MONITORING of
PROJECT IMPLEMENTATION
a manual

Office of External Relations
Pan American Health Organization
Pan American Sanitary Bureau, Regional Office of the
World Health Organization
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Foreword

The introduction of the Logical Framework Approach (LFA) in PAHO a few years ago has resulted in important improvements in the area of project design. Technical units and Representations have improved their capacity to prepare better projects, incorporating all the elements that will provide a greater chance for the attainment of the goals and that will make a project appealing to the international community. Externally funded projects are critical in the delivery of PAHO’s technical cooperation to countries, enhancing our capacity to respond to demands beyond our regular resources.

We have a manual known as the “Standardized Format for PAHO Project Documents and Profiles”, guiding our personnel, providing them with what are considered the minimum requirements for a good project. This manual is intended to guide a project designer step by step, securing that all basic elements of good project design are present, including: involvement of all stakeholders, establishment of clear goals and purpose, identification of assumptions and risks, and definition of expected results, manageable interest, necessary activities, indicators of progress and means of verification, etc.

In addition, PAHO has created the necessary internal mechanisms for project review through the establishment of the Project Review Process (PRP) and Project Review Group (PRG). Both have allowed the Organization to have a clear view of the projects prepared by different organizational structures, their degree of development, their priority within Divisions and the Organization as a whole, and their status in obtaining support from the international community. The PRG has been an excellent opportunity for peer review, personnel development in project design, and identification of opportunities for inter-programmatic work.

To get a project funded is not enough. It is also necessary to execute it well, timely and in accordance with agreed upon commitments with donors and beneficiaries. Monitoring is critical to project execution. It is a management tool for tracking progress of on-going projects and is an integral part of project execution. Accordingly, project managers must develop a monitoring plan to enable them to perform this function with diligence, overseeing integral project implementation, including technical and financial aspects. Project management is an area within the Organization that needs strengthening. The purpose of this manual, prepared by the Office of External Relations (DEC), is to create some standard procedures, as was done with project design, for managing the implementation of technical cooperation projects. It provides guidance on how to monitor projects in a way that will make project management more effective, and facilitate follow up. Once in place, monitoring will save time and effort for the project manager and will facilitate project reporting on achievements and obstacles to our counterparts. Good reporting provides the basis for continued support from the international community.

Irene Klinger
Chief, Office of External Relations
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1. Introduction

1.1. What is monitoring and why is it useful?

Monitoring is a management tool for tracking progress of ongoing projects. The basic idea is to compare actual performance with plans and to measure actual results against expected results.

The monitoring function is an integral part of project execution. It is simply a way of making efficient project follow-up and to provide systematic, consistent and reliable information on project progress.

Once in place, monitoring will save time and effort for the project manager and facilitate project follow-up and reporting. It does not make a project more complex – instead, it makes it more systematically manageable.

Monitoring serves the project manager in several ways:

- It provides information to be presented to national counterparts, PAHO and external financing partners at periodic meetings and in progress reports.
- It provides a basis for decisions on necessary modifications of the project: Resource utilization may be adjusted, priorities shifted and new activities introduced. Flexibility and agility in project management is enhanced.
- It helps the manager:
  - to show results,
  - to understand and explain to others what is happening in the project and why expected results are or are not achieved,
  - to provide arguments for needed changes, and
  - to build confidence with top management in PAHO, national counterparts and financing partner agencies.
- It improves the chances of serving the target population well, because the effect on the target population is analyzed reiteratively.

1.2. Purpose of the manual

Project management is an area within the organization that needs strengthening. The purpose of this manual is to create some standard procedure for managing the implementation of technical cooperation projects and to provide guidance on how to perform monitoring in a way that will make project management more effective, facilitate follow-up and make reporting more consistent.

The manual is organized in such a way that it should be easy to use for reference. After the introductory chapters which define monitoring and its place in the project cycle, as well as its use as a management tool during project implementation, the monitoring procedure is explained step by step (Chapter 4). Annex I contains a Condensed guide to the PAHO monitoring procedure and annex II a format for annual progress reports.
1.3. How the monitoring manual relates to other PAHO documents

This manual builds on and is closely linked to a number of other PAHO documents and systems in use.

AMPES, the system through which PAHO establishes managerial procedures for planning, programming, monitoring and evaluation provides the framework for this new manual. The basic document explaining the application of AMPES: Technical Cooperation Planning, Programming and Evaluation System AMPES (1998) should be familiar to all readers.

