OUTCOMES AND OUTPUTS

Often results are broken down into outputs and outcomes:

• Outputs are the physical product delivered by the project (in the case of result related to training the output will be the training session).

• Outcomes represent the benefits related to the service provision (for instance, the outcome of a training is the increased capacities of the trainees)

9 ACTIVITIES

If the specific objective is the vault stone of the project and the results are the pillars, the activities may well be described as the bricks - they are the elementary building blocks in the intervention logic chain.
Activities are the actions that we need to implement or “do” in order to achieve our result. For each of the results specified in the intervention logic, we will need to describe the list of required activities.

Once a project’s financial resources are available, we should be able to implement actions and little by little achieve the expected results.

**Example of activity definition:**

<table>
<thead>
<tr>
<th>Expected results</th>
<th>Example of list of activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 classrooms construction</td>
<td>• Building design</td>
</tr>
<tr>
<td></td>
<td>• Community contributions</td>
</tr>
<tr>
<td></td>
<td>• Purchase building grounds</td>
</tr>
<tr>
<td></td>
<td>• Tender dossier</td>
</tr>
<tr>
<td></td>
<td>• Tendering</td>
</tr>
<tr>
<td></td>
<td>• Evaluation of offers</td>
</tr>
<tr>
<td></td>
<td>• Contract implementation and supervision</td>
</tr>
<tr>
<td></td>
<td>• Final acceptance</td>
</tr>
<tr>
<td></td>
<td>• Inauguration</td>
</tr>
<tr>
<td>Training delivered to a group of 20 farmers (50% women) over a period of 1 week who will be educated in irrigation scheme maintenance</td>
<td>• Capacity building need assessment</td>
</tr>
<tr>
<td></td>
<td>• Design of training services (tor)</td>
</tr>
<tr>
<td></td>
<td>• Development of training manual</td>
</tr>
<tr>
<td></td>
<td>• Preparation of slideshow</td>
</tr>
<tr>
<td></td>
<td>• Booking training hall</td>
</tr>
<tr>
<td></td>
<td>• Contracting trainer (direct contracting procedure)</td>
</tr>
<tr>
<td></td>
<td>• Renting minibus for farmers</td>
</tr>
<tr>
<td></td>
<td>• Organization of 1-day study tour</td>
</tr>
<tr>
<td></td>
<td>• Preparation of training certificate</td>
</tr>
<tr>
<td></td>
<td>• Catering arrangements</td>
</tr>
</tbody>
</table>

It’s important to understand the level of detail needed for activity listing. For instance in our example of a 2 classrooms construction, we could identify two ends of a spectrum:

- A summary description of 2 – 3 activities, or
- A very detailed breakdown of maybe 20 to 30 activities or more.

Which would be more appropriate?

To answer we should consider the management level. Activity breakdown and planning is a management tool and depending on management needs we will have different levels of details.

For instance:

- The National Program Manager will eventually be interested in s handful of the most significant activities.
- The Project manager will find adequate the level of detail provided in our example, highlighting key management tasks necessary to produce the classrooms.
- The construction supervisor will need a much more detailed breakdown, specifying for instance the preparation of foundations, floors, walls, windows and so on.
SESSION 2

INDICATORS
1 INTRODUCTION

The two central columns of the logical framework, indicators and sources of verification, outline the monitoring and evaluation system of a project.

Once we have designed the intervention logic - the sequence of objective, results and activities - we need to define how to measure our progress.

The goal-oriented approach underscores a result-oriented culture: efficiency and impact are closely related to the capacity to make progress against the definition of goals.

The indicators will help us to optimize the follow up of goals achievement at objective and result level. The project monitoring system will be based on a process of continuous collection, analysis and follow up of indicators.

2 INDICATORS: DEFINITION

Indicators are a measure of change as they express the degree of achievement of project delivery in terms of
- **Products and Services** (outputs / results)
- **Sustainable benefits** (outcome / project specific objective)

Indicators for physical outputs are straightforward and relatively easy to define. For instance, the degree of achievement of an infrastructure can be readily measured and assessed both in terms of quantity and quality.

But often the definition of indicators is a tricky and challenging exercise. How can we measure the progress in term of capacity building? Or for improvement of human rights? Or for the changes in a legal reform process?

These aspects deal with intangible benefits, very real and relevant for project beneficiaries but hard to quantify. USE OF INDICATORS

STRATEGIC PLANNING

For any program or activity, from a development project to a sales plan, incorporating performance measurement into the design forces greater consideration of the critical assumptions that underlie that program’s relationships and causal paths. Thus, indicators help clarify the objectives and logic of the program.
PERFORMANCE ACCOUNTING
Indicators can help inform resource allocation decisions if they are used to direct resources to the most successful activities and thereby promote the most efficient use of resources.

FORECASTING AND EARLY WARNING
Measuring progress against indicators may point toward future performance, provide feedback useful for future planning, identify areas needing improvement, and even suggest what can be done.

MEASURING PROGRAM RESULTS
Good indicators measure what a program has achieved relative to its objectives, not just what it has completed; thus they promote accountability.

PROGRAM MARKETING AND PUBLIC RELATIONS
Indicators can be used to demonstrate program results to satisfy an external audience. Performance data can be used to communicate the value of a program or project to elected officials and the public.

BENCHMARKING
Indicators can generate data against which to measure other projects or programs. They also provide a way to improve programs by learning from success, identifying good performers, and learning from their experience to improve the performance of others.

QUALITY MANAGEMENT
Indicators can be used to measure customer (beneficiary) satisfaction, and thereby assess whether and how the program is improving their lives.

3 PERFORMANCE AND IMPACT INDICATORS
Project progress towards its objectives can be monitored through two broad categories of indicators:
- Impact indicators, and
- Performance indicators.

We are going to see how amongst performances indicators we may identify sub-groups of indicators related to the hierarchy of results of the cause – effect chain of the logical framework:
- Outcomes
- Outputs
- Inputs

3.1 IMPACT INDICATORS

Impact indicators will measure the achievement of sustainable benefits and long-term changes. According to this definition the appreciation of impact indicators might be challenging as they are meant to measure something which will happen several years after the project is ended.

EXAMPLES
Definitions should be related to project objectives specifications.

AGRICULTURAL DEVELOPMENT
- Increased family income
- Improved agricultural production
- Increased irrigated surface

PUBLIC HEALTH
- Reduced IRAs incidence
- Decreased mortality rate under 5
- % of deliveries attended in clinic

PRIMARY EDUCATION
- Increased literacy rate in primary school
- Increased girls attendance

TVET EDUCATION
- Curricula meeting Regional standards for TVET
- % employed students after 1 year from graduation

TECHNICAL ASSISTANCE
- Decrease in use of PIUs in project implementation
- PFM system improvement
As a result, during project life the attention is focused on the understanding of **impact opportunities** rather than the impact itself. This implies a sound understanding of factors contributing to sustainability.

### 3.2 PERFORMANCE INDICATORS

Performance indicators follow up project performances and focus on the achievement of results (outcomes and outputs). Performance indicators are the backbone of a result-based management system and project monitoring. Mid-term evaluations and even end-of project evaluations will also focus their attention on the level of attainment of performance indicators.

Within performances indicators we may recognize several levels of measurement that may assist us in understanding our progress toward the achievement of project goal:

- Outcome indicators
- Output indicators
- Process Indicators
- Input indicators

### 3.3 OUTCOME INDICATORS

These are meant to measure medium-term changes, intermediate results generated by program outputs.

They relate to **THE BENEFITS** derived from project products and services (outputs).

Often outcome indicators correspond to behavioral changes derived from project interventions.

#### OUTCOME INDICATOR EXAMPLES

**AGRICULTURAL DEVELOPMENT**
- N. of farmers applying improved IPM techniques
- Fees paid to water management board

**PUBLIC HEALTH**
- % women utilizing prenatal services during pregnancy
- Increased use of condoms

**PRIMARY EDUCATION**
- Functioning of parent – teacher association
- Number of kids using improved latrines at school

**TVET EDUCATION**
- Functioning of business – education Forum
- Nr of students enrolled increased

**TECHNICAL ASSISTANCE**
- Improved capacity of NAO staff
- Improved rate of Budget Support in development aid

### 3.4 OUTPUT INDICATORS

Output indicators are related to short-term results.

#### OUTPUT INDICATOR EXAMPLES

**AGRICULTURAL DEVELOPMENT**
- Irrigation canals are constructed
- Training is delivered
- Water management board is established

**PUBLIC HEALTH**
- Condom campaign is delivered
- Village clinic is rehabilitated
- Equipment is purchased

**PRIMARY EDUCATION**
- Improved curricula is developed
- VIP are constructed in school compound

**TVET EDUCATION**
- New curricula, relevant to labour market needs, are developed
- ToT is delivered
- TVET centers upgraded

**TECHNICAL ASSISTANCE**
- Nr of correct procurement procedures issued
- Training delivered
- Nr of documents correct in audit procedures
- Decrease of Nr of project proposals rejected
3.5 INPUT INDICATORS
Measure the quantity, quality, and timeliness of resources (human, financial and material, technological and information) provided for an activity/project/program.

3.6 PROCESS INDICATORS
Processes involve cross-cutting activities key to project approach

Process indicators may, for instance, measure progress toward:
- Participatory process and the degree of consultation and participation of project stakeholders;
- Increased gender involvement;
- Improved transparency of procedures;
- Improved environmental awareness and impact.

4 PROXY INDICATORS
Proxy indicators are used to demonstrate the change or results where direct measures are not feasible (for instance because it would be too expensive).

Some objectives, particularly impact objectives, are difficult to monitor. It is often necessary to select indirect or proxy indicators that may be easier for evaluators to measure. For example, the effectiveness of a child health program may best be measured by mortality rates. These rates are difficult to determine over short periods of time. For this reason, a proxy indicator, such as the percentage of births that are attended by trained health personnel, and the availability and frequency of use of health facilities may be used.

