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## ABSTRACT

This manual, which is intended for practitioners involved in the Asia and the Pacific Programme of Education for All, explains the basic concepts and procedures involved in monitoring and evaluating literacy and continuing education programs. The following are among the topics discussed in the manual's eight chapters: (1) understanding monitoring concepts and the process of developing a program monitoring plan (objectives, characteristics, tasks of monitoring systems); (2) developing indicators for program monitoring (types of indicators, convergence of indicators with monitoring tools); (3) designing methodologies in monitoring (types and characteristics of monitoring tools, data collection and analysis methods); (4) reporting and disseminating monitoring results (educational management information systems); (5) understanding evaluation concepts and the process of developing an evaluation plan (need for and functions of evaluation); (6) identifying the four major areas of evaluation; (7) developing the evaluation design and managing the evaluation work (sampling methods, evaluation roles and responsibilities, staff orientation and training); and (8) reporting and using evaluation results (reporting formats, the target audiences of evaluation reports, factors affecting use of evaluation results). The document contains 19 references and 22 tables/figures. Appended are sample forms, sample evaluation tools, and a list of participants. (MN)



# Monitoring and Evaluation of Literacy and Continuing Education Programmes

## Practitioners' Manual

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Asia-Pacific Programme of Education for All

UNESCO PRINCIPAL REGIONAL OFFICE FOR ASIA AND THE PACIFIC  
Bangkok, 1999



# Monitoring and Evaluation of Literacy and Continuing Education Programmes

## Practitioners' Manual



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# CONTENTS

## INTRODUCTION

## PART I – MONITORING

|                      |   |           |
|----------------------|---|-----------|
| <b>Chapter One</b>   | <b>: Understanding Monitoring Concepts and Developing a Programme Monitoring Plan</b> | <b>1</b>  |
| 1.1                  | Programme Monitoring Defined  | 2         |
| 1.2                  | Monitoring as a Management Function   | 2         |
| 1.3                  | The Conceptual Interface between Monitoring and Evaluation                            | 3         |
| 1.4                  | The Importance and Benefits of Programme Monitoring                                   | 5         |
| 1.5                  | Objectives of Programme Monitoring  | 6         |
| 1.6                  | Characteristics of a Good Monitoring System   | 7         |
| 1.7                  | Tasks of the Programme Monitor  | 7         |
| 1.8                  | Preparing a Monitoring Plan   | 8         |
| 1.9                  | The Process of Developing a Monitoring Plan   | 9         |
| <b>Chapter Two</b>   | <b>: Development of Indicators for Programme Monitoring</b>                           | <b>13</b> |
| 2.1                  | Monitoring Indicator Defined  | 14        |
| 2.2                  | The Need for Developing Indicators in Programme Monitoring                            | 14        |
| 2.3                  | Characteristics of a Good Indicator   | 14        |
| 2.4                  | Types of Indicators   | 15        |
| 2.5                  | Development of Indicators   | 16        |
| 2.6                  | Some Guidelines for Developing Indicators   | 17        |
| 2.7                  | Sample Indicators for Monitoring Literacy Programmes                                  | 18        |
| 2.8                  | Some Indicators for Monitoring Continuing Education Programmes                        | 20        |
| 2.9                  | Convergence of Indicators with Monitoring Tools                                       | 22        |
| 2.10                 | Suggested Steps for Developing Tools Based on Monitoring Indicators                   | 22        |
| <b>Chapter Three</b> | <b>: Designing Methodologies in Monitoring</b>  | <b>25</b> |
| 3.1                  | Monitoring Tool and Instrument Defined  | 26        |
| 3.2                  | Types of Monitoring Tools/Instruments   | 26        |
| 3.3                  | Characteristics of Good Monitoring Tools  | 27        |
| 3.4                  | Development of Monitoring Tools   | 28        |
| 3.5                  | Major Sources of Monitoring Data  | 29        |
| 3.6                  | Methods of Data Collection  | 30        |
| 3.7                  | Some Guidelines for Data Collection   | 31        |

|                               |   |    |
|-------------------------------|---|----|
| <b>Chapter Three (cont'd)</b> |   |    |
| 3.8                           | Collection of Data at Various Levels .....    | 31 |
| 3.9                           | Flow of Information .....                     | 33 |
| 3.10                          | Time Frame/Frequency of Data Collection ..... | 34 |
| 3.11                          | Analysis of Data .....                        | 34 |
| 3.12                          | Procedures for Analyzing Data .....           | 35 |
| 3.13                          | Statistical Methods for Data Analysis .....   | 37 |
| 3.14                          | Training .....                                | 37 |
| 3.15                          | Cost of Monitoring .....                      | 39 |

|                     |  |           |
|---------------------|--|-----------|
| <b>Chapter Four</b> | <b>: Reporting and Dissemination of Monitoring Results .....</b>       | <b>41</b> |
| 4.1                 | Reporting on the Progress of Programme Implementation .....            | 42        |
| 4.2                 | Establishing an Educational Management Information System (EMIS) ..... | 43        |
| 4.3                 | Information Flow in the EMIS .....                                     | 45        |
| 4.4                 | Some Additional Guidelines for an EMIS .....                           | 46        |

## PART II – EVALUATION

|                     |   |           |
|---------------------|---|-----------|
| <b>Chapter Five</b> | <b>: Understanding Evaluation Concepts and the Process of Developing an Evaluation Plan .....</b> | <b>47</b> |
| 5.1                 | Evaluation Defined .....  | 48        |
| 5.2                 | The Need for Programme Evaluation .....   | 49        |
| 5.3                 | Functions of Evaluation .....   | 49        |
| 5.4                 | Scope and Coverage of Evaluation .....  | 49        |
| 5.5                 | Evaluation at Various Stages of Programme Implementation .....                                    | 50        |
| 5.6                 | The Process of Developing an Evaluation Plan .....  | 53        |
| 5.7                 | Preparing a Logical Framework for a Project to be Evaluated .....                                 | 55        |

|                    |   |           |
|--------------------|---|-----------|
| <b>Chapter Six</b> | <b>: Identifying Areas of Evaluation .....</b>    | <b>57</b> |
| 6.1                | The Need for Identifying Evaluation Areas .....   | 58        |
| 6.2                | Four Major Areas of Evaluation .....              | 58        |
| 6.3                | Other Areas of Evaluation .....                   | 61        |
| 6.4                | Guidelines for Identifying Evaluation Areas ..... | 61        |

|                      |  |           |
|----------------------|--|-----------|
| <b>Chapter Seven</b> | <b>: Developing the Evaluation Design and Managing the Evaluation Work .....</b> | <b>63</b> |
| 7.1                  | The Evaluation Design .....  | 64        |
| 7.2                  | Evaluation Designs Which Include the Four Areas of Evaluation .....              | 67        |
| 7.3                  | Sampling .....   | 71        |
| 7.4                  | Evaluation Tools and Techniques .....  | 75        |

|                               |  |            |
|-------------------------------|--|------------|
| <b>Chapter Seven (cont'd)</b> |  |            |
| 7.5                           | Collection of Data .....   | 77         |
| 7.6                           | Analysis of Data .....   | 79         |
| 7.7                           | Evaluation Schedule .....  | 80         |
| 7.8                           | Roles and Responsibilities .....                                     | 81         |
| 7.9                           | Staff Orientation and Training .....                                 | 83         |
| 7.10                          | Evaluation Costs .....   | 84         |
| <b>Chapter Eight</b>          | <b>: Reporting and Use of Evaluation Results .....</b>               | <b>85</b>  |
| 8.1                           | Basic Consideration in Reporting Evaluation Findings .....           | 86         |
| 8.2                           | Reporting Formats .....  | 86         |
| 8.3                           | Target Groups of Evaluation Reports .....                            | 90         |
| 8.4                           | Factors Affecting the Use of Evaluation Results .....                | 92         |
| 8.5                           | Database Management System .....                                     | 92         |
|                               | <b>References and Suggested Literature for Further Reading .....</b> | <b>95</b>  |
| <br><b>APPENDICES</b>         |  |            |
| <b>Appendix I</b>             | <b>: Sample Forms for Data Collection in Monitoring .....</b>        | <b>97</b>  |
| <b>Appendix II</b>            | <b>: Sample Forms for Reporting Information in Monitoring .....</b>  | <b>109</b> |
| <b>Appendix III</b>           | <b>: Sample Evaluation Tools .....</b>                               | <b>113</b> |
| <b>Appendix IV</b>            | <b>: List of Participants .....</b>                                  | <b>125</b> |

## INTRODUCTION

In the pursuance of UNESCO's ultimate goal, which is to promote primary education, literacy and continuing education for all children, youths and adults, the **Asia and the Pacific Programme of Education for All (APPEAL)** has adopted various strategies to reach the ultimate beneficiaries of education. Its priority programme areas are:

- Reaching the unreached, the underserved and the disadvantaged population groups in rural and urban areas, with a particular emphasis on girls and women;
- Promoting community participation and ownership; and
- Improving the relevance and quality of basic education and enhancing the achievements of all children, youth and adults.

In order to achieve this ultimate goal, the participating Member States of APPEAL have implemented educational programmes at the national, provincial and local levels. At these various levels of implementation, planners and administrators of these programmes see the strong need for improving their monitoring activities and systems. Further, they feel that programme monitors and evaluators need more user-friendly and simple monitoring/evaluation tools that will help them conduct their work.

*The Practitioners' Manual on Monitoring and Evaluation of Literacy and Continuing Education Programmes* is APPEAL's response to this need for further strengthening of the monitoring and evaluation activities of the Member States. It is designed to complement the earlier efforts of APPEAL in providing information and educational materials on programme monitoring and evaluation of literacy and continuing education programmes. Most notable of these products are the *APPEAL Training Materials for Literacy Personnel (ATLP)*, the *APPEAL Training Materials for Continuing Education Personnel (ATLP-CE)* and the *APPEAL Manual for Planning and Management (AMPM)*. The basic distinctions between this manual and the ATLP and the AMPM stem from the contextual framework and the intended users of the materials. While the ATLP and the AMPM provide overview and general orientation materials useful to managers and planners, this manual is designed to give operations-oriented advice that can be used at the field level, especially by community-based service providers. Thus, the primary target users of this manual are field-based programme administrators who need to monitor the day-to-day implementation of literacy and continuing education programmes and projects, as well as programme evaluators. It gives them concrete and specific examples as well as step-by-step processes in the preparation and actual implementation of monitoring and evaluation activities.

The following topics are included in this manual:

- Definitions and concepts of monitoring and evaluation;
- Distinctions between monitoring and evaluation;
- Development and preparation of monitoring and evaluation plans;



- Development of monitoring and evaluation indicators;
- Designing tools and managing monitoring and evaluation;
- Training as a capacity-building strategy in monitoring and evaluation; and
- Reporting, dissemination and use of monitoring and evaluation findings.

The manual is divided into two main parts. **Part One** covers monitoring concerns while **Part Two** focuses on evaluation. In each part, the topics listed above are comprehensively discussed. Whenever possible, related issues are linked together in the discussions. Also presented are simple and easy-to-follow examples and procedures in the planning and actual performance of monitoring and evaluation work. They can serve as models that may be adopted or adapted by field programme administrators and evaluators.

The manual is the major output of the *UNESCO Technical Working Group Meeting on Monitoring and Evaluation of Literacy and Continuing Education* organized by APPEAL and the SEAMEO INNOTECH on 4-10 May, 1998 in Quezon City, Philippines. Participants were evaluation experts from Bangladesh, China, India, Malaysia, Philippines and Thailand (Appendix IV). Before writing the manual, they held a series of workshops and devised a common framework that identified the concerns of monitoring and evaluation reflecting the realities of the region. Although they individually worked on specific parts of the manual, they reviewed and assessed the content as a group. This group effort is an important element in the preparation of the manual because it provides a regional dimension to the framework, the concepts discussed and the monitoring/evaluation models presented.

# **PART I : MONITORING**

## Chapter One

### UNDERSTANDING MONITORING CONCEPTS AND DEVELOPING A PROGRAMME MONITORING PLAN

**This chapter aims to enable programme planners and practitioners of literacy and continuing education programmes to:**

- \* *define monitoring and set it in the overall programme context;*
- \* *differentiate monitoring from evaluation;*
- \* *understand the benefits that can be derived from conducting regular monitoring;*
- \* *discuss the objectives of programme monitoring and identify the features of good monitoring objectives;*
- \* *discuss the characteristics of a good monitoring system;*
- \* *understand the tasks of a programme monitor;*
- \* *describe how monitoring plans are prepared; and*
- \* *discuss the major steps in preparing a monitoring plan.*

### **1.1 Programme Monitoring Defined**

The following definitions provide appropriate descriptions of the concepts of programme monitoring (SEAMEO INNOTECH, 1997):

- ◆ **Programme monitoring** is a system of (1) documenting all planned efforts, (2) processing the raw data, and (3) disseminating the processed information to higher authorities like the management and planning officers.
- ◆ **Programme monitoring** is a systematic framework for collecting and analyzing information concerning all events related to the implementation of the project in order to improve its management.
- ◆ **Monitoring** is the process of gathering and analyzing data on the progress of ongoing programme activities and providing feedback information to programme managers for taking corrective actions.
- ◆ **Monitoring** is a responsibility of management. It refers to the planned collection of data on the programme /project implementation, processing these data, and communicating processed information promptly to its users so that it can help further improve programme implementation.
- ◆ **Monitoring** is the systematic attempt to measure: (1) the extent to which a programme reaches its intended target population (programme coverage), and (2) the extent to which the services being delivered match what was intended to be delivered (programme process).