Already in use in PAHO is also the manual Standardized Format for PAHO Project Documents and Profiles (1994), relating to the Design Phase of the project cycle. The new manual should be seen as a complement elaborated to support the Implementation Phase in the life of a project.

The two manuals, as well as AMPES, are based on the Logical Framework Approach (LFA) to Project Management. A review of the document The Logical Approach to Project Management in PAHO is recommended (PAHO/AD-DAP/96.01).

2. The project cycle and the use of evaluation tools

2.1. The planning process in PAHO

The planning process in PAHO called AMPES includes five levels of objectives linked by hierarchy and encompasses the following three stages of planning:

1. Policy Planning,
2. Strategic Planning, and
3. Operational Planning.

This manual is related only to the Operational Planning. The figure below illustrates the hierarchy and the planning levels.

AMPES

- Policy Planning
  - General Program of Work (GPW)
  - Strategic and Programmatic Orientations (SPO)

- Strategic Planning
  - Biennial Program Budget (BPB)

- Operational Programming
  - Semiannual Program of Work (SPW)
2.2. The project cycle

Project management in PAHO encompasses responsibility for the three phases of the project cycle:

- **Appraisal** for the Design phase.
- **Monitoring** for the Implementation phase.
- **Ex-post evaluation** for the Evaluation phase.

The concepts of appraisal, monitoring and ex-post evaluation must be clearly separated. Their respective places in the project cycle are illustrated in the figure above.

2.3. Spanish - English terminology

In Spanish, the term “evaluación” is often used for all three activities: appraisal, monitoring and ex-post evaluation. In order to establish a clear and unambiguous terminology, the following terms should be used in English and Spanish, respectively:
2.4. Purpose of appraisal, monitoring and evaluation

The purpose of an appraisal is to assess the viability of a proposed project before a decision is taken. The project design is scrutinized and alternative approaches and designs are compared. As a result, it will be recommended that the project be implemented as proposed, be modified or not be executed at all. Appraisal is sometimes called ex-ante evaluation.

The purpose of monitoring is to steer a project towards its purpose and to detect any problems that makes it probable that the project will not achieve expected results. This is done through periodic follow up of technical progress and financial expenditure, whereby actual performance and results are compared to plans.

The purpose of ex-post evaluation is to improve the design, strategy and processes of development cooperation by learning lessons of experience. Evaluation addresses the higher levels of the project hierarchy, i.e. the project purpose and the project goal.

Monitoring and evaluation share some of the same objectives:

- To improve the management of projects and ensure the optimum use of funds.
- To foster accountability and transparency in the management process.
- To ensure that the technical cooperation is pertinent, effective and efficient.
- To provide well substantiated information on project progress and results to be reported to higher levels in the organization, stakeholders and financial partners.
- To learn lessons of experience with the aim of improving the design, formulation and management of projects (organizational learning).

Monitoring and evaluation are however different with respect to their timing and the aspects that they address. Evaluation is more occasional than monitoring and is typically undertaken "after the fact" analyzing the long-term
impact of an intervention. Monitoring, on the other hand, is done periodically during project implementation assessing project progress.

From now on this manual will address the concept and tool of monitoring only, i.e. tracking project progress during the implementation of a project.

3. Project management during the implementation phase

3.1. The project document

The project document, which is elaborated at the final stage of project preparation, is a systematic description of the project including a budget and a chronogram. It is intended to guide the implementation phase. It is also the basis for the formal agreements between PAHO and the national counterparts and between PAHO and external financing partners.

3.2. Preparing annual work plans and budgets

The project document covers the entire project period. In order to translate the document into operational programming, it is necessary to break it down into annual work plans and budgets. Tasks, activities and expenditure are programmed on a yearly basis (or any other chosen period). The work plan is in fact a calendar of activities to be performed in a given period and the estimated financial expenditure related to these activities, as well as an identification of the responsible party for its execution.

The annual work plan and budget will then form a basis for monitoring of project progress. They should be elaborated in collaboration with designated (international, national, and local) counterparts and be presented to higher levels of management in PAHO and to external financing partners.

3.3. Responsibilities of the project manager

Successful project implementation requires that managers assume the following responsibilities:

- Manage all the resources.
- Produce outputs (the expected results) of the project.
- Perform technical as well as financial monitoring.
- Alert top management when
  - The achievement of expected results is uncertain.
  - Problems within the project appear to threaten achievement of the project purpose.
  - Changes in the project environment have a negative impact on the project.