Proxy Indicators: Example
The Chicago Museum of Science and Industry - a large, cavernous museum with many monumental-size exhibits, including an entire submarine and a coal mine - wanted to conduct a study to determine which exhibitions were of greatest interest to its visitors. They found that it was impossible to count how many visitors viewed every exhibit, so they decided to use a proxy indicator. They did this by determining where they needed to replace floor tiles most often. And where did they find the floor tiles most in need of replacement? In front of the exhibit of hatching baby chicks.
DO WE NEED INDICATORS FOR OVERALL OBJECTIVES AND PROJECT ACTIVITIES?

Performance and impact indicators will tell us what is happening at the project specific objective and result (outcome and output) level. We must now consider how to follow up the achievement of the other levels of the intervention logic, specifically the overall objectives and activities.

**Overall Objectives:** when working at the project level we do not necessarily need to follow up the progress toward long-term goals. While we should understand the scope of the contribution toward broader objectives most of the time these indicators will not need to be tracked for management purposes.

**Example:** if an irrigation project aims to improve food production and income for a farmers association (specific objective), thus contributing to national food security (overall objective), project management will not have to bother with the level of achievement of national food security. It is also unlikely that the project contribution to national goals is significant. In this case, it would not be statistically correct to establish a link between project production increase and variations at the national level.

**Project Activities:** We defined project activities as a “to do” list in order to achieve project products or services (outputs). It’s essential that the project keeps a sound track of activities that have been implemented and which not and in this case, more importantly, why.

Most of time activities are expressed as a straight-forward list of things that need to be accomplished and planned over time. To follow them up, we do not need “indicators” as the implementation of activities is a simple and explicit measure of progress.

**Example:** The achievement of a result related to capacity building (for instance improved capacity of the farmers association to adequately manage water of the irrigation scheme) is tied to the implementation of a number of activities such as:

- Establishment of a small demonstration farm scheme;
- Organization of a field day;
- Organization of a three-day training for the farmers group;
- Printing of booklets;
Distribution of booklets.

These activities will be planned through time and a responsible person will be attached to each one. The project manager may check on a weekly basis if implementation is going according to plan or not. The monitoring may proceed based on the follow up of the activity list without a need for specific indicators.

**Project Inputs and Financial Resources:** also for the lower levels of the intervention logic (the follow up of inputs and financial resources) we will not need to establish a system of indicators since the very delivery of inputs will allow the appreciation of progress or the lack of it.

Note that the fact that we do not necessarily establish indicators for activities, inputs and financial resources does not mean that we cease to follow them. On the contrary, the monitoring system and the understanding of project performance begin with a good appreciation of inputs and activity delivery.

### 5 Indicator Selection: Full Involvement of Project Stakeholders

Indicators measure our progress toward the achievement of project goals. If we want beneficiaries and other stakeholders to gain “full ownership” of the intervention, they need to participate in the selection of the indicators. This will help them appreciate progress and gain appropriation of what is being accomplished.

Unfortunately, this is seldom the case and more often than not indicators are selected during project design or implementation without the involvement of stakeholders.

A good indicator needs to be well understood by main actors. Often it is preferable to have a simple straightforward measurement as opposed to an overly complex or technical one.

Stakeholders need to be involved not only in the definition of the indicator but also in its measurement and assessment.

### 6 Indicators: A Project Management Tool

Indicators are a powerful management tool - they indicate through which measure the project is achieving planned objectives and results. A good manager will make appropriate use of indicators and should:

- Select them with stakeholders,
- Follow them up frequently and routinely,
- Identify bottlenecks and delays,
- Design corrective measures when indicators show a lack of progress, and
- Involve all the staff and stakeholders in assessment of progress.

However, managers at times delegate the follow up of indicators to “M&E” sections or subordinate staff and do not deal with them in the decision making process. An efficient use of indicators for management purposes depends on a “result-based management” culture that is still lacking in many organizations and institutions related to development.
When management focus is shifted to financial disbursements and input delivery, performance and impact indicators remain a theoretical and ineffectual tool.

7 INDICATOR SYSTEM: TRANSPARENCY AND VISIBILITY

Progress towards goals (or the lack of them) needs to be communicated to stakeholders and the broader public in order to provide visibility and transparency to the intervention. Too often indicators are considered an “internal affair” to be dealt with by the project staff and not to be shared with other actors.

Indicators may be effectively used as a powerful communication tool: summary data on key achievements can be shared to increase public and political support and eventually justify further funding.

8 SPECIFICATION OF INDICATORS: QQT

Indicators must always be adequately specified. In jargon they need to be “dressed up”. Once we define a basic indicator we need to add on:

- Quantity
- Quality
- Time

The “quality” dimension of indicators is particularly important and often not appropriately specified. Managers tend to be more interested in numbers than in their quality.

Example
For a result related to capacity building the specification of quality (content of the program, capacity of participants to perform) could be more important than the quantity (number of participants, duration of the event).

9 STEPS IN CONSTRUCTION OF AN INDICATOR

A good indicator could be built up in 4 steps:

A – BASIC INDICATOR
In-service training provided to agricultural economists

B – QUANTITY IS ADDED
100 agricultural economists provided with in-service training

C – QUALITY IS SPECIFIED
100 agricultural economists (20% women) provided with two-week in-service training in WTO negotiation skills

D- TIMING
100 agricultural economists (20% women) provided with two-week in-service training in WTO negotiation skills by December 2007.
10 SMART INDICATORS

The catchy “SMART” acronym is widely used amongst M&E operators and the development community to effectively summarize key criteria we need for a good indicator:

- Specific
- Measurable
- Available
- Relevant
- Time-bound

Using the SMART code for indicators may prove useful for an M&E practitioner as it is widely adopted and also effective in highlighting key issues.

**Note:**
We would like to stress that, whether or not you are using SMART or another catchy formula, ALWAYS keep an eye on the QQT specifications.

11 OTHER USES OF INDICATORS

Indicators could help us to follow particular aspects or issues that are important to the project strategy, albeit not explicitly addressed by project results or objectives. These could be crosscutting issues such as:

- Gender
- Environment
- HIV
- Human rights

We may design indicators in order to link project contributions to one or more of these aspects. This could be the case of the “engendered logframe” where indicators capture the gender orientation at level of results and of objectives.

The following boxes illustrate an example of how to engage a logframe with impact and performance indicators. The example relates to a food security project adopting a seed development strategy in Southern Africa.

**12 TARGETS AND BENCHMARKS**

12.1 **TARGETS**

A target is the explicit statement of desired results for a specific indicator over a defined period of time, and it provides the planned performance standard against which actual performance may be
subsequently compared and measured. It is usually specified in terms of quantity or quality, target area or target group (intended primary stakeholders), and time. For example: Increase of nitrogen fertilizer by 20% by 2002.

**12.2 BENCHMARKS**

A benchmark is also a reference point or standard against which performance or achievements can be assessed.

The distinction is that a benchmark refers to the performance that has been achieved in the recent past by other comparable organizations, or what can reasonably be inferred to have been achieved similar circumstances.

In the context of a monitoring system, a benchmark represents a reference to a standard of what is achievable. For example, the agriculture production (or maize equivalent) needed to feed the entire population of a country is a benchmark in food security.

It is important to note that some organizations and sources use these terms interchangeably, which can cause confusion.

**13 BASELINE**

The baseline involves measuring the status of households, communities, and institutions at time = 0. That is, the study assesses the initial value of indicators at or near the beginning of intervention aimed at changing behavioral or systemic characteristics of individuals or systems.

Compare the difference between “before” the project started and “after” it started. Track the changes “with” and “without” a project presence. This means comparing changes inside the project area with those in similar locations outside the project’s sphere of influence. Compare the difference between similar groups, for example when one has been working with the project and a so-called “control group” that is not influenced by the project.

Keep in mind the following when developing your baseline:

- Find out what existing information you can use and check its quality and cost.
- Identify where you will find the information.
- Decide on methods to collect the data.
- Decide what resources are needed.
- Agree on responsibilities for data collection, analysis and use as well as timelines for each.
- Agree on when and how the baseline will be revised during the project.

Many projects find baselines difficult to define well and on time. Not surprisingly, the use of a baseline is being increasingly questioned. Three alternatives exist:

- **Use the first measurement as the starting point** indicating whether there is an improvement or a decline from the first measurement or in comparison to a desired condition, target.
- **Use a rolling Baseline of profiles.** This involves collecting baseline information to develop profiles not at once, but on a rolling basis as village organizations are formed, as credit groups start, or as communities are taken up in the intervention strategy. The notion of “rolling baseline” represents a middle-group option between undertaking a comprehensive baseline and a totally retrospective impact-assessment approach. Note that information from this type of baseline may need to be complemented by general context information.
- **Optimal use of existing documents.** It does not require field data collection because it’s based on existing documentation.
SESSION 3

ESTABLISHING THE MONITORING SYSTEM
INTRODUCTION: SETTING UP A MONITORING SYSTEM

The diagram below synthesizes the steps required to set up the monitoring system for a typical development project.

The sequence evidences the following steps:

1) The monitoring system is designed to match the project structure, the definition of objective, and results and the information need.

2) Data is organized.

3) Strategy for a participatory approach to M&E is defined.

4) Detailed planning follows results.

5) Achievement of results is monitored through data collection.

6) Data is processed, analyzed and communicated.

7) Informed decision-making and project management is performed through the findings of the monitoring process.

The following paragraphs explore this process in more detail.
2 DESIGN OF A MONITORING SYSTEM

2.1 INTRODUCTION

Before tackling with the design of a monitoring system we need to review the definition of Monitoring discussed in session 1 (see box on the right).

Monitoring means collecting, assessing and using all the information required to follow up progress toward the project objective and the achievement of proposed results.