The common features of monitoring in the above definitions and descriptions are: (1) it is a system which follows a well-designed process, and (2) its primary purpose is to generate information that can be used to improve programme implementation.

### **1.2 Monitoring as a Management Function**

Monitoring programme implementation is a major function of managers, planners, field administrators and other practitioners in literacy and continuing education programmes. It is a mechanism that provides information on programme progress at various levels and stages of implementation. The manager needs field-based information for making appropriate decisions about programme directions and operations strategies. The planner needs data on the strengths and weaknesses of the programme plan in order to identify possible gaps between the planned and the actual activities implemented at the field level. The programme administrator's interest in monitoring lies in the area of determining whether he or she is reaching clients and intended beneficiaries.

A well-designed and carefully-scheduled programme monitoring follows a systematic framework for collecting and analyzing information on implementation activities with the end view of improving the management and operations at the various stages of the programme. It can provide information to policy makers and programme management so that timely and appropriate decisions can be made, thus helping ensure the success of the programme.

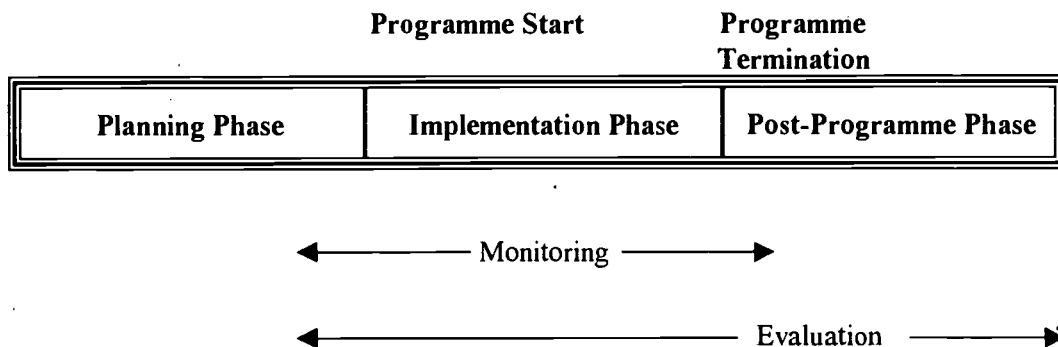
### **1.3 The Conceptual Interface between Monitoring and Evaluation**

There is often a tendency to equate monitoring with evaluation and to use the two words interchangeably and synonymously. In actuality, these are two different programme components and their conceptual interface is basically in terms of the time frame when they may occur as parallel activities.

Figure 1.1 shows the conceptual interface between monitoring and evaluation. Also presented are basic questions that these two programme components attempt to answer.

In programme monitoring, the efforts are mainly aimed at ensuring that the programme is functioning as planned. Unlike evaluation, which aims to judge programme performance, the overall aim of monitoring is to ensure that the programme activities are implemented as planned and whether the factors that lead to success are present in the field. The major monitoring function is to provide profiles of activities at the implementation level.

**Figure 1.1 Conceptual Interface between Monitoring and Evaluation and Basic Objectives and Questions**



**Monitoring: Basic Questions**

1. Are project activities being implemented according to plan?
2. Who is benefiting from the project?
3. Are the expected outcomes/outputs being developed?
4. Is the amount of benefits being delivered the right amount?
5. What changes, if any, should be made to the programme? Why?

**Evaluation: Basic Questions**

1. To what degree has the objective been attained over time?
2. Is the project cost effective?
3. What impact has the project had upon the target clientele?
4. What decision should be taken on the programme?

We **MONITOR** to "PERFECT" implementation

We **EVALUATE** to "JUDGE" the performance



of the programme

**Source:** SEAMEO-INNOTECH Course Handouts on *Planning and Management of Literacy and Continuing Education Programme, 1996-1997.*

Evaluation, on the other hand, aims to examine the project in its entirety – the context, input, process, output and outcome – and make recommendations that may lead to the revision of the programme design or replacing it entirely. It may also recommend changes in the future course of action for the programme.

The basic difference between monitoring and evaluation, therefore, lies in their purposes – **the major purpose of monitoring is to improve and perfect the implementation of the programme and point out gaps so that the programme manager can address them, while that of evaluation is to assess and judge programme performance.**

In terms of programme time frames, both monitoring and evaluation activities are planned before the actual programme implementation. Monitoring work commences simultaneously with the start of the programme while evaluation work is undertaken at regular intervals sometime after the programme begins, when it ends and/or sometime after its completion.

## 1.4 The Importance and Benefits of Programme Monitoring

Programme monitoring is important because of the following reasons:

- ◆ Monitoring information serves as a basis for modifying or revising the ongoing activities of the programme. Insufficient or totally absent information critical to the success of the programme is a sign of the ineffectiveness of the monitoring system put in place and made operational during the programme period.
- ◆ Monitoring is a necessary component in preparing for impact assessment. Experiences in project monitoring have shown that the failure of programmes is often due to weak or incomplete implementation of programme interventions rather than the ineffectiveness of the interventions themselves.
- ◆ Programmes in literacy and continuing education continually seek answers to questions such as: Who is benefiting from the programme? How are services being delivered? Are the beneficiaries actually learning what they are supposed to learn? These questions can only be answered if there is an existing monitoring system for the programme.

Programme monitoring provides the following benefits to management, the planners and field administrators:

- ◆ They can measure the progress of implementation against project plans and budget allocations *for effective management and control.*
- ◆ They can identify problems, weaknesses, gaps, bottlenecks, issues and potential sources of delays *in order to devise corrective actions that will improve programme implementation.*

## 1.5 Objectives of Programme Monitoring

The objectives of programme monitoring are generally derived from the questions asked in Figure 1.1. They are the issues that are normally addressed by programme managers and planners, as well as field administrators:

Some sample programme monitoring objectives are as follows:

- ◆ Identify the actual status of the long-term sustainability of the programme in order to determine if scheduled activities and expected outputs are being implemented/achieved as planned.
- ◆ Discover gaps and deficiencies in programme implementation as well as current and potential issues/problems which need to be addressed.
- ◆ Identify factors that may affect the long-term sustainability of the programme.
- ◆ Highlight significant features that may serve as insights for the planning and implementation of future similar projects.
- ◆ Identify opportunities and strengths that can be tapped to ensure successful programme management and implementation.
- ◆ Recommend policy options for effective and efficient programme management and implementation.
- ◆ Document initial success stories that may be useful for social mobilization and advocacy, or for replication in related programmes and projects.
- ◆ Immediately inform programme management and administrators of the status of programme implementation so that they can apply remedial measures to solve problems.
- ◆ Disseminate the results of the review, monitoring and evaluation work to the programme managers, planners, donors and other sponsors.

Programme monitoring objectives should be:

*Specific*  
*Measurable*  
*Achievable/attainable;*  
*Result-oriented,*  
*Time-bound, as set by the programme*

Objectives that are **specific** help to clarify goals, provide direction to the activities, guide the selection of data and provide a basis for assessing the overall value of the evaluation. **Measurable** objectives help provide outcomes that are observable and demonstrable. An **achievable** objective should be attainable on the basis of the available financial and material resources, and the technical demands of the methods to be employed, as well as

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1. The Literacy Coordinating Council (LCC) of the Philippines, *Mid-term Review of the Comprehensive Education and Community Development Programme (CECDP) of Valencia, Negros Oriental, 1997.*



staff capabilities. Lastly, objectives should be **time-bound** and should be achieved within a specific time frame.

## 1.6 Characteristics of a Good Monitoring System

In order to ensure the chances of success of the programme, monitoring is needed at various stages of the programme cycle from the inception of the project up to the completion of the final activities. A good monitoring system has the following characteristics:

- ◆ It should provide *periodic and timely feedback* on physical and substantive programme accomplishments as well as financial status.
- ◆ It should identify *problems that require solutions and action*. Problems may be specific to the programme or may be institutional in nature (e.g., changes in procurement procedures and rules governing overtime pay).
- ◆ It should be relatively *simple and should not burden the programme monitors*, but *comprehensive enough* to incorporate the basic information required by programme management. The use of complicated forms requiring a large volume of data not only creates confusion but will reduce the enthusiasm of those who are directly responsible for data collection and monitoring.
- ◆ It should be a *continuing exercise from the start-up phase to the project completion stage*. Monitoring seeks to provide a profile of real-world situations, to compare what actually happens with what has been planned or expected. For effective problem solving, monitoring should ensure timeliness of information and feedback.
- ◆ It should take into consideration *the different areas of accountability*, namely:

*Coverage accountability.* Are the persons being served by the programme really the intended beneficiaries? Are there beneficiaries who are not reached by the programme? Are there persons who are not intended beneficiaries being served by the programme?

*Service delivery accountability.* Are services being delivered in the proper amounts? Are the treatments and interventions provided really the intended programme services?

*Fiscal accountability.* Are funds being used properly? Are expenditures properly documented? Are funds used with the limits set by the budget?

*Legal accountability.* Are the relevant statutes and rules being observed by the programme?

## 1.7 Tasks of the Programme Monitor

The programme monitor is normally a regular member of the programme team. He or she is primarily responsible for the collection of information that can be used to improve the programme as it develops. During the programme planning stage, the project monitor undertakes activities resulting in the necessary information that will help planners adjust the programme design to the realities of the field.

The major tasks of the programme monitor are:

- ◆ To determine, together with programme planners and implementation staff, what kinds of information about the programme will be collected and shared, and what decisions will be made based on the information generated from various sources.
- ◆ To ensure that the programme goals and objectives as well as the major strategies for implementation have been carefully thought out and clearly stated in programme documents.
- ◆ To collect data at programme sites about how the programme is actually operating in the field.
- ◆ To report this information clearly and to help the staff plan necessary programme modification.

Based on the above tasks, the monitoring agenda consists of the following activities:

- ◆ Prepare a clear description of the programme monitoring plan, including its goals and objectives, activities and schedules.
- ◆ Define the scope of the data-gathering activities and the responsibilities of the concerned monitors.
- ◆ Conduct the necessary orientation and training of monitoring staff in order to adequately prepare them for their tasks.
- ◆ Monitor and document programme implementation based on the scope of the data-gathering activities. Report and confer with planners and programme administrators on the findings of the monitoring activities.

## **1.8 Preparing a Monitoring Plan**

The development and preparation of a programme monitoring plan are normally done before the start of the implementation phase. They are major tasks of the monitoring staff of the programme. The programme managers and planners are consulted in order to arrive at a common understanding of the objectives, nature and scope of the monitoring system. The schedule of the monitoring activities is also reviewed and discussed with them so that they know when to expect data from the field and subsequently make the necessary analysis of the information gathered by the programme monitors.

After review and consultation, a plan for the monitoring system is developed. The major elements of the plan are:

- ◆ Objectives
- ◆ Indicators
- ◆ Programme activities to be monitored
- ◆ Scheduled implementation period
- ◆ Expected activity outputs and dates of completion
- ◆ Critical data to be gathered

- ◆ Data-gathering tools and/or techniques
- ◆ Monitors responsible for the actual monitoring
- ◆ Monitoring dates
- ◆ Budget

The first two elements, **objectives** and **indicators**, are developed before the actual programme implementation and may be taken from the programme monitoring plan. The other eight elements are the major items to be accomplished during the actual monitoring work.