- Recommend adjustments and corrective action.
3.4. The logical framework approach

The logical approach (LFA) to project management provides the basic elements needed for designing complex projects and assisting in their execution, monitoring and evaluation. LFA is a management tool that facilitates project management.

It is expected that projects designed with LFA have well-formulated objectives and measurable targets to make it possible to monitor progress and assess results. Indicators need to be established, means of verification determined and assumptions explicitly stated.

### LFA MATRIX FOR PROJECT DESIGN

<table>
<thead>
<tr>
<th>HIERARCHY OF OBJECTIVES</th>
<th>INDICATORS</th>
<th>MEANS OF VERIFICATION</th>
<th>ASSUMPTIONS AND RISKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aktivity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purpose</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expected Results</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activites</td>
<td>Resources</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.5. How far does the project manager’s responsibility extend?

The LFA matrix also defines the responsibilities for a project.

The lower levels of the LFA hierarchy, up to and including expected results, are under management control. The project manager will therefore be responsible and held accountable for achieving the expected results. This is sometimes called the management contract.

Achievement of the project purpose, on the other hand, depends partly on factors beyond the project manager’s control; hence he or she cannot assume responsibility or be held accountable for achieving the project purpose and even less for attaining the goal. Nevertheless, the project manager is committed to working towards the purpose and the goal of the project and to alert his/her superiors, if there is evidence or probability that the project purpose will not be achieved.
As shown in this figure, monitoring is to be focused on the activities and expected results levels, while evaluations should address the project purpose level, and possibly also the goal level.

4. The monitoring procedure

In this section the reader will be guided through a typical monitoring procedure, step by step.

4.1. Reviewing the agreement with the donor

For every new project funded by the international community, there will be either a project specific agreement, or an umbrella agreement that rules the relations with that specific donor and covers more than one project.

The project manager should familiarize him/herself with that agreement in order to ensure compliance with all its specifications, which have been approved and signed by PAHO’s Director or his designate. Project agreements have specific clauses regarding transfers of funds, structures for project implementation, project personnel, procurement issues, relations with national counterparts, involvement of the donor at different stages, reporting requirements, etc. These are all crucial elements to be considered by the project manager when defining plans of action and when monitoring execution.
4.2. Making an operational plan

Once the project document is approved, an operational plan for the entire project period must be elaborated. By this is meant that activities necessary for achieving expected results are outlined indicating the sequence and timing of and defining dates when stated results are to be achieved. A simplified and condensed operational plan may be organized as follows:

**OPERATIONAL PLAN FOR PROJECT CONTRIBUTING TO THE ELIMINATION OF ILLNESSES CAUSED BY DRINKING IMPURE WATER**

**Project purpose:** Hygienic practices adopted by rural population in the NW region

<table>
<thead>
<tr>
<th>Expected Results</th>
<th>Chronogram</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 Clean water provided to villages in NW region</td>
<td><img src="image-url" alt="Chronogram" /></td>
</tr>
<tr>
<td>02 Health workers trained</td>
<td><img src="image-url" alt="Chronogram" /></td>
</tr>
<tr>
<td>03 Community informed about water treatment techniques</td>
<td><img src="image-url" alt="Chronogram" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activities</th>
<th>Chronogram</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 Consultations with regional and local representatives</td>
<td><img src="image-url" alt="Chronogram" /></td>
</tr>
<tr>
<td>Choose sites for wells</td>
<td><img src="image-url" alt="Chronogram" /></td>
</tr>
<tr>
<td>Determine techniques</td>
<td><img src="image-url" alt="Chronogram" /></td>
</tr>
<tr>
<td>Invitation to tender</td>
<td><img src="image-url" alt="Chronogram" /></td>
</tr>
<tr>
<td>Contract firm</td>
<td><img src="image-url" alt="Chronogram" /></td>
</tr>
<tr>
<td>02 Develop curriculum</td>
<td><img src="image-url" alt="Chronogram" /></td>
</tr>
<tr>
<td>Develop training material</td>
<td><img src="image-url" alt="Chronogram" /></td>
</tr>
<tr>
<td>Train trainers</td>
<td><img src="image-url" alt="Chronogram" /></td>
</tr>
<tr>
<td>Select participants</td>
<td><img src="image-url" alt="Chronogram" /></td>
</tr>
<tr>
<td>Conduct training courses</td>
<td><img src="image-url" alt="Chronogram" /></td>
</tr>
<tr>
<td>Evaluate results of training</td>
<td><img src="image-url" alt="Chronogram" /></td>
</tr>
<tr>
<td>03 Assess hygienic practices to create baseline</td>
<td><img src="image-url" alt="Chronogram" /></td>
</tr>
<tr>
<td>Organize local workshops</td>
<td><img src="image-url" alt="Chronogram" /></td>
</tr>
<tr>
<td>Hire trainers</td>
<td><img src="image-url" alt="Chronogram" /></td>
</tr>
<tr>
<td>Recruit local representatives</td>
<td><img src="image-url" alt="Chronogram" /></td>
</tr>
<tr>
<td>Conduct workshops</td>
<td><img src="image-url" alt="Chronogram" /></td>
</tr>
<tr>
<td>Evaluate hygienic practices after training</td>
<td><img src="image-url" alt="Chronogram" /></td>
</tr>
</tbody>
</table>
4.3. Making annual work plans