A key point is that this information will be used for improving project management as a means for reaching project objective and results.

This definition highlights how the monitoring structure is strictly related to the definition of project objective and the results required to achieve it. Any change in objective and results will affect the monitoring system.

This is why the design of the monitoring system needs to start from the logical framework and the result chain stated in the intervention logic (resources ⇒ activities ⇒ outputs ⇒ outcomes ⇒ project objective).

The design of the monitoring system could therefore start with a critical assessment of the 4 columns of the logical framework:
- Definition of project objective and results,
- Indicators,
- Sources of verification, and
- External factors.

2.2 OBJECTIVES FOR AN EFFECTIVE MONITORING SYSTEM

There is a widespread misconception of monitoring, where it is understood as a secondary, often perfunctory function in project implementation, and monitoring skills are mostly related to data collection and enumeration.

This understatement of monitoring is very common in the development milieu, and is often associated with a poor understanding of this vital function and its importance to achieve objectives and to apply result based management.
Our course aims to offer a more integrated perspective of the monitoring function, intended as a systematic and continuous process of gathering and assessing information to improve project management.

Monitoring as such is a vital aspect of project implementation, with functions strictly related to project management, design, and assessment.

Monitoring is much more than mere data collection, as it involves, amongst other things:

- An in-depth understanding of project design,
- The capacity to address design shortcomings,
- An understanding of management systems and a capacity for detecting weaknesses that may impede the achievement of project objectives,
- A constant effort to support management in the improvement of the design,
- A thorough understanding of external factors and key sustainability issues affecting the success of the intervention (this often means skills in social assessment, financial and economic issues, understanding of market issues, institutional set up, environmental aspects and even policy and legislative framework),
- The capacity to adapt the intervention to a changing environment,
- Full understanding of the risk assessment theory applied to projects,
- Application of principles of visibility, good communication, transparency and full accountability.

Good project monitoring involves the capacity to follow up projects in application of the **principles of Paris Declaration**:

- Accountability in projects,
- Achievement of good performances,
- Result-based management,
- A truly participatory approach, and
- Mutual responsibility.

### 2.3 UNDERSTANDING OF DATA REQUIREMENTS

The design of the monitoring system builds on the understanding of the **information needs** to follow up the achievement of progress toward objectives and results.

Common wisdom sees data requirement for project monitoring as summarized by the two middle columns of the logical framework. This is a gross but inaccurate approximation.

Information needs are much broader and are related to a number of variables including:

- **Subject matter** (i.e.: health sector, gender issues, civil engineering, education, agriculture, income generation, youth support). *For instance, an agricultural project will need to acquire information about farming systems, improved irrigation techniques, similar projects in the region, market for inputs and outputs.*

- Definition of **objective** and of **expected results**. *By definition the monitoring system will focus on the progress toward objective and results; their definition will provide the main scope for information requirements.*
• **Selected indicators.** Project indicators may focus on outputs or outcomes (preferably on both). A public health project may focus on indicators related to local clinic attendance and/or under-five mortality rates, providing different sets of data requirements.

• **The project environment.** This includes a broad group of subjects and may cover, amongst others: the project social and cultural context, financial mechanisms and set up, institutional and organizational aspects, the physical environment, policy and legislative framework, market of key commodities (inputs and outputs). **For the example of the health clinic project, monitoring may need to explore several sustainability issues:** institutional set up (staff is appointed by departmental Ministry of Health), financial sustainability (clinic revenues and expenditure records, budget affected by Municipality for local clinics, sale of medicines), social issues (to whom are directed medical cares, impact on women, children and vulnerable groups) and environmental aspects (waste disposal arrangements for the new clinic).

• **Risks associated** to project implementation. Monitoring will need to follow up critical external factors that may affect the achievement of the project objective, understand the importance and probability of these variables, and devise risk mitigation measures. For instance in the case of an income generation project addressing vulnerable women, monitoring may have to verify the acceptance of the intervention by other social groups, as men and excluded women, and follow up the risk of social tensions arising within the community linked to traditional social mechanisms.

• **Level of participation** expected. A project designed with a strong participation content needs to be able to measure it. The monitoring system may have to deal with the involvement of beneficiaries and stakeholders in project design and implementation levels of information, consultation and decision making, exclusion and inclusion of different social groups, and the depth and range of participation.

• **Geographical distribution** of the intervention. This variable pertains to how project resources, activities, products and services are distributed through the territory, how many beneficiaries and their distribution, and the impact of the distribution. In some cases information about geographical patterns can be effectively supported by geo-referenced information systems.

• **Management approach.** Result based management may require information and data sets illustrating the performance of individuals, groups, institutions and communities.

• **Communication and visibility requirements.** Some projects may have specific priorities in terms of visibility. Monitoring in this case needs to be able to gather and disseminate effectively data on performances and impact.

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**INFORMATION NEEDS AND COSTS**

A balance needs to be found between data requirements and project resources.

Information needs will be defined keeping an eye on the project budget.

Monitoring and data collection do have budgetary implications and these have to be assessed in the design phase.

A balance between “actions” and “studies” is vital for the design of an efficient and effective project monitoring system.
• For a small project it may not be efficient to invest a large amount of resources in studies and surveys.

• Conversely, a large project may require a significant amount of data (and resources) for effective monitoring.

• Often pilot projects require significant study components and careful monitoring, due to the need to capitalize experiences for future interventions.

When defining the range and depth of data required for project monitoring, we should think about:

• Baseline data
• Data accuracy
• Data trends
• Sampling requirements

These issues will be discussed in more detail in the following paragraphs.

### 2.4 DESIGN OF DATA COLLECTION METHODS

The definition of data collection methods is a critical part of the process of designing the monitoring system.

Data collection methods are summarized in the third column of the logical framework: “sources of verification”.

Data collection will also have budgetary implications, summarized in the following diagram, and the design of the system will often compromise between complexity of the source and cost of the information.

The analysis of methods, as well as the discussion of qualitative and quantitative methods, is dealt with in chapter 5 of the course.
**2.5 BASELINE**

A project is a process of change between an undesirable state (situation A, without the project) and a future desirable condition (situation B, stated as “project objective”).

The change is quantified by measurable, sustainable benefits brought in through the intervention.

Monitoring aims to measure progress toward this change.

**In order to measure the progress from A to B we need to know exactly the situation in A.** The study of conditions before (or without) the project is the baseline survey (see definition in following box)

**Baseline Survey**

A survey designed to establish initial conditions against which the effects of a finished project can be compared.

Baselining, or the measurement of conditions before the intervention, is very often ignored in project design and implementation.

The baseline is often neglected because these studies should be carried out during the preparatory phase; resources allocated to the project design are all too often extremely inadequate and may not allow the implementation of a field survey.

For this reason the baseline is often left as an activity to be implemented at project start up, but several risks are attached to a late or partial implementation of the baseline:

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**TIP FOR DATA COLLECTION**

A broad range of techniques and technologies are available to gather information for project monitoring purposes. Technology and existing records allow us to take measures, even accurate measures, at a distance.

A good monitor will, however, always maintain proximity to intended beneficiaries and will feel the pulse directly from the source.

- Break up distances.
- Avoid the “high-tech” monitoring style, positively affected by technology but often not enough by common sense and closeness to the ground.

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• The baseline is likely to bring in improved knowledge of the problem to be addressed by the intervention; consequently, the definition of project objective and results may need to be adjusted.

• The design of the monitoring system needs to be adjusted to the information brought in by the baseline.

• Without a baseline, targets remain abstract concepts that are detached from the reality of the situation.

Diagram: comparing before and after project measures vs. with and without

2.6 HUMAN RESOURCES FOR MONITORING

Effective project monitoring requires adequate resources.

Donors, international organizations, NGOs and national institutions are becoming progressively aware of the importance of M&E functions in order to increase development efforts effectiveness, in line with Paris Declaration and a streamlined application of result-based management to development interventions.
Perception and acceptance of monitoring and evaluation are positively changing, however too many development interventions remain under resourced in terms of M&E.

Several M&E systems that we assessed through recent years were constrained by the critical shortage of human and financial resources.

The following box shows skills and experiences sought for in a monitoring position for a large development intervention.

<table>
<thead>
<tr>
<th>Monitoring Projects: Skills Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ A very good understanding of the project cycle management and logical framework theory</td>
</tr>
<tr>
<td>✓ Broad experience in project implementation</td>
</tr>
<tr>
<td>✓ Know-how of sustainability issues</td>
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<tr>
<td>✓ Subject matter experience</td>
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<tr>
<td>✓ Strong analytical skills</td>
</tr>
<tr>
<td>✓ Communication abilities</td>
</tr>
<tr>
<td>✓ Participatory approach</td>
</tr>
<tr>
<td>✓ Familiar with result-based management approach</td>
</tr>
<tr>
<td>✓ Implementation of studies and surveys</td>
</tr>
<tr>
<td>✓ Ability levels in reporting, computer skills, networking</td>
</tr>
</tbody>
</table>

Monitoring also demands a comprehensive understanding of the project and its components.

Often a senior position is desirable to overlook monitoring functions, in order to facilitate the application of result-based management and to review other staff performances.

Amongst the readings of this session you’ll find an example of terms of references for a position of monitoring officer.

### 2.7 SET UP OF AN M&E UNIT

M&E functions are usually the responsibility of a specialized unit, often closely attached to the project management in order to establish a direct relationship with the decision making level.

Without this direct link to management the information collected may not be effectively used to improve management and to achieve project goals.

M&E should not be placed in a subordinate position to the units it is supposed to monitor: this may relegate monitoring to a junior role of data collection, missing key functions of management support, planning, performances assessment, design and internal evaluation of the project.

Recommendations for setting up the M&E Unit:

- M&E should neither be overstuffed nor under resourced.
• M&E should be directly attached (or close to) project management.