These elements may be plotted on a chart, as follows:

Monitoring Objective(s): \_\_\_\_\_

Monitoring Indicator(s): \_\_\_\_\_

| Activities to be monitored | Implementation period | Expected outputs/outcomes | Critical data to be gathered | Data-gathering tool (s)/ techniques | Assigned programme monitors | Monitoring dates | Budget |
|----------------------------|-----------------------|---------------------------|------------------------------|-------------------------------------|-----------------------------|------------------|--------|
|                            |                       |                           |                              |                                     |                             |                  |        |

### 1.9 The Process of Developing a Monitoring Plan

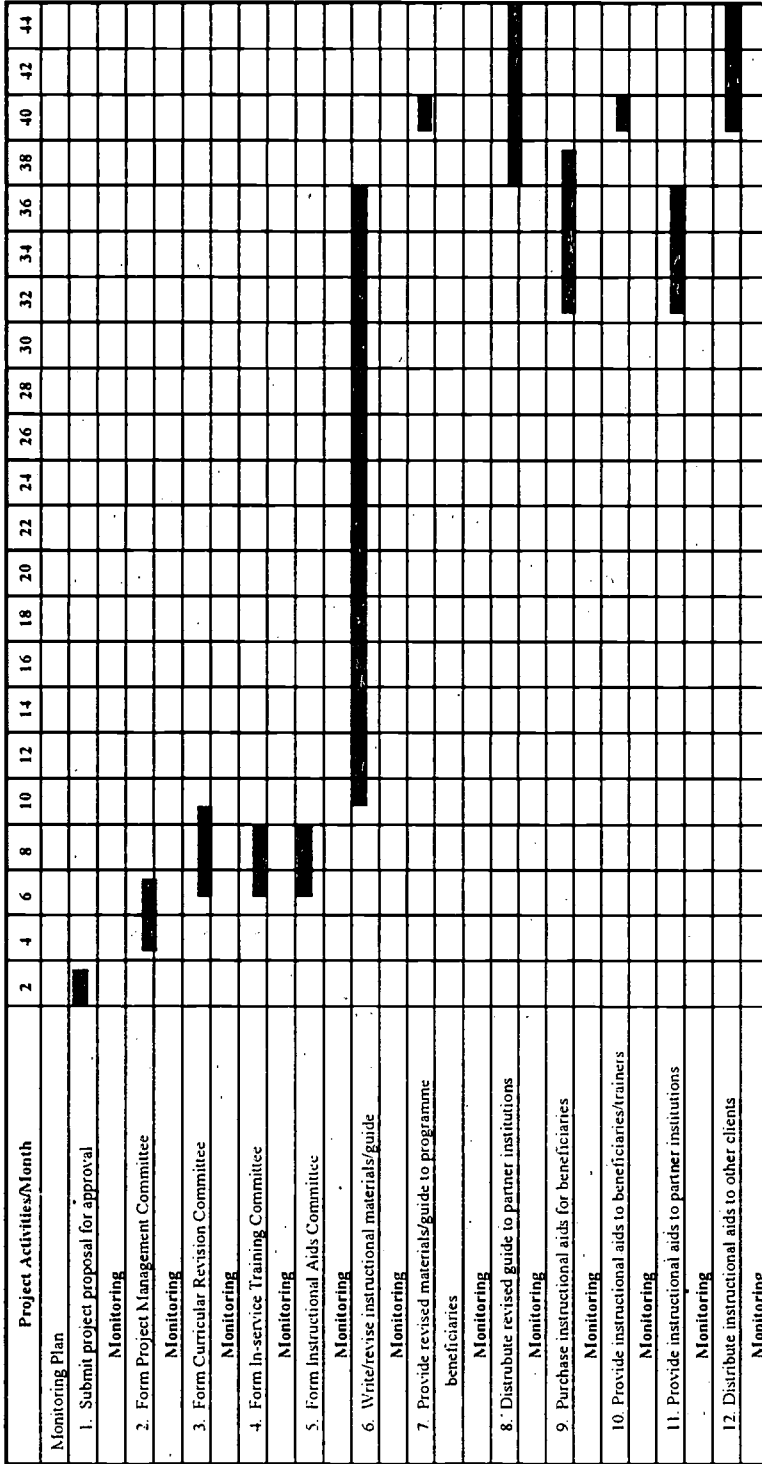
**Step One:** *Develop the monitoring objectives.* These objectives are generally based on the monitoring questions and concerns identified in Figure 1.1 of this chapter. They are also normally contained in the overall monitoring plan of the programme.

**Step Two:** *Specify the programme monitoring indicators.* These indicators will serve as the basis for developing the appropriate monitoring designs and methodologies. These indicators are likewise normally provided in the overall monitoring plan of the programme.

**Step Three:** *Identify the programme activities to be monitored.* For easy reference, a simple Gantt Chart may be prepared (Figure 1.2).

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Figure 1.2 Sample Gantt Chart for Programme Monitoring



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- Step Four:** *Indicate the expected outputs from each of the activities and the dates when these outputs shall appear. This step should be carefully done with the programme planners to ensure accurate monitoring.*
- Step Five:** *Prepare a list of the activities to be monitored. This list should also specify the following:*
- ◆ Actual events at monitoring time;
  - ◆ Participating programme beneficiaries and/or administrators;
  - ◆ Implementation schedule;
  - ◆ Expected outcome/output of each activity;
  - ◆ Resources/inputs being used; and
  - ◆ Person(s) in charge of the activity.
- Step Six:** *Take note of the date(s) of implementation of the activity(ies) to be monitored.*
- Step Seven:** *Identify the important data to be gathered about the activity(ies). These are data which the programme management needs in order to direct and control programme implementation.*
- Step Eight:** *Choose the appropriate dates when the data identified in Step Five will be gathered. The programme management should participate in the selection of these dates so that they will know when to expect data from the field.*
- Step Nine:** *Prepare the monitoring methodologies and instruments. The monitoring plan should describe the data-gathering techniques and instruments to be used.*
- Step Ten:** *Prepare the monitoring budget. All anticipated expenditures to be incurred should be identified, including provisions for a possible increase in costs.*
- Step Eleven:** *Prepare and validate the plan prior to actual monitoring. The programme monitors and/or programme staff assigned to write the plan for the programme monitoring system should frequently consult with management and planning officers throughout the writing and plan preparation stage.*

## Chapter Two

### DEVELOPMENT OF INDICATORS FOR PROGRAMME MONITORING

**This chapter aims to enable programme planners and practitioners of literacy and continuing education programmes to:**

- \* *identify various types of indicators;*
- \* *describe the rationale for the development of indicators;and*
- \* *explain the process of developing indicators.*

## 2.1 Monitoring Indicator Defined

An *indicator* is a variable that reflects the efficient and effective performance of a programme. Indicators provide a standard against which to measure changes brought about by programme activities. They are determined on the basis of programme objectives. For example, in monitoring the process of literacy programme implementation, you can look at management style, learning contact hours and instructional supervision, among other indicators.

## 2.2 The Need for Developing Indicators in Programme Monitoring

In order to help programme managers and operations staff at the field level in monitoring the activities of literacy and continuing education programmes, a set of indicators have to be identified and developed. Indicators are useful tools in documenting activities and measuring changes in the programme over time. When indicators are developed on a regular basis, they can help identify possible changes that need to be made in the programme structure, strategies or implementation scheme. For example, socio-economic indicators can be used to measure the changes in the socio-economic status of a village, group or family. If there are no clear and measurable indicators, it would not be possible to measure the progress of a literacy programme; likewise, it would be impossible to collect appropriate and precise data from the project site.

## 2.3 Characteristics of a Good Indicator

A good indicator has the following characteristics:

- ◆ It is measurable.
- ◆ It describes central features of the programme implementation.
- ◆ It links to the basic goals of the programme by providing a measure of progress or change.
- ◆ It is statistically valid and reliable.
- ◆ It can be readily observed and measured in terms of time, expertise and cost.
- ◆ It is comprehensive and meaningful.
- ◆ It is understandable to all major interested users.
- ◆ It identifies trends over time.
- ◆ It is applicable or useful at different levels (national, local, and grassroots).
- ◆ It is relevant to education policy.

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1. Based on the UNESCO PROAP *Educational Management Information System Training Manual*, Bangkok, 1998.

## 2.4 Types of Indicators

There are various types of monitoring indicators for literacy and continuing education programmes and their categorization depends on their scope and purposes.

*Qualitative indicators* are intended to measure the quality of the input, process and output of the programme. They measure performance relative to some given standards and norms. The term “quality” can mean different things depending on the context. Here the term refers to a perceived improvement in the implementation of the literacy programme. Examples of qualitative indicators are:

- ◆ learner/teacher ratio by level;
- ◆ classrooms in good condition;
- ◆ absenteeism (learners, teachers); and
- ◆ use of multimedia teaching aids.

*Quantitative indicators* statistically measure the amount or value of inputs or resources available. The “quantity” reflects a numerical condition such as the number of learners, teachers, costs, facilities or textbooks at a specified time. Examples of quantitative indicators can include:

- ◆ learner enrolment percentage, including females;
- ◆ costs/expenditure per learner by level and urban/rural location; and
- ◆ textbooks by level and urban/rural location.

*Input indicators* are determinants subject to policy manipulation, e.g., the characteristics of learners, teachers, curriculum, textbooks, other instructional materials, facilities, equipment, learner capacity for learning and other resources.

*Process indicators* are determinants that reflect forms of interaction between teachers, learners, administrators, materials and technology. Process indicators refer to the procedures or techniques that determine the transition of inputs into outputs, and are thus important for evaluation.

*Output indicators* are results or changes readily observable upon completion of a level of education. These indicators mainly refer to student attainment and student achievement, specifically test scores that reflect value added.

*Equity indicators* are used to measure the degree to which expenditures for education are provided for the population regardless of economic status, place of residence and intellectual capability. These also measure equality of access not only to physical facilities such as schools or learning centres but also to good quality education.

*Efficiency indicators* are used to monitor the attainment of one of the programme’s results at the least possible cost. Cost is basically the expenditure associated with the use of resources such as personnel or equipment. Examples of efficiency indicators are promotion rates, repetition rates, drop-out rates, average study time, and rate of facilities use.



**Outcome indicators** are results and effects on individuals and society as a whole that are evident over time as a consequence of education outputs within the socio-economic context. These education outcomes are effects more distant in time after completing education, and are usually more dispersed in occurrence than education outputs. The main outcome indicators are:

- ◆ degree to which acquired learning and skills (e.g., literacy and numeracy) have been retained several years later;
- ◆ admission to further education and training; and
- ◆ achievement in subsequent education and training.

**Learning-related indicators** are focused on a learner's condition and needs. The indicators include recruitment rate, achievement/performance level of learner, and learner's attitudes and motivation.

**Instruction-related indicators** include instructor's performance/achievement level, his/her teaching methods and strategies, sufficient instructional materials and other factors related to instruction.

**Resource/facilities-related indicators** include availability of learning centres, teaching equipment at learning centres, learning materials, and relevance of the curriculum.

**Socio-economic/environment-related indicators** are concerned with the level of community involvement, participation of government and non-government organizations, and the standard of living of the participants in the programme.

## 2.5 Development of Indicators

The following steps are useful in developing measurable and effective indicators

- Step One:** Study the objectives and expected outcomes of the literacy programme. The best strategy is to identify and clearly define the objectives of a literacy programme and break down these objectives into concrete small targets or elements. These objectives should include the expected outcomes of the literacy programme.
- Step Two:** Specify activities for the planned input, process and output. For example, input consists of personnel, money and materials. Activities for materials would include needs assessment, compiling and dissemination.
- Step Three:** Identify parameters or limits for measurement of performance. The parameters should clearly reflect the main characteristics of performance and be measurable. Once the parameters are identified, the important task is to determine ways to quantify them.
- Step Four:** Check whether the identified indicators match with the contextual needs related to learning, instruction, facilities, and socio-economic environment.

**Step Five:** Segregate the appropriate indicators at different functional levels, for example, village, district or national.

**Step Six:** Develop a matrix of indicators. It should show the logical and internal relationship between indicators and programme objectives at different functional levels. The following table gives an example of such a matrix:

**Table 2.1 Matrix Showing the Relationship between Indicators and Programme Objectives**

| Programme Objectives  | Suggested Indicators  | Means of Measurement  |
|---|---|---|
| Provide basic literacy to all illiterate adults 15 - 45 years old | <ul style="list-style-type: none"> <li>▪ Enrollment of illiterates</li> <li>▪ Completion rate</li> <li>▪ Rate of drop-out</li> <li>▪ Etc.</li> </ul>  | <ul style="list-style-type: none"> <li>▪ Percentage of total illiterates in the area</li> <li>▪ Percentage of enrolled learners</li> </ul>  |
| Improve the skills of the learners in community water management  | <ul style="list-style-type: none"> <li>▪ Skills for analysis of water problems in the community</li> <li>▪ Competency in problem solving through community participation</li> <li>▪ Knowledge about low-cost water management system</li> </ul> | <ul style="list-style-type: none"> <li>▪ Percentage of learners acquiring the skills</li> <li>▪ Ways of demonstrating problem solving skills</li> <li>▪ Areas of increased knowledge</li> </ul> |

## 2.6 Some Guidelines for Developing Indicators

The planners of a programme monitoring system should consider many aspects to make the indicators environmentally sound and cost-effective. The following guidelines may be useful:

- ◆ Check whether the indicators have the characteristics of *good indicators* (see Section 2.3).
- ◆ Be very selective in identifying indicators and keep the list of indicators as short as possible. Avoid a very long list of indicators. Confine the list to those essential for the information required.
- ◆ Consider the availability of human, financial and technical resources in the collection and processing of information. Management of large-scale information demands an increased budget for the collection and processing of data. It also requires additional skilled manpower.
- ◆ Keep in mind how the information to be collected will be used. It is better to avoid collecting information that won't be used immediately. Outdated information is of little use for monitoring the progress of any project.