Based on the operational plan annual work plans should be elaborated specifying in greater detail the timing of technical execution and related financial expenditure. A calendar of activities and a budget related to planned activities and expected results should be established. For the first year the plan must be detailed and specific. Towards the end of the first year a more specific work plan for the following year will be elaborated and so on.

For a specific year in the work plan the following will be defined:

- expected results to be achieved based on the project document
- activities to be performed
- tasks to be undertaken
- costs, i.e. a budget specifying funds needed to carry out the annual work plan.

The work plan forms the basis for the technical monitoring.

4.4. Breaking down the project budget

The project budget included in the project document indicates the financial resources needed for the entire project period. The costing of the project is calculated on the basis of tasks, activities and expected results. This budget now needs to be broken down by year or shorter periods to show what resources will be needed to accomplish the work plan.

The annual work plan outlining the technical execution should be accompanied by a break down of expected costs related to tasks, activities and the expected results.

A simplified project budget may look like this:

<table>
<thead>
<tr>
<th>YEAR 1</th>
<th>YEAR 2</th>
<th>YEAR 3</th>
<th>TOTAL BUDGET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Result 01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost per year</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The project manager will need a budget with a considerable level of detail. Superiors and financing partners, however, will be better served with budgets where items have been aggregated up to the activities level or even to results level. This way they get a better overview.

The budget constitutes the basis for the financial monitoring.

4.5. Preparing a monitoring plan

Once the work plan is elaborated, a monitoring plan should be prepared. It should address the expected results level, i.e. when, whether or to what extent expected results are being achieved.

At the task and the activity levels, performance will be checked against the calendar of activities and the budget. No other indicators are needed. This is a straightforward and relatively uncomplicated exercise and will not be dealt with further here.

A monitoring plan is used to plan, manage and document the data collection process. It ensures that comparable data will be collected on a regular and timely basis. It identifies the indicators to be tracked, specifies the source, method and schedule of data collection and assigns responsibilities. The plan will help keeping the monitoring system on track and ensure that data are reported regularly to project management.

The elaboration of such plan should preferably be undertaken with participation of all the stakeholders of the project, specially a representative of the beneficiary party, as well as the financing partner. A multiparty project steering or technical committee, with representatives of all stakeholders, is usually a good participatory mechanism to monitor progress. It allows for a shared view on planning and on monitoring indicators. It also offers opportunity for exchange of views among all involved on obstacles and potential solutions.

The following elements should be included in the monitoring plan:

Plans for data collection:

- Performance indicators and their definitions
- Baseline data
- Performance targets
- Data Source
- Method of data collection
- Frequency and Schedule of data collection
- Responsibilities for acquiring data

Plans for data analysis, reporting and use of information:
• Data analysis plans
• Identifying needs for complementary evaluation
• Plans for communication and using monitoring information

Each one of these elements is explained below and some advice offered.

4.5.1. Performance indicators and their definitions

For monitoring purposes, indicators need only to be defined for the expected results level. In the work plan some preliminary indicators may have been identified. In that case, they should be revised and, if necessary, complemented.