• M&E should be able to establish direct contacts with all project units and staff, without been constrained by a rigid hierarchy or slow communication mechanisms.

• Direct and informal email contacts should be established with all the staff and project stakeholders.

• M&E is a SERVICE unit. It is meant to facilitate information gathering, to share results of the monitoring process, and to promote improved effectiveness of the intervention. The understanding of this principle should guide staff and management to a proper understanding of monitoring functions.

• Share information and data as much as possible. Monitoring units should be the engine that moves and shares information, making data visible and accessible to everybody.

• Organize routinely participatory meetings to share information, discuss about progress, carry out planning, detect problems and devise solutions.

• Effective monitoring will be able to identify key bottlenecks and critically assess them. It is important to maintain a positive and constructive approach when addressing negative and constraining situations.

• The monitoring unit should be ready and capable to address management shortcomings. This could become a very delicate issue, risking confrontational positions with management. In this case the monitoring unit may look for conflict solving approaches involving the positive statement of issues, the search for consensual solutions, and the building up of consensus amongst different parties.

• At times the project environment will be weakly receptive to the M&E role due to a poor understanding of its functions and importance. Project staff may not have skills or a “culture” for result based management and systematic data collection to measure progress. In this case, M&E staff may need to coach colleagues, stakeholders, and even management on key RBM and M&E issues. Monitoring will assume a role of capacity building to improve project staff performances.
3 DATA ORGANIZATION

A key function of monitoring is to organize and structure the information and data that is available.

Projects tend to need and gather a substantial amount of information. This information is often available in a rough format: filled questionnaires, project documents, reports, maps, publications, digital files, letters or flyers.

Data usefulness is often very limited as potential users seldom know what is available, who is keeping the information, or how it would be accessed.

In fact, most of time disorganized information is of very little use.

The first task of a monitoring officer should be to gather all the available documentation and organize it. The following paragraphs discuss how these tasks could be tackled.

PROJECT DATA SYSTEM

A system should be designed where any new piece of information and data will be stored. The system should be agreed to and understood by all staff and data users.

This may include:
- Organization of a project filing system (both paper and digital)
- Organization of a project documentation centre
- Development of a database
- Development of web-based info systems
- Development of GIS

PROJECT DATABASE

Databases can be very effective in organizing project information, proving to be an excellent tool for M&E.

Databases do not need to be complex or complicated.

A simple Excel worksheet (eventually linked to Access) is often all that is needed.

When designing a project database try to keep it as simple as possible. At the beginning there might be the temptation to include as many variables as possible, but a complex database might become difficult to handle and update.

When needed, a database can be geo-referenced to develop a GIS (geo-referenced information system). Arcview and Mapinfo are the most commonly used GIS software for a project level type of application.
Common sense should be the guiding principle in the design of the database and the GIS. It should be considered that skills are often limiting factors in the use of even good applications. It is very common in the development environment to employ expensive information systems that receive very little use.

At times a good old-fashioned topographic map hanging from the walls of the project office, with red pins marking critical points, can do a better job than a sophisticated GIS.

An effective mapping support is now available through Google maps. This could be used as an excellent interface to study the ground, identify communication routes, locate villages, boundaries and interventions of any scale.

Google maps has a very friendly interface, is simple to use and, last but not least, provides free access. Farmers and villagers can recognize their plots and work, for instance, on land use planning.

Google maps applications may be utilized in a wide range of development interventions:
- Conservation projects
- Water development (i.e.: siting of boreholes)
- Micro-projects
- Agriculture and forestry projects
- Land tenancy and cadastre
- Infrastructure development
- Fisheries projects
- Study of ecosystems
- Land use planning
- Livestock and range land management

PROJECT DOCUMENTATION CENTRE

Each project should establish a documentation centre, suitably sized according to information needs.

For a small project all you may need is a cabinet where the documents and project literature may be stored and filed.

For larger projects and programs a room could be organized as a documentation centre.

Ideally a computer with free online access should be available.

Supporting equipment may include a printer, a photocopy machine, and a reading table with adequate lighting.

DATA BACK UP AND WEB-BASED DATA SYSTEMS

We witnessed several projects losing years of painstakingly accumulated data due to computer crashes. This is when people start to value data back up.

Nowadays there are several options to inexpensively, easily, and efficiently save your data.

A simple way is to purchase an external disk devise and routinely (i.e. once every month) save the information stored in the computers.
An effective way to safely store your information is to save it on the web, through your server or providers such as Google or Yahoo. In this way, you may store a significant amount of project documents and also gain the freedom of being able to retrieve them from anywhere.

**CAPACITY BUILDING**

Sustainability of information systems may depend significantly on capacity building.

Adequate skills often need to be established in order to store, use, and share information.

M&E will have to identify training requirements and propose options for capacity building.

Capacity building needs should be considered when:

- Organizing a documentation centre,
- Developing a project database, or
- Developing a GIS.

Exchanges with other projects, workshops to discuss the information system with stakeholders, and trainings with external resources provide opportunities to improve project capacities to store, handle, and access information.

Capacity building includes the acquisition of necessary equipment to support data management, such as:

- Map,
- Computers,
- Software,
- Filing cabinets and filing accessories (folders, labels),
- WiFi access, and
- Computer networking.

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**4 PLANNING BY RESULTS**

**4.1 INTRODUCTION**

One of the key functions of Monitoring is to facilitate the establishment of work plans that will be used to measure the progress of an intervention toward its objective.

For this reason planning is a central activity for M&E.

We remember that the logical framework approach will assist us to organize our projects for results:

- Monitoring by results
- Budgeting by results
- Reporting by results
- Assessing by results
Planning needs to be structured for results

This is achieved by organizing activities and resources in clusters linked to each expected result.

The monitoring system needs to be structured to seize the “measurable changes” achieved through project activities.

4.2 PLANNING: WHEN?

Planning should be considered a continuous task to be performed throughout the project life.

Design phase planning

Detailed project planning will be developed during the project formulation. The plan will cover the duration of the intervention; deadlines and benchmarks will be established for results.

The planning of activity implementation in this phase may not need to be too detailed, although in some case it helps to have a very specific blueprint for actions (as in the instance of infrastructure projects).

Financial resources, human resources, and equipment supply also need to be scheduled in detail during this phase.

The design-phase planning is developed by the project designer and endorsed by project stakeholders.

Monitoring will follow progress against this plan and eventually suggest changes to adjust the work plan to project needs and changing environment.

Planning during implementation

We recommend carrying out continuous participatory planning exercises with your team. This will be one of the most effective means of applying result-based management to your intervention.

Planning workshops

It is often advantageous to carry out planning exercises through a workshop format. Planning workshops will provide the opportunity to assess the work carried out during the past period and plan together actions and results for the follow up phase.

These workshops may prove very beneficial to the project team, contributing to:

- Increased staff and stakeholder participation (ownership of plans and commitment in the achievement of results);
- Build consensus on results, targets and indicators;
- Provide opportunity for exchanges within the team in a non-hierarchical and informal context;
- Contribute to team building;
- Contribute to result-based management.
Planning exercises can be established at different intervals:

- **Yearly**: This is often an important project event, to be carried out with the entire project team and key stakeholders.

- **Quarterly and monthly planning**: Often these plans will represent key project monitoring tools and will support monthly or quarterly progress reports.

- **Weekly project planning**: We recommend weekly planning to define detailed plan of actions. These could be semi-formal gatherings (at times around a coffee pot and a plate of cookies) taking just a few hours at the beginning or end of the week. These meetings are very operational, and at time are restricted to area managers. In general it is beneficial to open them up to all project staff.

  - Organize regularly these meetings, respecting the agreed upon frequency.
  - Transmit reminders to participants attaching an agenda with key issues to be dealt with.
  - Have effective meeting facilitation.
  - Management should always attend.
  - By the end of each meeting, minutes should be immediately prepared and shared with all staff, detailing new work plans and responsibilities.
  - Key follow up actions should be closely monitored.

### 4.3 PLANNING: ROLES AND RESPONSIBILITIES

We offer a succinct description of responsibilities for key players in planning workshops. These guidelines need to be adapted on a case-by-case basis:

- **PROJECT MANAGER**: Overall coordinator and responsible for the final output

- **MONITORING OFFICER**: Workshop organization, facilitation and follow up. If required, capacity building for planning and monitoring

- **WORKSHOP FACILITATOR**: Workshop facilitation (at times it is the monitoring officer who will lead the facilitation)

- **AREA MANAGERS**: Full responsibility for planning and implementation of results under their responsibility

- **PROJECT FINANCE AND ADMINISTRATION**: Facilitation of resources required (both for the workshop and the implementation of the plan)

- **ALL THE TEAM AND STAKEHOLDERS**: Full participation and open contributions; each staff will assume precise responsibilities related to the work plan
4.4 PLANNING : KEY STEPS

Planning can be effectively carried out through the following steps:

1) Result definition

2) Identification of responsibilities for result achievement

3) Definition of performance and impact indicators

4) Specify the timeframe for achievement

5) FOR EACH RESULT establish a detailed list of activities required to achieve the results
   In some cases it may prove useful to organize smaller working groups for activity planning; their output will be submitted to the plenary to discuss these plans in the broader context of the project.

6) Specify budgetary implications
   Financial and administrative requirements need to be specified in the work plan, as these are often critical conditions for the achievement of the results

7) Draw the plan on a large paper with full participation of the team

8) Identify interactions

9) Specify bottlenecks and risks

The output of the exercise will be a draft plan, often drawn on wall paper, that immediately after will be transcribed in its final format, usually an excel worksheet. Often the monitoring officer will be responsible to draw the final version and to share this with the team.

The plan becomes an official project document, and responsible people will find themselves committed to the achievement of the proposed plan and results.