- ◆ Start with a small number of indicators and keep options for incremental expansion. It is easy to handle a smaller number of indicators at the beginning stage of any project. Gradually more and more indicators may be added depending upon the capacity of the project management and the need for more information.

Focus on clearly-defined information needs. If the information needs are not specifically identified, there is the risk of unclear or inaccurate responses, which ultimately jeopardizes the very objectives of monitoring. Selection of indicators with specific information needs also helps in keeping the list of indicators shorter.

Create an opportunity for the participation of stakeholders in identifying the indicators and their use. Participation of learners, community members and literacy personnel from various levels in designing the monitoring system helps in the development of a needs-based system. Further, it increases their sense of ownership of the programme and ultimately facilitates the collection of good quality data at their level.

There should be periodic review and updating of indicators. Indicators developed at the initial stages of the programme should not be considered as permanent monitoring indicators. With changes in the socio-economic environment or implementation system of the programme, the indicators might need to be changed or revised. Thus it is better to make provisions for a periodic review of indicators.

## **2.7 Sample Indicators for Monitoring Literacy Programmes**

For monitoring a literacy programme, indicators are developed for the various levels of programme implementation. However, not all indicators may be used by all programme staff. A top-level manager may not necessarily require the information essentially required by a village supervisor. For example, a supervisor would continuously require information regarding the use of supplementary teaching aids to ensure adequate input for learning but the top manager of the programme doesn't need to use such information on an ongoing basis.

In the following table, certain indicators have been listed according to their use at various levels – from the learning centre to the national level. This is not an exhaustive list and the indicators shown at each level are not exclusive for that level. Programme administrators at various levels may simultaneously require more or less the same information; thus similar indicators are mentioned repeatedly in Table 2.2 showing the various levels of programme implementation.

**Table 2.2 Indicators at Different Levels: A Typology**

| Functioning Levels       | Indicators  |
|--------------------------|---|
| Learning centre level    | Percentage of targeted learners enrolled<br>Percentage of women/disadvantaged people enrolled<br>Percentage of average attendance by gender/income<br>Percentage of achievement of learners according to literacy levels and functional skills<br>Percentage of learners who use literacy skills and frequency of use<br>Percentage of learners who drop out and reasons (by gender/income)<br>Percentage of learners who have access to educational materials<br>Percentage of centres visited by community leaders/extension agency personnel<br>Percentage of learners satisfied with the contents of the curriculum<br>Percentage of family (of learners) where changes are observed as a result of literacy and types of changes<br>Percentage of graduates who enter post-literacy programmes |
| Village/ community level | Percentage of learners who completed the course<br>Percentage of centres with learner participation in classroom activities<br>Percentage of centres where planned supplies are available with comments on quality and use of supplies<br>Percentage of teachers provided training and types of training<br>Level of teacher performance<br>Percentage of budgeted funds available and used<br>Percentage of centres with good learning environment (physical/contextual)<br>Number of learning centres established<br>Average teacher/learner ratio<br>Number of organizations (GO and NGO) implementing literacy programmes with coverage of learners   |
| District level           | Percentage of centres visited by supervisors and issues covered during visit<br>Percentage of learning materials actually delivered/supplied<br>Percentage of literacy personnel provided training with levels and types of training<br>Level of teacher performance<br>Percentage of supervisors at a certain level of performance<br>Per capita cost  |
| Province level           | Percentage of target learners who enrolled<br>Percentage of women/disadvantaged people who enrolled<br>Percentage of learners who completed the course<br>Percentage of learners who dropped out (by gender/income)<br>Percentage of budgeted funds available and used<br>Number of learning centres established (by district)<br>Number of organizations (GO & NGO) implementing literacy programmes, with clients and learners<br>Per capita cost   |
| National level           | Percentage of target learners who enrolled<br>Percentage of women/disadvantaged people who enrolled<br>Percentage of learners who completed the course<br>Percentage of learners who dropped out (by gender/income)<br>Percentage of budgeted funds available and used<br>Per capita cost   |

## 2.8 Some Indicators for Monitoring Continuing Education Programmes

Continuing Education (CE) programmes are essentially follow-ups to literacy programmes. They aim to consolidate, reinforce and enhance the acquired knowledge, skills and competencies of neoliterates. These programmes are also designed to meet the functional needs of the people. Since these needs vary, there can be a variety of continuing education programmes to cater to different local needs. Taking into account the diversified client needs, UNESCO's ATLP-CE classifies continuing education programmes into six types: post-literacy programmes, income generation programmes, equivalency programmes, quality of life improvement programmes, individual interest promotion programmes and future oriented programmes.

Like literacy programmes, continuing education programmes need to be monitored with a specific set of indicators. Monitoring these programmes is more important because of the diversified nature of their activities and concerns. Thus indicators need to be developed according to the objectives of the programmes. There cannot be a single set of indicators for monitoring all types of CE programmes. For example, indicators for monitoring post-literacy programmes cannot be used in monitoring income generating programmes. However, the basic steps for developing indicators for literacy programmes (see Section 2.5) can be used for developing indicators for continuing education programmes.

The following are sample indicators for monitoring post-literacy programmes:

### **Sample indicators for monitoring post-literacy programmes\***

- Number of community learning centres (CLCs) established with information on type of building, furniture, recruitment of community workers and their training, formation of committee
- Number of enrolled members in CLC and percentage of learners who graduated from literacy programmes
- Percentage of CLCs provided with information, education and communication (IEC) materials, with types of materials and quantities supplied
- Percentage of member attendance at CLCs provided with IEC materials, including pattern of use, type of materials used and frequency of attendance
- Number of meetings of CLC management committee, percentage of attendance for committee members and issues discussed
- Resources mobilized locally for the operation of CLCs
- Important events/activities organized by CLCs and their frequency
- Evidence showing benefit of CLCs at the learner and community levels
- Percentage of CLC members with improved educational competencies and specific areas of improvement

\* Adapted from the monitoring system of the Dhaka Ahsania Mission, Bangladesh.

### **Sample Indicators for Income Generation Programmes\***

- Types of training courses organized for imparting skills towards income generation and number of persons covered
- Percentage of literacy graduates covered under Income Generation Programmes (IGPs)
- Number of persons trained with entrepreneurship development, marketing skills, accounts keeping
- Number of persons linked up with other rural development agencies and type of agencies
- Rate of participation of women in IGPs
- Nature of scope of activities available for further enhancing of competencies related to income generation
- Rate of increase in income of the participants

\* Based on ATLP-CE.

### **Sample Indicators for Quality of Life Improvement Programmes\***

- Extent to which the Programmes meet biological, social, economic, humanist and environmental needs
- Percentage of resources that are mobilised locally
- Percentage of participants who have access to basic services and information technology
- Rate of participation of literacy graduates in the promotion of socio-cultural values
- Nature of steps taken for conservation of environment, clean water and air and others
- Degree of harmony, law and order in the community
- Initiatives taken for spiritual fulfillment

\* Based on ATLP-CE.

## 2.9 Convergence of Indicators with Monitoring Tools

After developing indicators, the next immediate task for planning a monitoring system is the development of tools. It is important to know how to transform the indicators into various monitoring tools. There can be a variety of monitoring tools such as survey forms, questionnaires, progress reports, visit checklists, checklists for organizing focus group discussions, and others. It is neither necessary nor feasible to integrate all indicators into a single monitoring instrument. Again, all information would not be required and used simultaneously. As mentioned earlier, programme staff needs for information at various levels are different. It is therefore useful to systematically develop the monitoring tools carefully, taking into account these needs and the required frequency of information gathering. In developing tools, the appropriate mode of collecting information should also be kept in mind. This section attempts to explain how monitoring tools can be developed based on the indicators identified for monitoring purposes. However, these steps are not prescriptive or exhaustive. The same information may be generated through the use of other methods and tools.

### 2.10 Suggested Steps for Developing Tools Based on Monitoring Indicators

- Step One:** Select an indicator specifying the type of information needed. For example, information about the percentage of learner drop-out may require other data on gender or income level.
- Step Two:** Identify the source of information, i.e., who can best supply the information. In the case of drop-out data, for example, it is the teacher who can best provide all of the details.
- Step Three:** Work out how the information may be collected accurately. There can be a number of ways – through a written report or a physical visit, or from group discussion. For example, information about visits of extension agency personnel to the literacy centres can be collected from the reports of teachers or through discussions with learners.
- Step Four:** Check what types of tools would be appropriate to collect, to record and, if necessary, to transmit information. It might be a report form, a checklist, or a diary kept by the teacher or supervisor.
- Step Five:** After the initial exercise of linking the indicators with the mode of collecting information, the next essential step is to consolidate the information collection system. This is very important in order to save time in collecting information. If the teacher, for example, is asked to provide information at a given time, it is better to ask for such information in a package. However, it largely depends on whether the frequency (monthly, quarterly, etc.) and the mode of collection (discussion, report, etc.) of the information are the same. Simplify the integration of information to make it easy to



communicate and user-friendly. Complicated instruments may elicit misleading information.

**Step Six:** The next important stage is to decide who else in the project management system (at village or district level) requires similar information and how often. It is also advisable to determine whether the same monitoring instrument would meet the requirement or a new set of tools needs to be developed. The same sequence of steps for developing tools may also be applied at this level.

The following table gives examples of how to apply the steps earlier mentioned, showing how indicators lead to the development of monitoring tools.

**Table 2.3 Sample Illustrations on the Development of Monitoring Tools based on Indicators**

| Monitoring indicators (at learning centre level)  | Possible source of information           | Mode of collection                           | Frequency of information required        | Monitoring tool(s)                       |
|---|--|--|--|--|
| 1. Percentage of targeted learners enrolled   | Facilitator                              | Review of enrollment records                 | One time at the beginning of the project | Report form                              |
| 2. Percentage of women/disadvantaged people enrolled  | Facilitator                              | Review of enrollment records                 | One time at the beginning of the project | Report form                              |
| 3. Percentage of average attendance by gender/income  | Facilitator                              | Review of attendance records                 | Monthly/quarterly                        | Report form                              |
| 4. Percentage of achievement of learners according to literacy levels and functional skills           | Facilitator/supervisor/learners          | Physical test of achievement                 | Monthly/quarterly                        | Test reports                             |
| 5. Percentage of learner use of literacy skills with kinds of skills and frequency of use             | Facilitator/supervisor/learners          | Focus Group Discussion (FGD)                 | Quarterly                                | Checklist for FGD                        |
| 6. Percentage of learners who drop out and reasons (by gender/income)                                 | Facilitator/supervisor                   | Review of attendance/enrollment records      | Monthly/quarterly                        | Report form                              |
| 7. Percentage of learners with access to education materials  | Supervisor/learners                      | Physical visit to centre                     | Monthly                                  | Supervisor's visit checklist             |
| 8. Percentage of attendance of committee members at meetings  | Facilitator/supervisor/community members | Physical presence in meeting/meeting records | Quarterly                                | Report form/supervisor's visit checklist |
| 9. Percentage of centres visited by community leaders/extension agency personnel                      | Facilitator/supervisor/learners          | Visit records                                | Quarterly                                | Report form/supervisor's visit checklist |
| 10. Percentage of learners satisfied with the contents of the curriculum                              | Facilitator/supervisor/learners          | Focus Group Discussion (FGD)                 | Quarterly                                | Checklist for FGD                        |
| 11. Percentage of family (of learners) where changes occur as result of literacy and types of changes | Facilitator/supervisor/learners          | Focus Group Discussion (FGD)                 | Quarterly                                | Checklist for FGD                        |
| 12. Percentage of graduates linked with post-literacy programmes                                      | Facilitator/supervisor/learners          | Review of enrollment records                 | One time                                 | Report form                              |



## Chapter Three

### DESIGNING METHODOLOGIES IN MONITORING

**This chapter aims to enable programme planners and practitioners of literacy and continuing education programmes to:**

- \* *gain deeper understanding of monitoring tools/instruments and methodologies;*
- \* *identify various levels of programme implementation where monitoring data may be collected;*
- \* *identify the frequency of monitoring activities;*
- \* *understand the methods of data analysis;*
- \* *estimate monitoring costs; and*
- \* *develop a training programme on monitoring for mid-level practitioners of literacy and continuing education projects.*

### 3.1 Monitoring Tool and Instrument Defined

A monitoring tool is an assessment device that aims to determine the progress of an ongoing programme. It is also called a monitoring instrument. A monitoring tool should be able to identify gaps or weaknesses to enable decision-makers to revise or change programme activities and to undertake appropriate corrective action. For each indicator, a measurement tool needs to be developed. The quality of monitoring depends on the efficiency with which the tools are prepared and used.