Example:

<table>
<thead>
<tr>
<th>PROJECT PURPOSE</th>
<th>EXPECTED RESULT</th>
<th>INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management of health services improved</td>
<td>1. Patients’ waiting period reduced by 30%</td>
<td>Waiting time measurement</td>
</tr>
<tr>
<td></td>
<td>2. Medical staff receives 10% more patients per day</td>
<td>Number of patients</td>
</tr>
<tr>
<td></td>
<td>3. User satisfaction level remains the same</td>
<td>Patients opinions</td>
</tr>
</tbody>
</table>

Good indicators start with a clear statement of objectives or expected results. Each indicator needs a detailed definition specifying quantity, quality and time. When selecting indicators the most important characteristics are the following:

• Validity – that the indicator actually measures what is purported to measure,
• Reliability – that repeated measurements will give the same results,
• Sensibility – that the indicator will be responsive to changes, and
• Specificity – that the indicator measures only those changes related to the project intervention in question.

4.5.2. Baseline data

It is hardly possible to establish targets or measure progress without knowing what the situation is like at the commencement of a project. That is why baseline data have to be established before the project starts. They should reflect, as near as possible, the value of each indicator at the outset of a project and they will be the value against which changes will be measured throughout the project period.
Example:
In a project aimed at increased wheat production of small farmers establishing the baseline is easy, at least in theory: The level of production of wheat at the outset of a project specifying the quality of wheat.
In cases where expected results are of a more qualitative nature, e.g. “increased awareness of hygienic practices related to use of water”, it takes a bit more imagination to establish the baseline.

4.5.3. Performance targets
Targets represent the exact level and timing of expected results to be achieved by a project. Whereas the indicator defines how performance will be measured along a scale or dimension, the target identifies the specific planned level of result to be achieved within an explicit time frame.

Example:
If the expected result is “patients’ waiting period reduced by 30% in a two year period”, interim targets may be set as follows:
“10% reduction of average waiting time by July Year 1; further 10% reduction by January Year 2 and finally an additional 10% reduction by July Year 2.”

A final target is the planned value of an indicator by the end of the project or the planning period. If this time frame is very long, it is advisable to set interim targets or, as they are often called, milestones.

Example:
Expected result: “Access to clean drinking water to 80% of the rural population in the province of Santa Clara”.
When the project starts only 50% of the population has access to clean water (baseline value). The project is planned for a seven-year period. The final target is 80% to be achieved by the end of 7 years. In this case it may be wise to establish intermediate targets, e.g. 60% after two years, 70% after four years and 80% after seven years.

It is a good idea to use a cumulative curve to illustrate the intermediate targets and the final target. This will be a good basis for comparison with actual achievements.
4.5.4. Means of verification and data source

The means of verification make it possible to verify the status of the indicators. They should be defined in the LFA-matrix of the project document. If this has not been done or if new indicators have been selected, project management has to establish means of verification.

The data source is where the data to verify the status of the indicator are to be found. It can be an institution that conducts the data collection or a system for data collection set up by the project. It is important that the same source can be used routinely, as switching data sources for the same indicator over time can lead to inconsistencies and misinterpretations. For example, switching from estimates of infant mortality rates based on national sample surveys to estimates based on hospital registration statistics can lead to false impressions of change.

Two examples:

<table>
<thead>
<tr>
<th>EXPECTED RESULTS</th>
<th>INDICATORS</th>
<th>MEANS OF VERIFICATION</th>
<th>DATA SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduced mortality of pre-school children by 20% in three years</td>
<td>U5MR</td>
<td>Mortality statistics</td>
<td>Bureau of National Statistics</td>
</tr>
<tr>
<td>Management of health services more responsive to client demands</td>
<td>Patients' waiting time reduced. More patients received.</td>
<td>Waiting time monitoring sheet</td>
<td>Statistics of 10 selected health centers on number of patients and waiting time.</td>
</tr>
<tr>
<td></td>
<td>Client satisfaction increased.</td>
<td>Satisfaction levels</td>
<td>Exit questionnaires to clients</td>
</tr>
</tbody>
</table>

4.5.5. Method of data collection

The method or approach to data collection for each indicator should be specified. It should be noted whether it is primary data collection or is based on secondary data.

For primary data collection, consider:

- The unit of analysis
- Data segregation needs (by gender, age, ethnic group, location)
- Sampling techniques
- Techniques or instruments for acquiring data.
For indicators based on secondary data, give the method of calculating the specific indicator data point and the sources of data. Provide sufficient detail on the data collection or calculation method to enable it to be replicated.