EACH PLAN IMPLEMENTATION WILL BE REVISED AT THE NEXT PLANNING SESSION, checking who did what, assessing achievements, and identifying reasons that may have led to noncompliance with the plan.

The work plan will also become the key tool for Monitoring.

By definition, the responsibility of monitoring will be to follow up progress against the plan.
### Example of yearly work plan established for a capacity building team (Rome, 2009)

#### PEMS

<table>
<thead>
<tr>
<th>OUTCOME</th>
<th>OUTPUT</th>
<th>ACTIVITY</th>
<th>RESOURCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>E &quot;A&quot;</td>
<td>A.1.1</td>
<td>Run participation reports regularly to evaluate and monitor completion status of all three phases</td>
<td>Anne Aloisio, Rosy Crocitta, Sara Nichoncheaninn, Dandan Xu, Marianthi Eliodoru</td>
</tr>
<tr>
<td></td>
<td>A.1.2</td>
<td>Create Year-End report as reference and comparison for the coming year.</td>
<td></td>
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<tr>
<td></td>
<td>A.1.3</td>
<td>Carry out quality check in Mid-Year phase: All PEMS agreements reviewed, feedback to staff provided; log all received agreements</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A.1.4</td>
<td>Carry out quality check in Mid-Year phase: All Mid-Year review checked, logged and feedback provided to staff</td>
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</tr>
<tr>
<td></td>
<td>A.1.5</td>
<td>Carry out quality check in Year-End phase: All year-end reviews logged, trends analysis carried out, follow up with multi rater</td>
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<td>A.1.6</td>
<td>Deliver PEMS year-end training sessions</td>
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<td></td>
<td>A.1.7</td>
<td>Provide daily support to all staff involved in 2010 PEMS: Help desk responds to daily queries/email, phone, walk in and log cells</td>
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<td>A.1.8</td>
<td>Provide one-to-one coaching sessions in person and virtually for Oracle and PEMS</td>
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<td>A.1.9</td>
<td>Provide mediation if needed during Year-End reviews</td>
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<td>A.1.10</td>
<td>Provide support to users for enrolment in training (oracle online and advice) and courses</td>
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<tr>
<td></td>
<td>A.1.11</td>
<td>Provide support to users for enrolment in training (oracle online and advice) and courses</td>
<td></td>
</tr>
</tbody>
</table>

#### OUTPUT

- **A.1** PEMS cycle completed by all staff
- **A.2** Statistics show 70% and above have completed all phases
- **A.3** Run participation reports regularly to evaluate and monitor completion status of all three phases
- **A.4** Create Year-End report as reference and comparison for the coming year
- **A.5** Carry out quality check in Mid-Year phase: All PEMS agreements reviewed, feedback to staff provided; log all received agreements
- **A.6** Carry out quality check in Mid-Year phase: All Mid-Year review checked, logged and feedback provided to staff
- **A.7** Carry out quality check in Year-End phase: All year-end reviews logged, trends analysis carried out, follow up with multi rater
- **A.8** Deliver PEMS year-end training sessions
- **A.9** Provide daily support to all staff involved in 2010 PEMS: Help desk responds to daily queries/email, phone, walk in and log calls
- **A.10** Provide one-to-one coaching sessions in person and virtually for Oracle and PEMS
- **A.11** Provide mediation if needed during Year-End reviews
- **A.12** Provide support to users for enrolment in training (oracle online and advice) and courses
- **A.13** Provide support to users for enrolment in training (oracle online and advice) and courses

#### RESOURCES

- Anne Aloisio, Rosy Crocitta, Sara Nichoncheaninn, Dandan Xu, Marianthi Eliodoru

#### NOTES

- Staff cannot participate in preparing PEMS due to time constraints especially during certain periods of the year e.g. November conference, summit etc.
- Staff not familiar with OLM therefore have problems enrolling
- Staff not interested in attending
- Staff not familiar with OLM therefore have problems enrolling
- Low buy in and therefore supervisors do not encourage staff to complete their PEMS

#### RISKS

- 1. Competencies are not fully developed therefore appreciation of PEMS in its entirety is affected
- 2. PEMS training is not delivered before PEMS training therefore staff have a lack of understanding of the bigger picture and staff appreciation for PEMS is affected
- 3. Staff not interested in attending
- 4. Staff not interested in attending
- 5. Staff not familiar with OLM therefore have problems enrolling

#### OUTPUT

- **B.1.1** Prepare/or renew contracts for trainers and other PSAs
- **B.1.2** Prepare classroom set up and material needed for all courses daily
- **B.1.3** Deliver courses on PEMS 1 day workshop, PEMS hands on planning and Oracle half day workshop face to face and virtually
- **B.1.4** Deliver PEMS mid-year training sessions
- **B.1.5** Deliver PEMS year training sessions
- **B.1.6** Deliver soft skills training courses
- **B.1.7** Log and analyse the results of feedback and improve the design of the course and system if necessary
- **B.1.8** Create courses in OLM and monitor to ensure successful enrolment for all courses
- **B.1.9** Provide support to users for enrolment in training (oracle online and advice) and for changes in enrolments
- **B.1.10** Set up calendar reminders for each course and remind staff
- **B.1.11** Provide one to one coaching/training sessions for those who are unable to attend group courses in HQ and decentralised offices
- **B.1.12** Work in help centres manned during specific times (11.00-12.30 and 15.00-16.00)
- **B.1.13** Keep regular contact with focal points in decentralised offices to ensure courses delivered successfully and feedback collected

#### RESOURCES

- Anne Aloisio, Rosy Crocitta, Sara Nichoncheaninn, Dandan Xu, Marianthi Eliodoru, Fraser Murray, Damien Perry, Joanne Malone, Focal points
5 DATA COMMUNICATION AND DISSEMINATION

5.1 INTRODUCTION

Data is a critical asset for any project. The impact of the data gathered and processed will depend on its communication.

A key role of monitoring is to provide effective sharing and communication of critical information about the project and its achievement of results and the objective.

Effective communication in projects will contribute to:

- Improved management feedback and the support of informed decision-making;
- Increased stakeholder awareness of project progress and enhanced participation;
- Transparency and Accountability in projects (key principles of Paris Declaration);
- Contribute to project visibility;
- Improved coordination, networking and interaction;
- Team building through open information sharing mechanisms.

5.2 PROJECT REPORTS

Reports are key instruments to share critical information about the project. Often reports are contractual documents that need to be produced at regular intervals.

Unfortunately, development project reports tend to be of low standards, inadequate for effective communication. The following pages summarize key recommendations to improving a result-based reporting system.

RESULT-BASED REPORTS

EFFECTIVE REPORTS: KEY REQUIREMENTS

Effective reporting needs to apply to the following criteria:

- RESULT-ORIENTED
- SHORT: very few people will have time and attention span to read more than a few pages
**EFFECTIVE COMMUNICATION**: A boring report is a poor report! It takes time, experience and skills to write a good report, which is catching attention and bring focus to key issues. A good report would compel reader to go through it and follow it up. Very few reports are effective in their communication.

**HIGHLIGHT KEY ISSUES**

Report structure should be directly resulting from the logical framework with clear definition of:
- Objective
- Results (outcomes and outputs)
- Activities

The project environment needs to be shortly described, with a focus on the implications of the external factors for the achievement of proposed objectives (i.e.: sustainability issues).

The box on the right shows an example of a project report structure adhering to these guidelines.

Below we offer an example of how a report structure could be developed, with detail of sub chapter and recommended average length for each of them.

**EXECUTIVE SUMMARY** ..........1 to 2 pages

**BACKGROUND AND CONTEXT** …3 to 5 pages
- SECTOR OF INTERVENTION
- SECTORAL POLICIES (GOVERNMENT AND DONOR)
- BENEFICIARIES
- PROBLEMS
- OTHER INTERVENTIONS
- RELEVANT STUDIES

**INTERVENTION LOGIC**……………..3 to 5 pages
- OVERALL OBJECTIVE
- PROJECT OBJECTIVE
- RESULTS
- ACTIVITIES

**ASSUMPTIONS**...................... 1 to 2 pages
- ASSUMPTIONS
- RISKS AND OPPORTUNITIES

**IMPLEMENTATION**.....................5 to 10
- INSTITUTIONAL ARRANGEMENTS
- MANAGEMENT AND ORGANIZATION
- PHYSICAL AND NON-PHYSICAL RESOURCES
• WORKPLAN
• BUDGET

SUSTAINABILITY ………………………5 to 8 pages
• POLICIES
• INSTITUTIONAL ASPECTS
• FINANCIAL AND ECONOMIC ANALYSIS
• TECHNICAL ISSUES
• SOCIAL AND CULTURAL SUSTAINABILITY
• MARKET
• ENVIRONMENTAL SUSTAINABILITY

MONITORING AND EVALUATION….1 to 2 pages
• PERFORMANCE AND IMPACT INDICATORS
• EVALUATION REPORTS

CONCLUSIONS AND RECOMMENDATIONS……….1 to 2 pages

COMMON WEAKNESS IN REPORTING:

• LACK OF FOCUS ON KEY ISSUES

• TOO EXTENSIVE DESCRIPTION OF CONTEXT AND BACKGROUND (note: complementary information should be added in annexes)

• INADEQUATE QUANTIFICATION AND SPECIFICATION (Objectives, results and activities)

• LACK OF STRUCTURE

• WEAK INTERNAL LOGIC

• OVERLY NARRATIVE STYLE (We recommend to use short, bullet-point sentences. Use summary tables.)
SESSION 4

EVALUATION

DIMENSIONS OF PROJECT SUSTAINABILITY

- Technical
- Policy
- Financial and Economic
- Social-Cultural
- Institutional
- Environmental
1 EVALUATION: DEFINITION

The first session covered the meaning of evaluation and main differences with monitoring. We start the 6th session with a review of the definition of evaluation. We propose the following:

*The impartial assessment of a project or a program, against defined objectives and plans of the following criteria: i) design quality, ii) relevance, iii) efficiency, iv) effectiveness, v) impact and sustainability*

We would like to draw the attention on three key aspects evidenced by this definition:

Impartiality: The evaluation aims to be objective;

Objective-centered: The first and most important aspect that an evaluation should consider is the definition of the objective of the project;

Evaluation criteria: a number of predefined criteria are used to assess projects and program;

2 EVALUATION TYPES

Evaluation can be categorized according to:
- Timing of the evaluation
- Object of the evaluation
- Who will carry out the evaluation

2.1 TIMING OF THE EVALUATION

The evaluation can be carried out at ANY TIME during the project cycle:
- Before starting (by the end of the project formulation phase) – EX ANTE ASSESSMENT
- During implementation – MID TERM EVALUATION
- By the end of the project – FINAL EVALUATION
- Some time after the end of the project – EX POST EVALUATION

The following diagram summarizes type of evaluation in relation to the phase of the project cycle:

2.1.1 EX ANTE EVALUATION

An ex ante evaluation is performed before adopting or implementing the intervention. It gives support to the intervention design and contributes to ensuring the design quality.