### 3.2 Types of Monitoring Tools/Instruments

In the process of selecting monitoring tools, the programme monitors should be familiar with the different types of tools that are most suitable for collecting data/information for various purposes and at different levels of programme structure. Some of these tools/instruments are:

- ◆ Questionnaire
- ◆ Checklist
- ◆ Programme documents
- ◆ Observation schedules
- ◆ Interview guide
- ◆ Diary/journal

**Questionnaire.** A questionnaire is a list of structured or unstructured questions to be answered by a number of people. These questions should be simple, clear, and easy to understand. The language and terminology used should be engaging and unambiguous. Some of the questions may be phrased in such a way as to allow for open-ended comments. The instrument should be prefaced by brief instructions and a statement of the purpose of the questionnaire.

In developing a questionnaire, one should try to avoid unnecessary questions. However, standard demographic information such as age, gender, occupation, marital status and education level will help in interpreting the overall responses. Questions about sensitive issues related to the community may also be asked in order to determine their relationship to programme implementation [see Appendix I].

**Checklist.** A checklist is a prepared list of items that are to be observed at the project site. It consists of the monitoring indicators earlier identified and developed in order to determine the progress of the programme. It should be clear and simple. Photographs and illustrations can be included in order to capture project profiles more accurately. The learners are welcome to fill in their own thoughts, insights and perceptions. It can be in the form of a task checklist, quantitative data sheet or qualitative data sheet. Examples are in Appendix I.

**Programme Documents.** Records and documents are important sources of monitoring data. Analysis involves a random selection of content and statistical techniques for making general assertions. The analysis of these records and documents may be quantitative or qualitative. Some of them may already be available in the community and the learning

centre, for example, the village profile and the attendance record book. This information could be helpful for all levels in planning, implementing and monitoring ongoing or new projects.

**Observation Schedule.** During field observation, data are collected on a random basis. Observations must be recorded, a task made simpler by setting structured objectives before going to the field. Available records at the site could be used as inputs to the observation record. Some examples are checklists, maps, charts, diaries and schedules. Caution should be taken when using this method. It should be checked by other methods such as interviews, group discussions and hard evidence. For example, books that look new may be a sign that they have not been touched by programme beneficiaries or used by the instructor.

**Interview guide.** Interviews can be structured or unstructured in nature. In an unstructured interview, the respondent may describe topics in his/her own words, make suggestions and contributions. The interviewer encourages, facilitates and provides reassurance and reinforcement. Because it is carried out in a face-to-face situation, it gives the interviewer an opportunity to probe further and ask questions that will validate earlier responses. However, he or she should consider several factors before, during and after the interview, most notably:

- ◆ The culture and norms of the respondent;
- ◆ Convenience of the respondent;
- ◆ Explanation of the purpose, methodology and confidentiality of the answers;
- ◆ A good rapport and trust in regard to the information gathered; and

An example of an interview guide is shown in Appendix I.

**Diary/journal.** A diary or journal is a record of events and insights made by either the programme administrator at the field level or a programme beneficiary or group of beneficiaries. It may be a continuing account or a periodically prepared one. It is a useful monitoring tool because it is an eyewitness account of programme activities.

### 3.3 Characteristics of Good Monitoring Tools

Monitoring tools should have the following characteristics:

- ◆ User friendly
- ◆ Improvement-oriented
- ◆ Interventionist
- ◆ Self-instructing
- ◆ Comprehensive
- ◆ Independent of evaluator bias
- ◆ Simple language/understandable
- ◆ Time-saving/economical
- ◆ Easy to analyze

### 3.4 Development of Monitoring Tools

The quality of a tool depends on the efficiency with which it is prepared and used. Some of the important things to consider in developing a monitoring tool are:

**A list of items for measurement.** Prepare a list of items to be measured as reflected in the statement of specific operational objectives, structured curriculum and the components of the programme. Separate them into items for observation, interview and/or testing.

Examples of such items are:

- ◆ Absentees during the rainy season;
- ◆ Relevance of topics; and
- ◆ Number of participants by the end of the year.

**Structuring the items.** Questions are stated in short, simple terms without ambiguity. A measurement scale, index or rating scale for the items is constructed so that items are truly representative and measurable. The weight or relative importance of the different items is specified by a single measurement value. Scores are calculated on the basis of a framework of weights.

**Validity and reliability.** The validity and reliability of the data/information depends on several factors:

- ◆ The variables that influence each other;
- ◆ Attitude/mood of participants during the data collection;
- ◆ Social position of the participants;
- ◆ Lack of training on the part of the facilitator; and
- ◆ Group interviewing.

To ensure the validity and reliability of monitoring, monitors must make sure that the following conditions are in effect:

- ◆ The instrument is administered in the same time frame, in the same manner, to different participants;
- ◆ The participants are aware of the purpose and procedures of monitoring; and
- ◆ All sources of data/information are recorded and kept confidential.

**Pretesting of tools.** Pretesting is carried out to determine the level of performance of the monitoring tool before administering it to the intended respondents or beneficiaries of a programme or project. Pretesting helps ensure accuracy and validity of the outcome and also helps to identify possible problems prior to the testing proper. The tools should convey the same meaning to all respondents, clearly and without any ambiguity. The tools can be revised again and again as necessary because this process will help bring about some revisions and modifications to the monitoring approach as well as to the tool itself.

**Selection of tools.** Proper selection of monitoring tools will help ensure the accuracy of the information collected. Here are some of the factors to consider when selecting a tool:

- ◆ Profile of respondent;
- ◆ Level of respondent;
- ◆ Level of monitor/evaluator;
- ◆ Purpose;
- ◆ Size of sample;
- ◆ Time;
- ◆ Resources; and
- ◆ Financial considerations.

**Figure 3.1 Examples of Tools Commonly Used at Different Levels**

| No. | User Level          | Question-Naires | Check-List | Documents | Observation | Interview Guide |
|-----|---------------------|-----------------|------------|-----------|-------------|-----------------|
| 1   | Learner             |                 | /          |           | /           | /               |
| 2   | Village             | /               | /          | /         | /           | /               |
| 3   | District            | /               | /          | /         |             |                 |
| 4   | Provincial or State | /               | /          | /         |             |                 |
| 5   | National            | /               | /          | /         |             |                 |

### 3.5 Major Sources of Monitoring Data

There are three major sources of monitoring data:

- ◆ Day-to-day records of the operation of an education system or literacy programme provide substantial data on personnel, target groups and various activities. Some examples include attendance data on learners, or expenditure data on personnel, materials and equipment. Learner attendance registers, instructors' and supervisors' diaries and data sheets/cards are also good sources of monitoring data.
- ◆ In-house periodic monitoring conducted by an organization may serve as a good source of monitoring data. Regular agency monitoring tasks are a review of the organizational structure, functions and activities. Most education systems and institutions conduct periodic monitoring on progress of pupil performance, physical facilities, environmental conditions, availability of educational materials and other information deemed necessary for efficient management of the institution.

Similarly, at the literacy centre level, periodic tests are conducted to find out the achievement levels of learners. Periodic monitoring may be conducted in structured or unstructured form. Learner evaluation may be conducted either by administering the necessary tests or while playing some educational games. As these games and activities will be used as monitoring tools, they should be developed carefully, keeping in mind the monitoring indicators. Further, they should be administered carefully at the appropriate time.

- ◆ Special data collection related to issues of policy or strategies may occur whenever there is inadequate information on these issues. Such special data collection activities are often based on samples and have the advantage of immediate relevance, greater detail on given topics and a reduced time lag between the need for information and its generation and, ultimately, its use by programme planners and managers.

### **3.6 Methods of Data Collection**

There are various methods of data collection. The programme monitor decides on the methodology of data collection when he or she selects the monitoring tools. Some commonly used data collection methods are:

- ◆ Interviews;
- ◆ Observations;
- ◆ Focus group discussions;
- ◆ Documentation and case studies;
- ◆ Surveys; and
- ◆ Analysis of records and data.

In order to choose the most appropriate method of data collection, it is helpful to ask the following questions:

- ◆ Can this method generate the needed information?
- ◆ Will this method be acceptable to the people who will be involved?
- ◆ Does it fit in the identified time frame for monitoring the particular activity or programme component?
- ◆ Is there any equipment or back-up support needed and, if so, is it available?

Whichever method is selected, the monitor should be cautious. The dangers of being overwhelmed by data have already been mentioned earlier. Monitors should collect only a moderate amount of information; they should seek more data only to validate what they have or if the existing data are confusing, contradictory or inconclusive.

Efficient monitoring can be done by:

- ◆ Devising economical methods of gathering information, e.g., by using existing data and/or reviewing and analyzing the answers provided earlier by respondents;
- ◆ Collecting data in different ways by using different instruments and methods such as a questionnaire, written assignments, discussion, etc.;
- ◆ Collecting the data from different samples, e.g., collecting data from one source and, for review purposes, gathering data from other sources;
- ◆ Using participatory methods to collect data by involving the respondents in the data collection process; and
- ◆ Planning the monitoring activities systematically.

### 3.7 Some Guidelines for Data Collection

- ◆ Status differences or difficulties in relationships make some people unwilling to be open about their ideas or opinions. Establish a fruitful and collaborative relationship with them. Inform them about what you are doing and why you are doing it.
- ◆ If you need assistance from colleagues or other field workers, provide them appropriate training and orientation.
- ◆ Even though you cannot foresee natural calamities, be aware of the daily and seasonal patterns of respondent activities so that you can plan your visit accordingly.
- ◆ Anticipate the problems you might face in the course of data collection and try to overcome them.
- ◆ If possible, use a tape recorder to record your interviews.
- ◆ Collect only the amount of data that is manageable yet sufficient to provide needed information.
- ◆ Make sure that individuals do not dominate a group discussion and push it in certain directions.
- ◆ Be aware that some people may hesitate to express criticism that may hurt others.

### 3.8 Collection of Data at Various Levels

Data collected at various levels in the form of periodic returns give valuable information. They may be collected at the following levels:

*Learning centre level.* The instructors' initial reports, monthly and final reports normally provide information on the attendance record, drop-out rate, problems faced, achievements of learners and success stories. In many post-literacy and continuing education centres, instructors' records give information about learner interest in certain learning materials, their need for various skill development activities and other additional information.

In addition to instructors' records, the learners' exercise books are also sources of monitoring data. Detailed information about their progress, time taken in achieving various levels and problems in learning may be obtained from these books.

At the learning centre level, the instructor should be motivated to fill in the monitoring sheets and attendance register regularly. These reports should be collected by the supervisor or monitor. With the information received, programme activities at the field level can be strengthened and corrective measures taken to address weaknesses.

*Village level.* At the village level, data may be collected from the village co-ordinators' records. These records may consist of:

- ◆ The village co-ordinator's diary containing observations and notes during visits to the literacy/CE centres and also comments received from the instructors;
- ◆ The village co-ordinator's periodic reports to the district office. This report is mainly based on information received from the various literacy/continuing education centres in the village; and



- ◆ The village co-ordinator's registers and existing records.

In addition to village co-ordinators, the community members themselves are good sources of data. They provide information about various activities organized in the field and their impact on the target community as a whole.

The village co-ordinator or monitor at the village level should:

- ◆ Review and study the areas of monitoring as well as the indicators and criteria for monitoring;
- ◆ Set up a time schedule for conducting the monitoring activities in each place;
- ◆ Estimate the expenditure for transportation and other expenses for conducting the monitoring activities;
- ◆ Select the monitoring tools or instruments for collecting the information about instructor or facilitator performance and other factors that lead to the success or failure of the programme;
- ◆ Collect all the related data for analysis; and
- ◆ Report and make plans for improvement.

***District level.*** The reports prepared by village co-ordinators are consolidated and analyzed at the district level before transmission to the appropriate authorities. District-level reports usually consist of periodic summaries of district education activities and district data registers.

In addition to this information, data may be collected from people's representatives, NGOs, district administration offices, various development departments, and other appropriate agencies.

***Provincial/state level.*** The reports from the provincial or state office to the national head office may indicate the following: number of classes, number of learners, drop-out percentages, achievement level of learners, financial position and the strength and weakness of administrative structures in the implementation of the literacy/continuing education programmes. Usually, the information is based on the reports received from various districts. Provincial/state data registers are also potential sources of monitoring data.

At the provincial level, monitoring may be done on a quarterly basis and the data processed and sent to the state Department of Non-formal Education or other similar agencies.

***National level.*** National-level data are based on the reports received from regional sites, provinces or states. Therefore these reports should be based on an objective and balanced interpretation of the performance of the implementing agencies in order to identify the strong points of the programmes. They should also suggest concrete steps for overcoming weaknesses or difficulties encountered during the implementation of activities.

The national headquarters maintains a national data register and reports annually to higher levels in the Government about the programme progress and prepares reports for the consumption of other publics such as the media.