4.5.6. Frequency and schedule of data collection

Monitoring systems must gather comparable data periodically to measure progress. How often should data be collected? There is no general answer. Depending on the indicator, it may make sense to collect data on a quarterly, annual or less frequent basis. For example, because changes are slow, fertility data may be collected every few years whereas data on contraceptive distribution and sales may be gathered quarterly.

When planning the frequency and the scheduling for data collection, important factors to consider are the management’s needs for timely decision making and the decision points in the project cycle.

4.5.7. Responsibilities for acquiring data

In terms of each indicator, the responsibility for the timely acquisition of data from their source should be clearly assigned to a particular individual, team or office. The mode of registration of data should be determined.

4.5.8. Data analysis plan

To the extent possible, it is advisable to plan in advance not only for the collection of data, but also for data analysis, reporting, review and use, to identify data analysis techniques and data presentation formats to be used.

4.5.9. Identifying needs for complementary evaluations

Evaluations of ongoing projects should be undertaken only when monitoring results show that there are serious problems or obstacles that make it less probable that the project purpose be achieved. For example, if reasons for not meeting targets are not clearly understood, planning evaluations to investigate and analyze the project makes sense.

4.5.10. Plans for communicating and using monitoring information

Planning how monitoring information will be used is critical for effective management. There are basically three ways of using the information:

1. Influencing management decisions
2. Writing progress/semiannual or annual reports directed to superiors, national counterparts and financing partners.
3. Sharing the information with stakeholders for discussion and analysis.
5. Analyzing results of monitoring

Analysis of monitoring results is basically a matter of comparing actual performance with plans, and actual expenditure with budget and analyzing deviations and discrepancies. This can be expressed in words, as well as in tables and diagrams. Figures usually are easier and faster to interpret illustrating clearly the comparison between plans and outcome.

Example:

TRAINING OF HEALTH WORKERS

<table>
<thead>
<tr>
<th>No. planned</th>
<th>Actual no. trained</th>
<th>%</th>
<th>Budgeted cost. US$</th>
<th>Actual cost. US$</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>180</td>
<td>162</td>
<td>90%</td>
<td>8,600</td>
<td>10,100</td>
<td>116%</td>
</tr>
</tbody>
</table>

In this case the technical execution, i.e. the number of health workers trained, is only 90% of the expected, while the cost amounts to 16% more than budgeted. There may be good reasons for this cost overrun that need to be explained. Or there may be problems that motivate a change in the organization of the training.

Discrepancies and shortfalls may be due to problems or conditions within the project, such as the project organization, administrative systems, change of project directors or shortage of staff.

But there is also the possibility that disappointing results, delays or cost overruns are due to situations or changes in the project environment, such as political disturbances, natural disasters, new legislation or increasing inflation. The latter factors are related to the assumptions and assessment of risks that should be considered at the project design stage.

6. Suggesting correcting measures

Depending on the results of the analysis the project manager may want to propose corrective measures, improve the project design or adjust resource allocation. The operational frame or the assigning of responsibilities may need adjustment. Monitoring results will help justify such measures.

7. Editing progress reports/annual reports

Monitoring results should be incorporated into periodic reports and taken into account when new work plans are drawn up. The reports should always relate to the project document and to the LFA matrix presented in that document.
There are two main issues that should be addressed in the reports:

- Technical execution - as related to the annual plan. Focus should be on the Expected Results level more than on the Activity and Task levels.
- Financial execution - as related to budget and specifically to expected cost for producing Expected Results and to carrying out Activities.

The reporting on the two issues must be synchronized comparing the degree of technical execution with the utilization of funds. It is the responsibility of the project manager to ensure that this match exists.

The monitoring of the technical execution provides the Project Manager with elements for the technical reporting, while the financial system in PAHO (Budget and Finance Division) supplies him or her with the financial information.

The reporting requirements of external financing partners are defined in the respective agreements between PAHO and the contracting partner. Requirements vary to some extent in terms of frequency, content and level of detail.

It is important that reports are well structured, concise and to the point. The aim should be to give an overview of project progress, of the extent to which expected results have been achieved, of problems encountered in project execution and in the project environment, and of perspectives for the next reporting period. It is wise to avoid getting involved in great detail.

The structure of the reports should remain the same throughout the life of the project and the level and categories of reporting should be maintained in order to facilitate comparison.