In general ex-ante evaluation focuses on sustainability issues of the project design with in-depth assessment of technical, financial, economical, social, institutional, market and policy issues.

Ex-ante evaluations are very helpful for large programs and projects, when design tends to be complex and is concerned with the following points:
• Assessment of needs
• Definition and specification of objectives
• Expected results and necessary indicators for their evaluation
• Sustainability issues
• Added value of the community intervention
• Risks linked to the proposals
• Open alternative options
• Lessons from similar experiences already undergone

Ex-ante assessments provide inputs for improved project or program design.

### 2.1.2 MID TERM EVALUATION

An evaluation during implementation is intended to draw lessons from the first years of the intervention implementation and to adjust the contents of the ongoing intervention in relation to realities in the field and/or contextual developments.

It aims at improving the intervention under way and its conclusions may be supported by observations in the field. It often includes a report on outputs and an analysis of the first results and impacts achieved.

The focus of mid-term evaluations will be on the following parameters:
• Assessment of project design, the intervention logic, and whether these need to be adapted to a changing environment;
• Project efficiency with focus on management and organizational arrangements;
• Institutional set up;
• Achievement of outputs and outcomes;
• Analysis of risks;
• Sustainability issues and possible impact;
• Phasing out strategy.

### 2.1.3 END OF PROJECT EVALUATION

Final evaluation or “end of project evaluation” is carried out when the intervention is coming to its end. The objective is to learn for future planning.

Very often end of project evaluations are coupled with project design of the follow up phase.

End of project evaluations will assess “impact opportunities” since it will be too early to measure sustainable changes that follow the implementation of the project.

### 2.1.4 EX POST EVALUATION

The ex post evaluation is performed some time after completion of implementation.

It is mainly concerned with checking achieved impacts, identifying and judging unexpected impacts and assessing the sustainability of the intervention's benefits.
It enables us to detect the real changes in the field and, if the changes occur soon enough, they can be analyzed to estimate those that are attributable to the intervention.

The ex post evaluation often aims to report to the institutions that have allocated the resources. Likewise, it helps to transfer acquired experiences for new interventions.

## 2.2 Evaluation by Agent

Evaluations can be classified according to who is involved in the assessment of the intervention.

These will differ by the degree of objectivity and impartiality that may be achieved.

- **Self-evaluation**: An evaluation conducted by people that are directly involved in the implementation of the project in the field. The issue of objectivity and impartiality will clearly be at stake.

- **Internal evaluation**: An evaluation conducted by people who form part of the staff of the organization that provided the aid but are external to the project.

- **External evaluation**: An evaluation conducted by those who are external to the aid organization and the project.

## 3 Evaluation Criteria

### 3.1 Introduction

We defined evaluation as the assessment of predefined parameters of a project or a program against its objectives.

These standardized parameters include:

- Design quality
- Relevance
- Efficiency
- Effectiveness
- Impact
- Sustainability

Other criteria may be added to these, according to the needs and the objectives of the assessment exercise (see box on the right).
A good evaluation relies on the evaluator’s understanding of these parameters and capacity to properly assess them.

### QUALITY OF DESIGN

Quite often development intervention preparation is, to put it mildly, inadequate. We need to understand why and how we can address preparation issues.

Often the assessment of project design is included in the analysis of relevance.

*We recommend tackling the issue of project design separately, as this is the first and amongst most important lessons to be learned through the evaluation.*

Assessment of project design will take into account the identification and preparation process as well as the outputs of this phase.

Amongst issues that the evaluator will have to consider:

- Participatory level of the preparation phase;
- Problem analysis;
- Objective definition;
- Selection of strategy;
- Longer term objectives and program approach;
- Quality of the intervention logic (and detailed analysis of quality of design for the achievement of each result);
- Analysis of risks;
- Analysis of sustainability factors;
- Definition of assumptions and preconditions;
- Organization and management;
- Institutional set up
- Project resources
- Budget
- Plan of action
- Preparation of other documents (terms of reference for technical assistance, tender dossiers and other documents eventually required by the preparatory phase)

The premises for project success or failure are set during the preparation phase.

A sound evaluation will explore how.
• Timing and costs of the preparatory phase;

3.3 RELEVANCE

Relevance is possibly the first and utmost important issue to be assessed during an evaluation:

⇒ a project that is not relevant should not be implemented;

⇒ a weak relevance calls for an urgent reassessment of objective and results;

Each project is designed in order to tackle some specific problems. One of the first axioms of project design is that WITHOUT A PROBLEM WE SHOULD NOT HAVE A PROJECT.

Relevance is related to the needs that the project is designed to address.

Analysis of relevance will scrutinize the following issues:

• Problem analysis and definition of project objective (this step overlaps with the previous parameter “assessment of design quality”);

• Relevance of project objective (and hence focal problem) to beneficiary needs;

Note: this step is particularly important as ALL the evaluation is carried out against the definition (and relevance) of the objective.

• Relevance of the project to beneficiary skills and capacity;

• Relevance to the intervention to existing opportunities and risks;

• Relevance of the project to development objectives; this includes assessment of relevance to:
  - Program objectives
  - Donor priorities
  - Government priorities
  - Sectoral and regional objectives

Note:
Needs may change through time and often project implementation starts few years after project design. Analysis of relevance will have to assess whether problems, identified during the preparatory phase, are still relevant or whether these (and project objectives) need to be redefined.

3.4 EFFICIENCY (PERFORMANCE)

Efficiency (or project performance) explores the cost / benefit ratio of the intervention.

Efficiency addresses the question related to whether similar results could have been achieved in a better way by other means at lower costs and in the same time, or at the same cost but in less time.

In the result chain of the intervention logic, analysis of efficiency assesses the relation between project
resources and activities (cost) in relation to products and services delivered by the intervention (outputs or “benefits”).

Thus efficiency explores the lower part of the logical framework, focusing more on what is delivered and at which costs rather than the achievement of project objectives and sustainable changes that may affect beneficiaries’ life.

Efficiency is of particular interest in ex-antes and mid-term evaluations, when the interests of the evaluation will be on result-based management and achievement of performances in the intervention:

⇒ Ex-antes evaluations allow us to improve project design, streamlining costs and organizational arrangements in order achieve results “efficiently.

⇒ Mid-term evaluations allow us to improve management, increase efficiency in use of resources, and revise planning.

On the other hand, the end of project evaluation is likely to be more focused on the achievement of the objectives and sustainability mechanisms rather than on the performances in terms of cost and time.

Evaluation of efficiency aims to understand project performances. Two key aspects include:

• Implementation arrangements and their efficiency

• Timely achievement of results and their cost

### 3.4.1 EFFICIENCY OF ORGANIZATION AND MANAGEMENT

This component of efficiency assessment deals with the understanding of the process: how the organization and project management have used their time and economic resources.

The following aspects will be studied:

⇒ Project planning and timely achievement of plans

⇒ Assessment of budget and expenditures

⇒ Organizational arrangements and how these effect the achievement of results and objectives (analysis of management system and adoption of a result-based management approach);

⇒ Relationship with stakeholders, beneficiaries and other local institutions/authorities

⇒ Quality of monitoring procedures and practices, including the use of indicators of efficiency
The objective is not so much to sanction poor performances but to draw lessons and provide recommendations to use efficiently project resources in order to achieve planned results.

This component of the evaluation will focus on the achievement of result-based management. Evaluation will also assess performances of staff and technical assistance.

This is particularly important as Technical Assistance often accounts for a large part of the project budget and evaluation will seek the delivery of TA and other staff.

It is important to remember that evaluation does not aim to sanction poor performances. On the other hand, however, we need to be very aware of the need for FULL ACCOUNTABILITY in development work. In some cases projects are slowed down by poor performances of managerial and key technical staff. In this case, it is the obligation of the evaluation and of the client to address the situation in the interest of project beneficiaries. We need to be very conscious that poor efficiency on projects will delay benefits for intended beneficiaries and will waste the limited resources allocated for development work.

### 3.4.2 OUTPUT / COST RATIO

A complementary and more direct approach to efficiency analysis is the assessment of the costs at which services and products are delivered. This will allow understanding if our intervention makes sense from a financial and economic perspective.

**Assessment of unit costs** is a very effective approach to understanding project efficiency. Some examples:

<table>
<thead>
<tr>
<th>Unit Costs to Consider</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost per square meter of the completed building</td>
<td>-</td>
</tr>
<tr>
<td>Costs per classroom</td>
<td>-</td>
</tr>
<tr>
<td>Cost per student</td>
<td>-</td>
</tr>
</tbody>
</table>

Unit costs will be compared with prevailing market costs and or with opportunity costs of the same product or service.