The department which is responsible for the literacy and continuing education programmes has to determine a set of goals for the programmes according to the policies of the country. This department should set up a responsible division or identify a programme manager who will be responsible for monitoring activities. The functions of monitoring at this level are usually as follows:

- ◆ To establish the monitoring functions of each level;
- ◆ To coordinate and cooperate with related networks in undertaking monitoring activities;
- ◆ To establish the policy, goal and objectives of the programmes;
- ◆ To determine the area, criteria and indicators for programme achievement;
- ◆ To design a management information system for data collection at each level of the country;
- ◆ To design the tools or instruments for data collection in each phase of the ongoing programme;
- ◆ To analyze the needed data according to the time frame of each unit of the country;
- ◆ To take corrective measures in time. This particular step should be properly planned and executed in the overall scheme of monitoring literacy and continuing education programmes; and
- ◆ To prepare reports and give suggestions for further improvement to policy makers.

### 3.9 Flow of Information

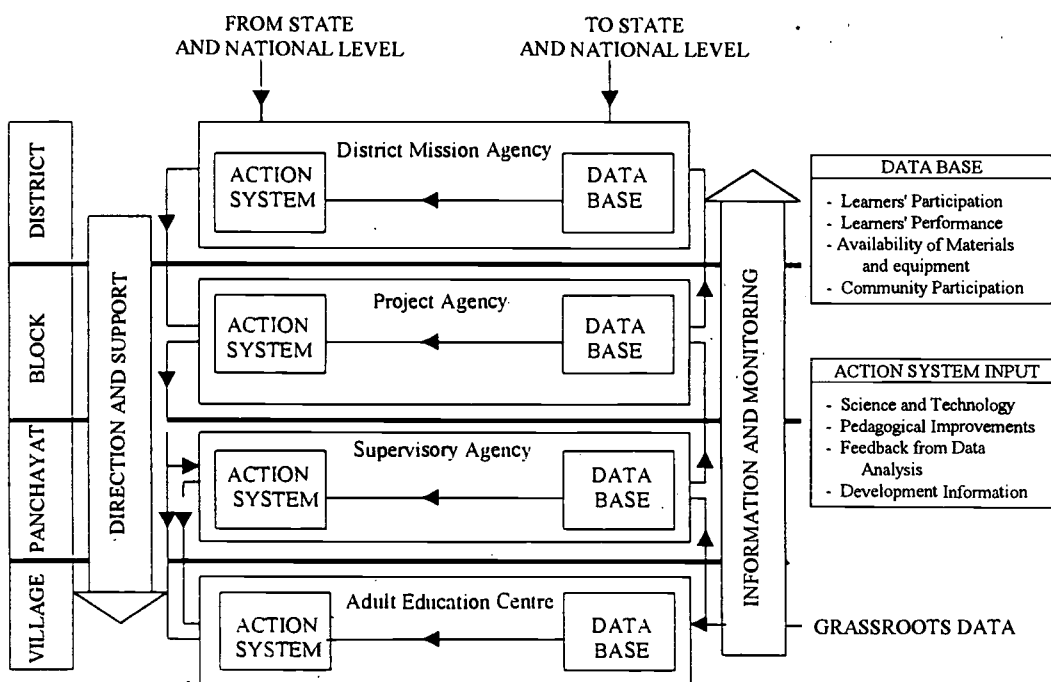
The flow of monitoring information should be both up and down:

*Bottom up.* Included in this flow of information are data collected through periodic reports, visits, meetings between functionaries of different levels, training and evaluation sessions, documentation, and the collection of success stories.

*Top down.* Instructions, circulars, training programmes, interagency meetings and seminars usually direct information from the national level to the levels of the district, village or learning centre.

The following illustration shows the flow of information in the monitoring and evaluation of literacy and continuing education.

**Figure 3.2 Flow of Information in Monitoring and Evaluating Literacy and Continuing Education: An Example**



Source: *National Literacy Mission*. Government of India, New Delhi. 1988.

### 3.10 Time Frame/Frequency of Data Collection

When designing the monitoring plan at each level, the programme monitor should prepare the time frame for conducting the monitoring activities at different phases, namely after 1 month, 3 months, 6 months, 1 year, etc. Additionally, he or she should provide for flexibility in the frequency of monitoring activities. For example, the supervisor may visit the literacy class once a month while the instructor tests the literacy level of learners once every 3 months. The frequency of monitoring at each level depends on the objectives of the programme, but sometimes the frequency of occurrence may change if there are unexpected problems or difficulties that have to be overcome directly. The programme director or manager has to make the decision to revise schedules.

### 3.11 Analysis of Data

Data are useful only when they are appropriately analyzed. In general, the analysis of monitoring data addresses the following three issues: description of the programme; comparison between sites; and conformity of programme implementation to its design.

**Description of the programme.** Determining the extent to which a programme has implemented its planned activities largely depends on a full understanding of the programme itself. Therefore the monitor should have access to the description of the programme and should be familiar with the following:

- ◆ Programme goals, strategies, coverage and reach;
- ◆ Types of services delivered, the intensity of services given to participants/clients;
- ◆ The reactions of participants to the services delivered; and
- ◆ Achievement/progress of the programme based on testimonials and other forms of feedback.

Descriptive statements may take the form of narrative accounts, especially when monitoring data are derived from more qualitative sources. Quantitative analysis is also useful, and sophisticated analytic methods and measures are increasingly being developed to accurately describe programme progress.

**Comparison between sites.** When a programme includes more than one site, the programme monitor should be concerned with the differences in implementation between the sites. Comparison of performance among various sites provides an opportunity for understanding the sources of diversity in project implementation and outcomes. Some points for comparison include differences in staff, administration, targets or surrounding environments. Comparison can facilitate efforts to achieve standardization.

**Conformity of programme implementation to its design.** The degree to which the ongoing operations of a programme match its original intent is a major concern of monitoring. Discrepancies between the two may lead to efforts to move the implementation of a programme closer to the original design or to a re-specification of the design itself. Such analysis also provides an opportunity to gauge the appropriateness of impact evaluation and, if necessary, to plan a more appropriate formative evaluation (see Section 5.4) in order to develop the desired convergence of design and implementation.

### 3.12 Procedures for Analyzing Data

Once the data have been collected, they have to be turned into usable information. This requires a process of analysis: sorting and collating the data and reducing them to manageable proportions. This must be done with care so as not to distort or bias the results. Analysis can be carried out by an individual or by a group of monitoring staff.

If the information has been collected in the form of tick-box responses, the task is one of counting. If the material consists of responses to open-ended queries, you should read everything with care. The important task to be done is to thoroughly review the responses to the monitoring instrument.

Then the group begins to draw up a set of categories that covers the issues earlier identified and sees if they can be applied to the questionnaire or observation data. As the work continues, the group may find the need to add new categories or perhaps reduce the

original list. They can keep modifying until they have a workable set. This process is seldom as difficult as it may sound. Categories and patterns emerge quite quickly.

Once the categories are clear, the group goes through the information again to note the span and frequency within each category.

For instance, learners use the term “boring” to describe the following perceptions:

|                            |      |    |
|----------------------------|------|----|
| too difficult              | ###  | 12 |
| too easy                   | ///  | 3  |
| covered in another subject | //// | 4  |
| not relevant               | //   | 2  |
| not interesting            | ##   | 6  |

The group may want to do something more complicated. For example, they may want to check if there is a connection between an instructor’s responses to a particular question and the numbers of years he or she has been teaching. If there is a connection, it probably will emerge quite quickly.

Another approach is to gather together a group of perhaps six to ten participants to analyze a large number of items; each person is given a task, as follows:

- ◆ If there are tick boxes to tally, each person records the scores for the first question. If there are more open-ended questions, each individual reads the answers to the first question, and writes down a brief summary of the responses. It is possible to add one or two representative quotations to the summary in order to add some “colour” to the final report.
- ◆ After this activity, each person then reads his or her summary to the whole group. It is advisable to identify apparent inconsistencies. A question to ask in this exercise is: Are some responses being biased by those who make the summaries, or are they being synthesized logically?
- ◆ This process may be repeated until all the questions have been analyzed in this way.
- ◆ Each person then collects the summaries and produces a final summary, including quotations, if desired. These are also read aloud to provide a final opportunity to check the balance of reporting.
- ◆ These summaries can be put together to serve as a basis for the monitoring report, with perhaps the inclusion of an agreed-upon introduction and conclusion.

It is advisable to conclude by discussing lessons learned and insights gained, as well as what has been learned about the monitoring activity itself – about the methods used, about constructing a questionnaire, about carrying out and recording interviews or observations, and the total monitoring process.

### 3.13 Statistical Methods for Data Analysis

After the data have been collected, various methods may be used for data analysis.

Some examples are:

- ◆ Percentages may be used to determine rates, such as the enrollment rate, drop-out rate and the attendance rate.
- ◆ The following formula may be used for measuring the effectiveness of coverage:

$$\text{Coverage efficiency} = 100 \times \frac{\text{Number in need served}}{\text{Total number in need}} - \frac{\text{Number not in need served}}{\text{Total number served}}$$

- ◆ The ratio scale may be used for determining ratios and proportions.

*A 3 to 5-point scale (Likert scale)* measures the satisfaction or attitude of clients. Percentage, frequency allocation and standard deviation are normally used to analyze these data.

*Content analysis* is normally used for qualitative data.

*Existing software programmes* for coding, sorting, computing and analysis, such as the SPSS, may also be used.

### 3.14 Training

The ATLP and ATLP-CE identify three levels of personnel involved in literacy and continuing education. **Level A** personnel under ATLP are those individuals who make policy, and plan and implement literacy training programmes in their country. **Level B** personnel consist of a cadre of professional supervisors and trainers who operate in key locations throughout a country and **Level C** staff are grassroots personnel working directly with learners in the community.

This manual focuses on the training of **Level B** literacy personnel. They are usually provincial district supervisors and trainers of staff who conduct actual literacy/continuing education classes. In literacy programmes, they are fully involved in literacy work, but in continuing education programmes there are generally two categories of **Level B** personnel. The first category remains entirely involved in literacy programmes while the second may have dual responsibility in literacy as well as in different areas of continuing education. All these personnel have to be given orientation on the importance of monitoring and evaluation and should be provided various skills and competencies for monitoring their programmes.

**Level B** personnel have to monitor the **Level C** workers. They have to be trained in monitoring skills which are critical to their work. In the case of continuing education, monitoring skills are very different for each of the six types of continuing education programmes (see Section 2.8). In some cases, like post-literacy programmes, the monitoring would be direct and continuous, while in other programmes it would occur at

certain intervals. **Level B** personnel should also be able to help **Level C** personnel in monitoring and supervising their own staff who perform actual monitoring activities:

For programmes such as basic literacy training in which there are clearly defined stages of achievement, monitoring techniques are simple and easy to implement. On the other hand, the outcomes of continuing education are more varied and wide ranging, registering various levels of achievement; some are even quite specialized and technical in nature. Therefore, **Level B** personnel involved in monitoring continuing education programmes require intensive training in programme monitoring methods and strategies.

In general, all personnel who are involved in monitoring literacy and continuing education programmes should have specific knowledge and skills to monitor effectively, including:

- ◆ A clear understanding of both monitoring and evaluation;
- ◆ Basic techniques of monitoring, including indicators and tools;
- ◆ Specific monitoring and evaluation techniques to assess skills of learners/neo-literates according to competency level using a variety of techniques;
- ◆ Techniques to monitor the various activities of literacy and continuing education programmes;
- ◆ Techniques of data processing and analysis; and
- ◆ Report writing and dissemination of information.

Training programmes for monitoring personnel should include workshops on methodologies of monitoring, the design of various tools and instruments, the organization and analysis of data collected from the field, interpretation of data, and formulating recommendations.

The monitoring methods used should not be threatening and should be sensitive to the socio-cultural contexts of the target group. Equally important, the persons involved in monitoring should enjoy the work.

The following is a sample training schedule for Level B personnel in monitoring literacy and continuing education programmes:

| Days    | Topics   | Methodology   |
|---------|--|---|
| Day I   | <ul style="list-style-type: none"> <li>- Registration</li> <li>- Introduction of participants</li> <li>- Introduction to the training programme</li> <li>- Expectations of the participants</li> <li>- Sharing the experiences on monitoring of literacy/CE programmes</li> <li>- Monitoring – definitions, context, objectives and functions</li> <li>- Monitoring in the context of literacy/ CE programmes</li> </ul>   | <p>Breaking the ice</p> <p>Presentations/ discussions<br/>Lecture supported with transparencies (OHP)</p> <p>Group discussion</p> |
| Day II  | <ul style="list-style-type: none"> <li>- Characteristics of good monitoring system</li> <li>- Tasks of programme monitor</li> <li>- Monitoring plans and major steps in preparing monitoring plan</li> </ul>   | <p>Familiarization with manual<br/>Reading and group work<br/>Presentations and group work</p>                                    |
| Day III | <ul style="list-style-type: none"> <li>- Monitoring indicators                             <ul style="list-style-type: none"> <li>* concepts</li> <li>* features of good indicators</li> <li>* types of indicators</li> <li>* development of indicators</li> </ul> </li> <li>- Convergence of indicators with monitoring tools</li> </ul>  | <p>Discussions and presentation (whole day)</p>   |
| Day IV  | <ul style="list-style-type: none"> <li>- Monitoring Tools                             <ul style="list-style-type: none"> <li>* types of tools</li> <li>* development of tools</li> <li>* pre-testing of tools</li> <li>* selection of tools</li> </ul> </li> <li>- Data collection mechanisms in literacy/CE                             <ul style="list-style-type: none"> <li>* methods of data collection</li> <li>* data collection forms</li> <li>* collection of data at various levels and frequency of data collection</li> <li>* roles of various functions in data collection</li> </ul> </li> </ul> | <p>Presentation and preparation of tools<br/>Group work</p> <p>Demonstration<br/>Exercise</p> <p>Group work</p>                   |
| Day V   | <ul style="list-style-type: none"> <li>- Data analysis</li> <li>- Report writing and dissemination</li> <li>- Preparation for training of Level C workers</li> <li>- Validating session</li> </ul>   | <p>Demonstration and practice;<br/>Writing exercise;<br/>Development of training schedule</p>                                     |

### 3.15 Cost of Monitoring

For monitoring purposes, the data collection mechanism should be built into the literacy and continuing education programmes at each level. Participatory monitoring should be an integral part of any development programme. Therefore the cost of monitoring should also be included in the total project cost.