8. Concluding remarks

8.1. A participatory approach

Experience shows that people centered approaches to design, monitoring and evaluation enhance ownership and promote the sustainability of interventions. Participatory approaches will lead to greater involvement, better and more lasting results, and shared commitment and responsibilities.

As convenient and pertinent, counterparts, staff and the representatives for the target group should therefore be involved in planning and conducting monitoring activities, interpreting data, analyzing results and discussing the reasons for results being achieved or not achieved. Besides the instant advantages of such an approach, it also has the benefit of building national capacity in the area of monitoring.
8.2. Results Oriented Management

Monitoring for project progress is an integral part of project management. It is a useful tool that does not make project management more difficult or more complicated. On the contrary, it pays in the long run to establish an effective system of monitoring. It is a way of managing projects better and smarter.

Monitoring will save time and effort for the project manager and make project follow-up and reporting more effective.

Monitoring is a way of knowing and understanding what is going on in the project and of being in control. The results serve as the basis for decisions with regard to the need for reprogramming and/or reassigning human and financial resources. It will provide relevant and timely information to top management on the progress and any difficulties encountered in the project.

Monitoring is to be focused on the Expected Results level of the LFA hierarchy, a level that is under management control. The project document, and more particularly the annual work plans, constitutes the basis for monitoring project progress.

Monitoring means comparing actual performance with plans. It includes two distinct but interrelated types of follow-up: technical execution of the project and financial expenditure related to the project. The two aspects of monitoring and reporting should be performed in a synchronized manner.

Monitoring results are valuable inputs in future evaluations of the project.

Effective monitoring will enhance the quality of project management. This is a logical step in the institutional development of the organization and will make PAHO more accountable and attractive as a partner of external financing agencies.
ANNEXES
Annex I
CONDENSED GUIDE FOR PAHO MONITORING PROCEDURE

1. PREPARING THE MONITORING PLAN

1.1. Review project agreement

Internalize all aspects related to project execution and reporting that appear in the project agreement signed with the donor. What are the commitments? Which procurement procedures? How often will transfers of funds be made? Which implementation structure needs to be in place? How often are reports due? How will donor be involved or not during the life of the project?

1.2. Review LFA matrix for project.

What are the “expected results” to be achieved?

1.3. Review work plan for current year.

What activities are to take place during the year? What is the expected expenditure (budget) for the year? What should be achieved by the end of the year?

1.4. Review/develop indicators for tracking progress at the “expected results” level

Which are the indicators whereby progress can be tracked? Which targets have been set (expected results level):

- To be achieved by the end of the project?
- To be achieved by the end of the year (intermediate targets or milestones)?

<table>
<thead>
<tr>
<th>Expected results</th>
<th>End of project target</th>
<th>Target Year 1</th>
<th>Result Year 1</th>
<th>% of year target</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02</td>
<td></td>
<td></td>
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<tr>
<td>03</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
1.5. What are the means of verification of the selected indicators?

1.6. What data sources should be used?

1.7. Who is responsible for the data collection?

2. DATA COLLECTION IN ACCORDANCE WITH MONITORING PLAN

3. ANALYSIS OF MONITORING RESULTS

3.1. Rate of technical execution?

3.2. Rate of financial execution?

3.3. Consolidating and comparing technical and financial execution

<table>
<thead>
<tr>
<th>TRAINING OF HEALTH WORKERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. planned</td>
</tr>
<tr>
<td>180</td>
</tr>
</tbody>
</table>

3.4. Technical execution: Deviations and discrepancies from planned results?

- At the level of “expected results”
- At the level of activities

3.5. Technical execution: Analysis of deviations and shortfalls

- Problems within the project (project design, organization, counterparts, staffing etc)?
• Problems in the project environment – outside the control of project management?
• Any unexpected results – positive or negative?

3.6. Financial execution: Deviations from budget

• At the level of expected results
• At the level of activities

<table>
<thead>
<tr>
<th></th>
<th>Budget Year 1</th>
<th>Actual expenditure</th>
<th>Expenditure as % of budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expected result 01:</td>
<td>100</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>Activity 1</td>
<td>25</td>
<td>25</td>
<td>100</td>
</tr>
<tr>
<td>Activity 2</td>
<td>40</td>
<td>36</td>
<td>90</td>
</tr>
<tr>
<td>Activity 3</td>
<td>35</td>
<td>29</td>
<td>83</td>
</tr>
</tbody>
</table>

3.7. Financial execution: Analysis of over-spending or under-spending

4. PROPOSED ACTION

• Immediate action?
• Adjustments in work plan of the following year
• Adjustments in budget for the following year

5. CONCLUSIONS AND LESSONS LEARNED
ANNEX II

FORMAT FOR ANNUAL PROGRESS REPORT

The report should preferably be limited to 10 pages, and should in no case exceed 15 pages. If more information is deemed pertinent and necessary it should be presented in annexes to the report.