**Evaluation will assess the use of the most cost-effective alternatives to achieve the results in comparison to similar projects/programs or approaches.**

### 3.5 EFFECTIVENESS

The effectiveness measures whether the planned purposes/outcomes have been achieved and whether the planned benefits have been reaped by the intended beneficiaries.

Effectiveness relates outputs to outcomes and project services to sustainable benefits achieved by intended beneficiaries.

In particular, it focuses on:
The factors influencing the achievement of the purpose, including unforeseen external factors.

The management capacity to ensure that the results achieved correlate with the purpose of the project.

The reaction of beneficiaries and the use of project/program results and benefits.

The unplanned results that are likely to affect benefits.

The potential effects of results obtained on crosscutting issues such as gender, environment and poverty reduction.

Some example:

Is the building of the primary school effective in improving literacy rates of village children?

Does the workshop on AIDS prevention achieve lower HIV incidence in targeted population?

Is the strengthening of extension services effective in increasing rice yields of the farmer cooperatives benefiting from the project?

3.6 SUSTAINABILITY

Sustainability: “from the verb to sustain meaning: to hold up; to bear; to support; to provide for; to maintain; to sanction; to keep going; to keep up; to prolong; to support the life of.”

(Chambers Concise Dictionary)

Sustainability is one of the most important parameters of evaluation work. Unfortunately, it is also the aspect that in project evaluation is less understood and quite often not sufficiently developed.

A proper understanding of sustainability issues calls for broad experience and capacity for in-depth analysis of several disciplines:

- Financial and economic analysis
- Social analysis
- Institutional set up
- Full understanding of project specific technical aspects (i.e: medicines, justice, irrigated agriculture, social development, education, HIV, et cetera)
- Sector policies
- Market assessment
- Environmental assessment

Project sustainability definition:

A project is sustainable when an acceptable amount of benefits is delivered to intended beneficiaries for a reasonable duration after the end of project assistance.

A “reasonable duration” could mean several years after the project end.
The following diagram exemplifies evolution of project benefits through the project life and what could eventually happen after the project ends.

We could imagine 3 scenarios after the project will be completed:

a) Project benefit positive trend will continue after project ends;

b) Beneficiaries will manage to maintain a stable level of benefits after the end of the intervention;

c) Benefits will slowly decrease after the end of external assistance and after some time the situation will eventually return as it was before the intervention.

According to the definition of sustainability scenarios a) and b) are sustainable. Scenario c) underscores an unsustainable delivery of the project.

Whether benefits will be maintained or will decrease after the project depends on a number of factors that affect project feasibility and which need to be taken into account in project design, implementation and evaluation.

These factors can be summarized in 7 categories:

1. Social aspects (also including participation and ownership, cultural aspects, organization, gender)
2. Market
3. Institutional set up
4. Technical Aspects
5. Financial and economic aspects
6. The physical environment and natural resources
7. Policy environment

The evaluation of project sustainability involves therefore the analysis of each of these aspects (note: some of these could be not relevant for a specific project, like the “policy environment for a small, village level, WATSAN intervention).”

Sustainability evaluation will study as well:

- The probability of continued long-term benefits;
- The resilience to risk of the net benefit flows over time;

The following paragraphs discuss the evaluation approach to each of the sustainability dimensions.
3.6.1 **SOCIO-CULTURAL SUSTAINABILITY**

Social and cultural issues may heavily affect the sustainability of the intervention.

Social sustainability comprises several aspects that need to be studied and understood during evaluation. The evaluator needs to be familiarized with social and gender analysis in order to be able to assess these issues.

**Project beneficiaries and benefit distribution**

- Evaluation needs to identify project beneficiaries (intended and real) and verify whether the project is responding to their needs.
- The evaluator will need to understand benefit distribution and assess whether groups were marginalized or excluded by the intervention.
- Were groups affected negatively?

**Socio-cultural changes**

- Does the project involve social or cultural changes that may lead to the acceptance or not of project outcomes?
- Does the project take into account local culture and decision making-mechanisms?
- Does the project take into account the local perception of needs and respect the local status’ systems and beliefs?
- Does the project build on traditional and religious systems and beliefs?

Have the changes produced by the project been accepted by the beneficiaries and other stakeholders? How?

**Beneficiaries Capacities**

- Did the intervention assess beneficiary’s capacities and develop a capacity building plan?
- Do beneficiary and stakeholders have sufficient capacity to maintain the level of benefits achieved by the end of the intervention?
- Has any capacity gap been revealed through the evaluation?

**Gender**

- Was the project targeting gender groups?
- Was a gender analysis carried out?
- Were specific interventions addressed to women, youth, elderly and other vulnerable and/or marginalized groups?

**Gender analysis** for social sustainability will need to take into account the following issues:

- Gender sensitive approach
- Gender differentiated target group analysis
- Different interests of women and men reflected at different levels of project:
  - Target group
  - Institution
  - Policy
- Increased gender equality
- Improved impact through gender sensitive approach
Participation

Did the intervention embrace a participatory approach? What was the level of participation of the project during identification, preparation, implementation and monitoring?

What is the level of information, consultation and decision making achieved for different stakeholder groups?

What is the level of ownership achieved for each project result and for the final outcome?

Were women and other groups involved in the decision-making mechanisms?

3.6.2 FINANCIAL SUSTAINABILITY

FINANCIAL SUSTAINABILITY: DEFINITION

Financial sustainability relates to operational (recurrent) costs generated by the projects and the ability, or interest, of stakeholders to meet them following the project end.

Financial sustainability is a key factor for most projects: without appropriate financial incentives stakeholders will not pursue the interventions promoted by the project.

For the private sector financial sustainability relates to a level of income adequate to cover costs, justify risks and eventually assure an adequate margin of benefit.

For institutions and public sector financial sustainability is related to the budget required to cover operation costs.

Example:

A project introduces irrigation to small-scale subsistence farmers. Financial sustainability will depend, amongst other things, on increased incomes and the capacity to pay for increased costs (gasoline for pumping, network maintenance, pump reparation, higher level of inputs).

ISSUES TO BE ASSESSED FOR FINANCIAL SUSTAINABILITY

If the services (results) have to be supported institutionally, are funds likely to be made available?

Are the services affordable for the final beneficiaries at the completion of project?

Are the responsible persons/ institutions assuming their (financial / economic) responsibilities?
Can the benefits be maintained if economic factors change (e.g. Commodity prices, exchange rate)?
Are the target groups (and relevant authorities / institutions) in the position to afford maintenance and replacement of the technologies introduced and / or used by the project?
Is there a phase-out strategy defined?

3.6.3  TECHNICAL SUSTAINABILITY

The evaluation of technical sustainability studies includes an assessment as to whether the technology and knowledge provided fit in with existing traditions, skills and knowledge. In addition, it is important to determine whether the beneficiaries are likely to be able to maintain the technology acquired without further assistance. Lessons learned will provide recommendations on the possibility of replicating successful impacts for a possible extension of the project or of other similar interventions.

ISSUES TO BE TAKEN INTO ACCOUNT

What technology was introduced by the project (human and technical)?
How understandable and flexible is it?
Does technology build on existing knowledge and practices?
How well does it encourage development of local knowledge?
Does it optimize the use of local resources?

HOW TO BUILD TECHNICAL SUSTAINABILITY

- CAPACITY BUILDING
- APPROPRIATE TECHNICAL ASSESSMENT AND STUDIES
- APPROPRIATE TECHNOLOGY
- APPROPRIATE INPUTS AND PRODUCTS
- PROJECT STAFF TECHNICAL SKILLS

3.6.4  ENVIRONMENTAL SUSTAINABILITY

Evaluation needs to assess environmental sustainability and impacts of the proposed interventions.

Positive and negative impacts need to be taken into account.

Project externalities need to be internalized

Often a simple environmental assessment matrix will help in the evaluation of environmental sustainability.
For some projects environmental sustainability is particularly important and needs specific know—how and skills to be assessed.

**ISSUES TO BE TAKEN INTO ACCOUNT FOR ENVIRONMENTAL SUSTAINABILITY**

- Is the project respecting environmental needs?
- Is the project managing its environmental responsibilities?
- Are stakeholders aware of the project’s environmental responsibilities?
- Is environmental damage expected?
- What mitigation measures are in place?
- Are traditional, successful environmental practices being respected?

**ASSESSING ENVIRONMENTAL SUSTAINABILITY**

The following box proposes a simple matrix that may assist in the assessment of project environmental impacts (positive and negative) and mitigation actions (implemented or recommended).

**3.6.5 MARKET SUSTAINABILITY**

Whenever the project involves the development of a new product, the assessment of market sustainability becomes a critical issue and a precondition for follow up.

**EVALUATION OF MARKET SUSTAINABILITY: KEY ISSUES**

- Market analysis
- Price structure
- Price policies (subventions, taxes, restrictions)
- Analysis of input availability and prices

**3.6.6 INSTITUTIONAL SUSTAINABILITY**

The assessment of institutional sustainability studies the extent to which the project is embedded in and respects the local organizations/institutional structures, the capacity of these structures to take over after the project end, and the adequacy of the budget for this purpose.

**EVALUATION OF INSTITUTIONAL SUSTAINABILITY: KEY ISSUES**

- Role of state and institutions
- Institutional audit
- Institutional architecture
- Capacity and need assessment
- Level of transparency and democracy for local institutions
- Operational costs and revenues (see financial sustainability)
- Whether the project to be embedded in institutional structures
- Whether project partners are properly trained for handing over
  - Technically
  - Financially
  - Managerially
- Availability of qualified human resources
- Good relations with institutions which will continue to provide flow of benefits;
Phasing out strategy: this aspect is particularly important for all functions that need to be handed over and sustained by local institutions after the project end.

### 3.6.7 SUSTAINABILITY AT POLICY LEVEL

Policy and political sustainability of development interventions are aspects often neglected in project design and implementation.