Usually the cost of monitoring is calculated based on the following assumptions and factors:

- ◆ Number of villages to be monitored;
- ◆ Number of clusters of villages to be monitored;
- ◆ Number of persons involved in the monitoring;
- ◆ Number of monitoring co-ordinators; and
- ◆ Number of agencies/organizations to be visited and records to be checked and collected, as well as meetings to be organized.

Based on the above data, the cost for regular monitoring is calculated as follows:

- ◆ Salary of the co-ordinator;
- ◆ Salaries of the monitors;
- ◆ Preparation and production of tools;
- ◆ Travel and transportation costs;
- ◆ Cost of organizing meetings in the field;
- ◆ Training of monitoring personnel;
- ◆ Stationery and other materials;
- ◆ Computer rental or purchase;
- ◆ Salaries of computer operators; and
- ◆ Miscellaneous.



## Chapter Four

### REPORTING AND DISSEMINATION OF MONITORING RESULTS

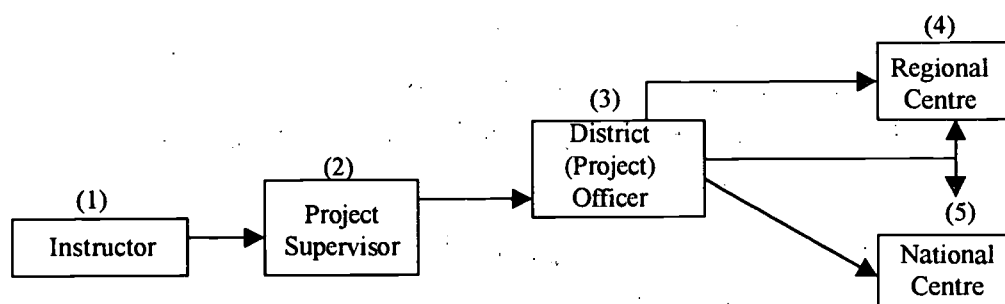
**This chapter aims to enable programme planners and practitioners of literacy and continuing education programmes to:**

- \* *gain deeper understanding of reporting and disseminating monitoring results;*
- \* *understand the concept of Educational Management Information System (EMIS);*
- \* *realize the importance and need for establishing an EMIS;*

## 4.1 Reporting on the Progress of Programme Implementation

Programme managers should keep in mind that the ultimate objective of monitoring is to communicate relevant findings to the decision makers, practitioners, community members and other stakeholders in the programme. Thus it is essential to develop a system of reporting that will efficiently and speedily disseminate the monitoring results and recommendations to all concerned parties and groups.

A sample reporting system is illustrated as follows\*:



\*Source: *Dossier of Evaluation Instruments for Literacy Programmes*, edited by Josef Miller and Anja Dietrich, Centre for Education Science and Documentation, Bonn, Federal Republic of Germany, 1989, p. 79.

The chain of reporting starts from the instructor who reports to the supervisor. The supervisor in turn reports to the project officer. The latter is expected to submit reports to the national centre for literacy and adult education and to the regional community development office.

The reporting system is developed in such a manner that it has linkages back to the planning of the programme and forward to the control and evaluation stage of the programme.

There are some key points on reporting procedures which may lead to better use of monitoring findings.

- ◆ Reports should be made with reference to the framework, definitions, indicators and hypotheses established in advance. This would help to avoid ambiguities and disagreements concerning what the programme is intended to accomplish.
- ◆ Findings should be reported promptly to allow quick feedback of information for changes that may need to be made.
- ◆ Documentation of the programme components should be emphasized. Such detailed information on the programme process will clearly point out corrective measures that are needed and guide decision-makers in selecting among alternatives for future action.

In general, the reporting system may include the following information from the field:

- ◆ Literacy programme class profiles;
- ◆ Instructor profiles;
- ◆ Monthly report I by the supervisor to the project officer;
- ◆ Monthly report II by the supervisor to the project officer;
- ◆ Monthly consolidated report by the project officer to the regional or provincial centre and the national centre for literacy education;
- ◆ Monthly report by a partner agency or NGO to the national centre for literacy education;
- ◆ Monthly consolidated report on the literacy programme by the national centre for literacy education for information and feedback; and
- ◆ Periodic and yearly report by the national centre for literacy education for information, feedback and documentation.

At different programme levels and at various stages of programme implementation, the reporting forms may be used by monitoring personnel as well as shared with partner agencies or NGOs involved in the project. Sample forms for reporting monitoring information are provided in Appendix II.

## 4.2 Establishing an Educational Management Information System (EMIS)

*EMIS defined.* An Educational Management Information System (EMIS) is an organized structure that governs the collection, processing, analysis, reporting and use of information. It is a collection of component parts that include inputs, processes, outputs and feedbacks that are integrated to achieve a specific objective. It is a system for managing a large body of data and information that can be readily retrieved, processed, analyzed, and made available for use and dissemination.

*The need for establishing an EMIS.* The main purpose of an EMIS is to integrate information about related activities and make the information available in a comprehensive way to a variety of users. Every country has some arrangements for reporting about literacy and continuing education programmes. Thus there is a need to strengthen this aspect in a systematic manner to facilitate wider and more effective dissemination of information gained through programme implementation and the exchange of experiences and expertise in literacy and CE programmes.

The main justifications for giving priority to an EMIS are:

- ◆ The rapid expansion in the physical size and geographic coverage of the education system;
- ◆ The increased complexity of educational activities in terms of their number and variety of outcomes;
- ◆ Need for more efficient use of resources;
- ◆ Greater accountability requirements; and

- ◆ The improved availability of relatively low-cost technologies for dealing with large data sets.

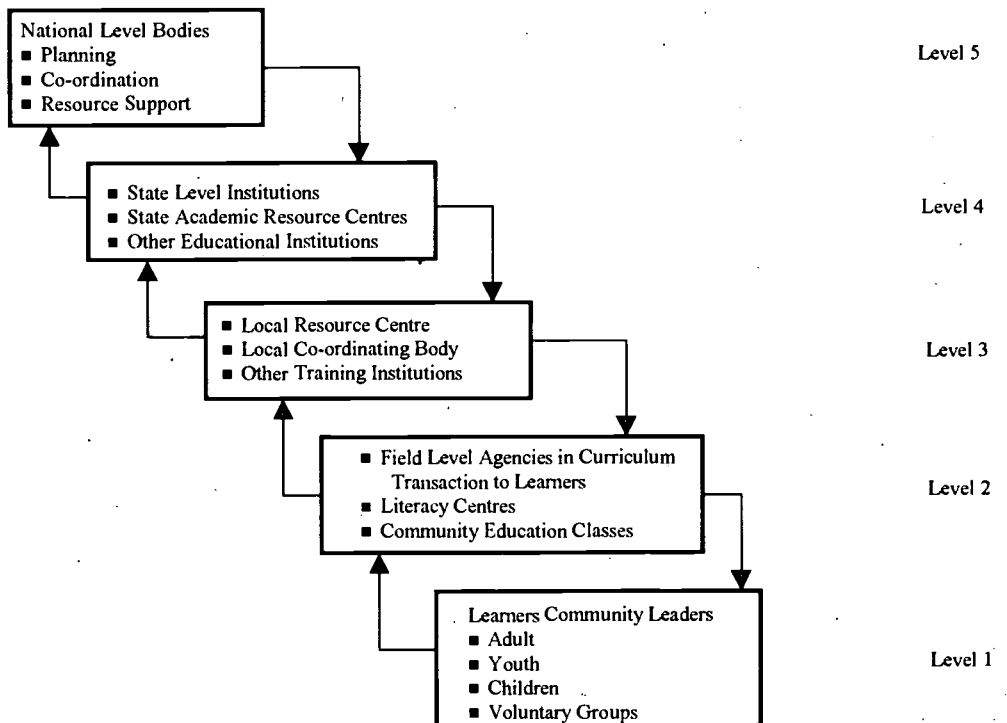
The importance of an EMIS system and procedures within educational management can be expected to substantially grow into the next century as concerns about the financing and management of education escalate in both developed and developing countries.

The operation of a successful EMIS involves five major steps:

- ◆ Needs identification;
- ◆ Data collection;
- ◆ Data processing and analysis;
- ◆ Information provision (reporting); and
- ◆ Use of information.

**EMIS structure.** In reality, the people of the community are the main beneficiaries of an EMIS. The basic source of information about literacy and continuing education are the learners themselves. Information originating at their level has to flow through various institutional and individual channels of the system, providing necessary feedback at the appropriate time. An example of such a structure is given here to illustrate the channels of information flow as well as feedback.

### Channels of Information Flow and Feedback at Different Levels



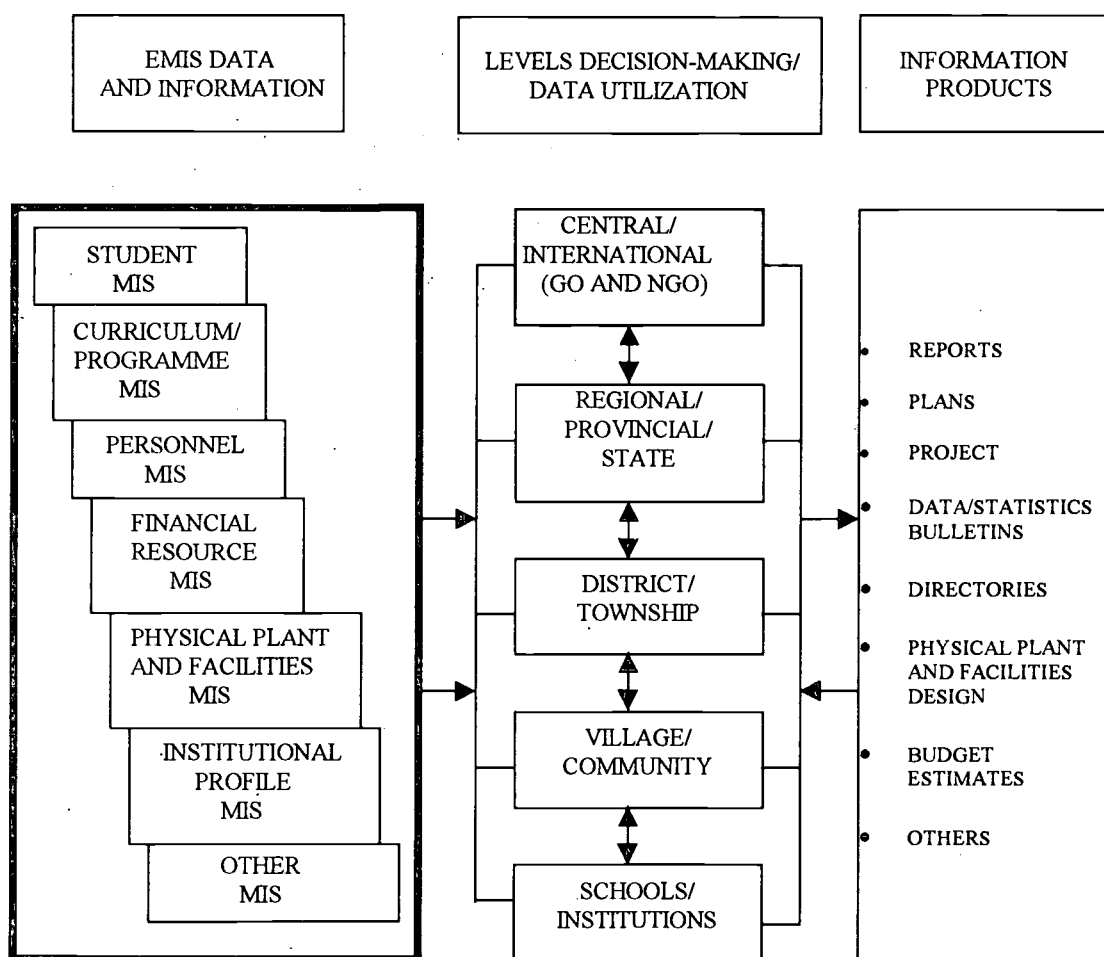
Source: Adapted from *Environmental Education Handbook for Educational Planners*. National Institute of Educational Planning and Administration. New Delhi. 1990.