1. EXECUTIVE SUMMARY
   Principal project achievements, problems, summary, financial execution and future proposals
   (one page).

2. INTRODUCTION-CONTEXT
   Brief history of the project. Political, social and economic context in which the project is carried out.

   This section should not exceed one page unless there were changes affecting the development of the project (such as elections, natural disasters, and war).

3. PERTINENT NATIONAL POLICIES AND THEIR IMPACT ON THE PROJECT
   RELATIONSTO NATIONAL AND LOCAL COUNTERPARTS
   Maximum one page.

4. PROJECT PROGRESS
   This section must be based on the LFA matrix. Explanatory notes should not exceed three pages.

   4.1 Describe to what extent the expected results have been achieved using the data emerging from the project monitoring. Refer to good indicators. Explain and comment delays, deviations and differences of actual performance as compared to plans. Indicate and discuss problems, deficiencies, errors etc and propose corrective action.

   4.2 Indicate to what extent expected results are actually contributing to the project purpose. Comment on whether or to what extent the project environment - what is outside the control of the project - has affected the project positively or negatively. Are there any unexpected results, positive or negative?
4.3 Assess progress from the point of view of project management, e.g. comment on project organization, operational framework, administrative systems, adequacy of staffing – both in PAHO and the counterpart institution.

5. **FINANCIAL EXECUTION ANALYSIS**

This section should not exceed two pages.

5.1 Analyze expenditure as percentage of budget by activity corresponding to the work plan. If requested by donor, also include PAHO’s budget components. In case of multi-country projects, include tables for each country, as well as a consolidated table.

5.2 Utilizing the ABF/ABU official report prepared by the Budget and Report Section of PAHO, show the rate of technical and financial execution by consolidating technical and financial data. Explain and comment on any deviation. Suggest corrective measures, as necessary. This is not an auditing exercise, but rather a review of project progress in relation to the utilization of funds. The purpose is to determine whether it is necessary to reassign allocations or adjust calendar of activities.

5.3 Introduce a financial chart showing
   a) PAHO’s contribution, including resources from external financing partners
   b) National counterpart contribution

5.4 All the data mentioned should be presented for the year for which the report is made, and accumulated during life of the project and also be related to the original project document and budget.

6. **FUTURE PROGRAMMING**

Propose the work plan for the following year. In the case of multi-country projects, include one for each country.

Comments are necessary only if new activities are introduced or if changes are proposed in terms of activities or the budget contained in the original project document.

7. **ADDITIONAL COMMENTS**

Further comments should be included only if there are relevant or important issues that have not already been covered in the report.
# List of Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABF/ABU</td>
<td>Office of Budget and Reports</td>
</tr>
<tr>
<td>AMPES</td>
<td>Technical Cooperation Planning, Programming and Evaluation System</td>
</tr>
<tr>
<td>BPB</td>
<td>Biennial Program Budget</td>
</tr>
<tr>
<td>DEC</td>
<td>Office of External Relations</td>
</tr>
<tr>
<td>GPW</td>
<td>General Program of Work</td>
</tr>
<tr>
<td>LFA</td>
<td>Logical Framework Approach</td>
</tr>
<tr>
<td>PAHO</td>
<td>Pan American Health Organization</td>
</tr>
<tr>
<td>PRG</td>
<td>Project Review Group</td>
</tr>
<tr>
<td>PRP</td>
<td>Project Review Process</td>
</tr>
<tr>
<td>SPO</td>
<td>Strategic and Programmatic Orientations</td>
</tr>
<tr>
<td>SPW</td>
<td>Semiannual Program of Work</td>
</tr>
<tr>
<td>U5MR</td>
<td>Under 5 Mortality Rate</td>
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MONITORING of
PROJECT IMPLEMENTATION
a manual

Pan American Health Organization
Pan American Sanitary Bureau, Regional Office of the
World Health Organization
525 Twenty-third Street, N.W., 20037, U.S.A.

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