Adequate policy and political support are often vital factors to assure a continued flow of benefits and to create a favorable environment for the follow up of the intervention.

**POLICY SUSTAINABILITY: KEY ISSUES**

- Policy support provided to the intervention at different levels:
  - National
  - Sectoral
  - Budgetary
- Macro-economic policies, support to development, credit
- Intervention capacity to adapt to changing priorities and policies;
- Support from public and private sector;
- Project contributions to:
  - Democratization
  - Participation
  - Accountability
  - Human rights
- Strengthening of non-state actors as partners in policy making and implementation
- Financing agency regional policies
- Other agency policies
- Inter-agency coordination

### 3.7 IMPACT

Impact refers to the effects of the project on target beneficiaries as well as to its wider overall effect on larger numbers of people, within the sector or in a geographic area, in terms of technical, economic, socio-cultural and institutional factors.

It relates to the relationship between the project’s purpose and overall objectives, taking into account the fact that at this level the project is normally one of the variables contributing to the wider outcome.

**IMPACT EVALUATION: KEY ISSUES**

- The extent to which the overall objectives were achieved and the contribution of the project to their achievement;
- The external factors that influenced the overall impact and the capacity of the project to respond to these factors;
- The possible unplanned impacts of the project and their effects on the overall impact;
- The possible longer-term effects of the project;
The impacts of the project on gender-related, environmental and poverty issues;

Example:

From the point of view of the groups concerned, are environmental nuisances acceptable compared to the positive effects of the intervention?

### 3.8 ADDITIONAL EVALUATION PARAMETERS

A number of additional criteria may be added to the one discussed, according to client and stakeholders priorities.

Some aspects that recur frequently in project and program evaluation include:

- GENDER EQUALITY
- CAPACITY BUILDING
- EQUITY
- INTERNAL COORDINATION
- COORDINATION WITH OTHER ACTORS
- PARTNERSHIPS
- VISIBILITY

The evaluator or the client may decide to emphasize an aspect or another according to needs.

**RECOMMENDATION**

Evaluation of projects and programs should also assess the adherence to Paris Declaration Principles and provide recommendations to this effect.
EXAMPLE OF TERMS OF REFERENCES FOR MONITORING AND EVALUATION OFFICER

Terms of Reference

Regional Monitoring and Evaluation Officer

1. BACKGROUND

The EC funded Fourth Microproject Program (MPP4) started in June 2003 and will end in May 2008. The program has a budget of 35 M Euro and over 1000 projects have so far been implemented in 28 districts. Implementation is carried out by 4 Regional Offices and coordinated by a central Management Implementation Unit (MIU).

An M&E unit was established in the MIU in December 2006. The Mid-term-review (September 2006) found that the M&E system needs to be substantially developed. An M&E TA was appointed in November 2006 to support the M&E system, including the building up of a comprehensive data base of MPP4 projects.

2. OBJECTIVE

The objective of the M&E regional officer assignment is the development and the efficient implementation of the monitoring and evaluation system for the regional operation of MPP4 and to provide all data required at the regional and national level for the follow up and management of the program.

The M&E system aims to establish a result based management system and appropriate performance indicators need to be established, routinely followed up and communicated at regional and national level for all activities and results related to MPP4.
As necessary, the M&E Regional Officer will be required to support the M&E Technical Advisor and MIU M&E Officer in the establishment and maintenance of a functional 4th GOM/EU M&E system.

3. **REQUIRED SERVICES**

The Regional M&E Officer will work under the direct supervision and guidance of the M&E Officer at MIU for all aspects of M&E system design, methodology of data collection, definition of M&E work plan, reporting schedules and deadlines.

The Regional M&E Officer will also be under the direct management of the Regional Coordinator, on whom he/she will depend for all operational, logistical and administrative matters.

The monitoring and evaluation efforts are directed to support and improve the management of regional operations, and as such the officer will need to work in close coordination with all regional staff and to be thoroughly integrated within the MPP4 regional office operation.

4. **EXPECTED OUTPUT**

The following outputs are expected:

4.1 **Projects Database**

The RM&E Officer will directly supervise the building up and regular update of the regional project database according to the guidelines provided by national M&EO. Updates will be regularly transmitted to the national MPP4 management information system (MIS).

He/she will coordinate at the regional level survey and data collection efforts required to build up the database.

4.2 **Project Performance and Impact Assessment**

Following MPP4 project evaluation guidelines and format, the Regional M&E officer will regularly assess a sample of MPP4 projects (both completed and under implementation). Evaluation will include: baseline data, quality of design, level of community poverty and vulnerability, level of need and priority, quality of works, quality of services provided, beneficiary satisfaction, organizational capacity, community contribution, community follow up, institutional support, coordination with other local development actors, and follow up by District Assembly (DA). At least one project will be assessed every week totaling at least 40 projects per year. He/she will participate and facilitate the joint supervision of specific projects or programs to ensure effective implementation of the annual work plans and budgets.
4.3 Activity and result monitoring

The Regional M&E Officer will be responsible for the regular monitoring of the Regional MPP4 operation following the guidelines and formats established at the National level. The monitoring system will cover all aspects of the regional operations and all phases of the project cycle.

Monitoring will include:

- Projects (applications, administrative procedures, assessment, launching, tendering, input supply, contracting, activity implementation, community contribution, district assembly support, hand over),
- Provide technical assistance in capacity building of 4th GOM/EU Micro-Projects Program and Local Authorities including NSAs in all monitoring and evaluation related activities and also in the management of the information system,
- Studies,
- NGO projects (work closely with NSAs to increase their effectiveness, project development skills, program quality and level of responsibility), and
- All other MPP4 activities.

4.4 GIS Operation

The Officer will be responsible for the operation and update of the regional GIS. He/she will develop regularly maps (at least yearly at the end of each PE) to represent geographical distribution of regional projects.

The following analysis will be carried out:

- Distribution of MPP4 and other actor’s interventions by sector, District, and result area
- Project distribution and vulnerability distribution with emphasis on poverty
- Project distribution and sector needs

The officer will provide conclusions and recommendations for strategic planning and geographical distribution of projects.

4.5 Management, coordination, and visibility monitoring

The Officer will monitor specific indicators for management performances, internal and external (with other actors) coordination and program visibility efforts.

4.6 Detection of problems and problem analysis

The M&E regional officer will be responsible for timely detection of key issues and problems affecting the management of regional operations and constraining the achievement of targets. The assessment of constraints will need to be carried out in close coordination with the management and all regional staff.
Regular updates and monthly reports will be sent to national M&E with appropriate recommendations for problem solution.

Problem analysis will be integrated to the monthly report.

4.7 **Ad hoc studies**

The Officer will directly supervise the timely and efficient implementation of specific studies which may be required to address management and operation constraints. Studies may cover sector analysis for the design of some interventions as well as the assessment of socio-economic or environmental constraints and other issues.

Studies (subject and terms of references) will be jointly agreed upon with the regional management and the M&E/MIU.

4.8 **Documentation centre**

The M&E Officer shall develop the MPP Regional Offices Resource centers and will be responsible for the update of the regional documentation centre.

4.9 **Filing system**

The M&E regional officer will supervise the efficient and organized maintenance of the regional office filing system. The computer filing system will also be supervised. A backup of key regional data will be carried out under the direct supervision of the M&E/RO once every month.

4.10 **M&E Coordination**

The M&E Officer will maintain close coordination with other regional M&E systems, to include: MASAF database, Local Assembly Management Information System (LAMIS), databases established by Ministry of Education, Health and Water, and a NGO database, including Income Generating Activities.

4.11 **Database on suppliers, contractors, NGOs**

A specific database will be established for suppliers, contractors, NSA and NGO. These databases will be updated every 4 months.

4.12 **Data collection for MMP1, MMP2 and MPP3 projects**

The Regional M&E officer will join available information on previous micro project program interventions and, if possible, these will be added to the database and the GIS.

4.13 **Visibility events**

The Officer will prepare, at least every quarter, power point presentations summarizing regional performances, illustration of key projects, GIS and database results.
4.14 **Training and capacity building**

He/she will provide technical assistance in capacity building of 4th GOM/EU Micro-Projects Program and Local Authorities including NSAs in all monitoring and evaluation related activities and also in the management of information system.

He/she will also organize and facilitate quarterly technical review meetings for project progress reports in coordination with MIU.

4.15 **Reporting**

- Prior to submission of reports to MIU, he/she will review progress monitoring reports and provide feedback to Regional Contracts Managers, Social Development Officers, and Project Officers as appropriate.
- He/she will collaborate with 4th GOM/EU Micro-Projects Program and NSAs’ staff on the timely compilation and submission of monitoring progress reports.
- He/she will facilitate planning and participate in the implementation of surveys and program evaluations.
- He/she will ensure quality and timely submission of progress reports from MPP Regional Offices and NSAs.

5 **M&E INTERNAL ASSESSMENT**

The M&E officer performances will be assessed by the Regional Coordinator and the National M&E Officer every quarter on the basis of a score card system where performances on the 13 output list detailed in these terms of references will be appraised.

6 **QUALIFICATIONS AND EXPERIENCE:**

- Bachelor’s degree in social science with emphasis in rural development or project management
- At least two years of professional experience in implementing/managing integrated development programming, with knowledge of practices in monitoring and evaluation
- Experience implementing/managing programs related to HIV/AIDS, gender, environment, human rights, health, education, water and sanitation, agriculture or food security programming
- Demonstrated skills in M&E design with previous experience in application of quantitative and qualitative research methodologies
- Fluency in English and at least one locally spoken language
- Computer literate (MS Office, SPSS)
- Ability to transfer knowledge through formal and informal training
- Willingness to travel approximately 50% of the time to remote areas of the country to interact with project beneficiaries and NSAs