### 4.3 Information Flow in the EMIS

The flow of information is crucial in an EMIS network. Within a well-established EMIS, it is imperative that both basic data and feedback information flow both ways between the EMIS and other units. Information products should be provided to as many other information outlets as possible in order to reach the maximum number of users.

Figure 4.1 illustrates the flow of information from the EMIS to the users at different levels.

**Figure 4.1 Information Flow**



Source: UNESCO, PROAP, (1998). *Educational Management Information System*, Bangkok, p.9.

#### **4.4 Some Additional Guidelines for an EMIS**

- ◆ A simple but robust EMIS can help in drawing out conclusions about problems and progress.
- ◆ You should select a few indicators and collect information systematically on them at all levels – from the community to the national level.
- ◆ Information should be contextual.
- ◆ A local and decentralized EMIS is most useful at the field level.
- ◆ Gender perspectives can be incorporated into all aspects of an EMIS.
- ◆ It is useful to assess the processes by which the local community facilitates participation and achievements.
- ◆ An efficient EMIS helps in the assessment of teacher competence, training, motivation and teaching environment.
- ◆ It also helps in profiling learning competencies and existing levels of achievement.
- ◆ EMIS records should help in determining the need for improved teaching/learning materials.
- ◆ A good EMIS should tell us something about the participation of girls and women, as well as those belonging to disadvantaged groups.
- ◆ An efficient EMIS should generate information on the participation of minorities.
- ◆ EMIS records also help in providing information about physical facilities.

# **PART II: EVALUATION**

## Chapter Five

### UNDERSTANDING EVALUATION CONCEPTS AND THE PROCESS OF DEVELOPING AN EVALUATION PLAN

**This chapter aims to familiarize practitioners of literacy and continuing education programmes with concepts of evaluation and the process of developing an evaluation plan. Specifically, they will be able to understand:**

- \* *definitions of evaluation;*
- \* *the need for evaluation;*
- \* *the scope, coverage and functions of evaluation;*
- \* *categories and types of evaluation at various stages of programme implementation; and*
- \* *the process of developing an evaluation plan.*



## 5.1 Evaluation Defined

The following are some definitions of **programme evaluation**:

- ◆ Evaluation is the process of delineating, obtaining and providing useful information for *judging* decision alternatives (Stufflebeam, 1971).
- ◆ Evaluation is the determination of the worth of a thing. It includes obtaining information for use in *judging the worth* of a programme, product, procedure, objective or the potential use of alternative approaches designed to achieve specific objectives (Worthen and Sanders, 1973).
- ◆ Evaluation is the collection and use of information to make decisions about programme, product, process or system (Cronbach, 1972).
- ◆ Evaluation is the process of ascertaining the decision areas of concern, selecting appropriate information, and collecting and analyzing information useful to decision-makers in selecting choices among alternatives (Alkin, 1975).

The common features of the preceding definitions of **programme evaluation** may be summarized as follows:

Evaluation is the systematic process of collecting and analyzing data in order to determine whether and to what degree objectives have been or are being achieved. To evaluate is to determine the value of something. Something has value if it is necessary, desirable, useful or important. It is also of value if it can serve a purpose or cause an effect.

As discussed in Chapter One, evaluation aims to answer the following questions:

- ◆ To what degree has the objective been attained over time?
- ◆ Is the programme cost-effective?
- ◆ What impact/effect does the programme have upon the target beneficiaries?
- ◆ What decision should be taken on the programme?

A good programme evaluation should be able to generate information in order to answer the above questions. Further, this information “must be defensible. There must be a method to its collection. Thus, evaluation must be organized ... information should have the quality of being exact and precise ... [and] must be usable in the improvement of some developmental, educational or training programme” (Bhola, 1990). The primary goal of evaluation is to generate information that can be used in the planning and improvement of current literacy and continuing education programmes as well as gain insights for future development efforts.

## 5.2 The Need for Programme Evaluation

For programme managers and planners, decision making involves making a choice among two or more alternatives or options. To make an intelligent choice, one needs valid and reliable information. Evaluation provides decision makers with the information they need to make informed decisions about the programme. The programme planners, on the other hand, need evaluation data to serve as a basis for planning and strategy formulation in the succeeding phases of the programme or in planning programmes of similar nature in the future. Evaluation needs to be carried out in order to determine the extent to which goals and objectives are achieved and what actually takes place during the operation of the programme. Evaluation findings are the main basis for changes and improvements in the programme with focus on quality control and progress assessment. Information generated provides answers to questions such as why certain events do or do not occur.

## 5.3 Functions of Evaluation

Programme evaluation has several functions (Bhola, 1990):

- ◆ **Informational.** This function provides usable information for feedback, specifically information that can be used to improve programme implementation.
- ◆ **Professional.** This function aims to increase understanding about the means and ends of a programme, demonstrate the effectiveness or failure of programme plans and strategies, strengths and weaknesses, and recommend corrective actions.
- ◆ **Organizational.** This function helps an institution to analyze its goals, objectives, structural strengths and weaknesses. It helps in determining organizational renewal and restructuring.
- ◆ **Political.** This function consists of setting agendas and generating discussions and debates on certain issues and concerns. It is designed to promote group participation and interest among programme management, planners and administrators.
- ◆ **Socio-psychological.** This function aims to give programme clients and other stakeholders a feeling of security. Issues and problems are simplified in order to arrive at conflict resolution and remedies.
- ◆ **Historical.** The historical functions of evaluation include recording and documenting events and major programme activities to provide insights for future programme directions and actions.

## 5.4 Scope and Coverage of Evaluation

Various categorizations of evaluation are based on the information needs of the programme. Some common evaluation categories are as follows (Bhola, 1990):

- ◆ **Internal and external evaluation.** The distinction between internal and external evaluation is in terms of who conducts the evaluation. In general, *internal evaluation* is conducted by the programme staff themselves. In instances when they use the

services of evaluation specialists, they are in control of the process of evaluation, from the planning stage up to the dissemination and use of evaluation results. *External evaluation* is conducted by evaluators who do not belong to the programme. The services of an outside evaluation group are engaged by the programme to help ensure objectivity in the evaluation process.

- ◆ *Formative and summative evaluation.* The concepts of formative and summative evaluation are primarily based on process. *Formative evaluation* is the evaluation of the programme and its various components in the very process of their formation. The information generated can be used to improve the programme services, structure, systems, schedule of activities and other elements. The emphasis is on process. *Summative evaluation* is normally designed to "sum things up". It is conducted at the end of the programme in order to ascertain whether the objectives have been achieved and its impact on the clients, as well as its cost-effectiveness. The results of summative evaluation provide the basis for the decisions that should be taken by programme planners and managers.
- ◆ *Evaluation based on the units of analysis* such as learner evaluation, programme evaluation, group evaluation and community impact evaluation.

## 5.5 Evaluation at Various Stages of Programme Implementation

Evaluation work commences as early as the programme conceptualization phase. It progresses with the increase of programme activities and delivery of services to the beneficiaries. The evaluation concerns at the various stages of the programme cycle are as follows (SEAMEO INNOTECH, 1997):

- ◆ *Evaluation during the pre-implementation phase.* During the planning and conceptualization of the programme, evaluation is done to obtain information about the quality of the product and services of the programme prior to actual programme implementation. The main evaluation activities at this stage are: review of the programme plan and materials developed; ascertaining the internal consistency among programme objectives; activities and resource allocation plan; and synchronizing the programme schedule with staff assignments and planned activities.

Some types of evaluation conducted during this stage are:

- Needs assessment;
- Baseline evaluation;
- Feasibility study; and
- Educational policy analysis.

Evaluation conducted during the pre-implementation phase focuses on certain activities related to programme design and development.

| Pre-implementation Activities  | Evaluation Questions   |
|--|--|
| ◆ Formulating goals and objectives   | ◆ Are the project goals/objectives designed to meet the stated educational needs and problems?   |
| ◆ Planning the resources required<br>◆ Planning the activities and time frame<br>◆ Planning the personnel required | ◆ Are the resources (budget, materials, etc.) properly allocated for optimal use?<br>◆ Are all specified activities logically consistent and adequate to bring about the attainment of the objectives?<br>◆ Are all needed and qualified personnel recruited, with their roles/functions properly described?                           |
| ◆ Writing the trial materials.   | ◆ What is the quality of the materials in terms of the following: <ul style="list-style-type: none"> <li>• Internal consistency;</li> <li>• Logical sequence;</li> <li>• Comprehensiveness;</li> <li>• Relevance to user experience;</li> <li>• Relevance to real life situation; and</li> <li>• Comprehensibility of text.</li> </ul> |

- ◆ **Evaluation during the programme implementation phase.** During this phase, the main task of evaluation is to collect evidence about the effectiveness of the programme or services under various conditions.

Some types of evaluation conducted during this programme phase are:

- Trend analysis;
- Process evaluation;
- Formative evaluation; and
- Experimental study.

Some evaluation activities and questions that need to be answered during this phase are:

| Activities  | Evaluation Questions  |
|---|---|
| <p><b>Prior to Full-Scale Implementation</b></p> <ul style="list-style-type: none"> <li>◆ Validating the programme or services with samples of the target population</li> </ul> | <ul style="list-style-type: none"> <li>◆ Can the users follow all prescribed tasks as planned?</li> <li>◆ What is the quality of the interim outcome? Is it what we expected?</li> <li>◆ Is there anything difficult or problematic which suggests some modifications?</li> </ul>                               |
| <p><b>During Full-Scale Implementation</b></p> <ul style="list-style-type: none"> <li>◆ Ascertaining the delivery of programmes and services as planned</li> </ul>              | <ul style="list-style-type: none"> <li>◆ Can the programme produce the kind of changes in clientele called for in the objectives, or specified after the materials have been used?</li> <li>◆ Should the services be implemented or terminated?</li> <li>◆ Is there anything that should be revised?</li> </ul> |

- ◆ **Evaluation at the programme completion phase.** During the programme completion stage, the results and effects of services and products may be evaluated through the following types of studies:

- Summative evaluation
- Cost-benefit analysis

The evaluation activities and questions that need to be answered during this phase include:

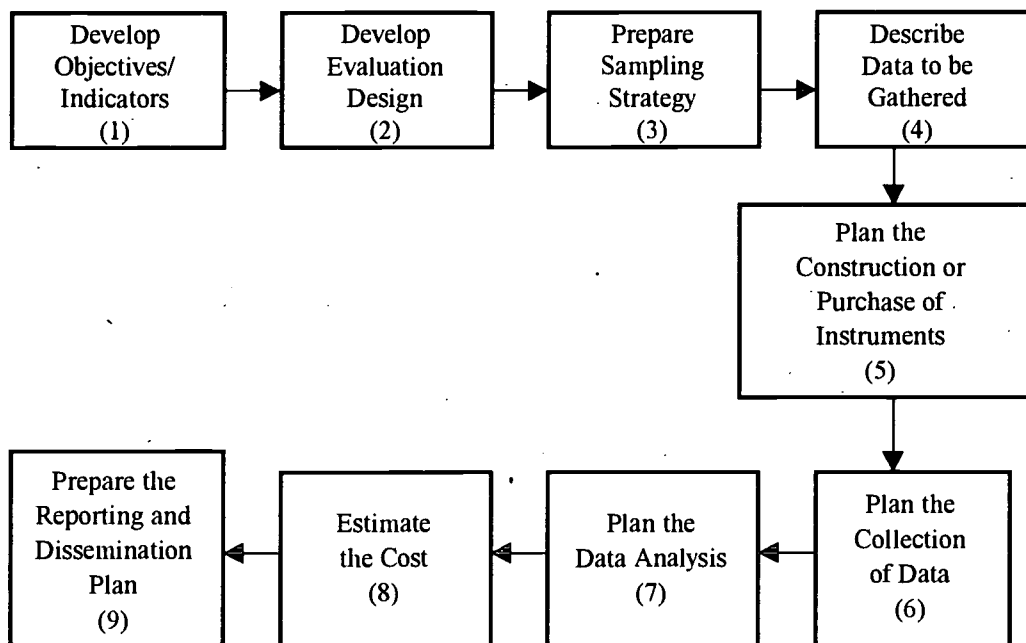
| Activities  | Evaluation Questions   |
|---|--|
| <ul style="list-style-type: none"> <li>◆ Institutionalizing the innovation after the materials have been revised and disseminated to the proper authority.</li> <li>◆ Nationwide implementation may be expected.</li> </ul> | <ul style="list-style-type: none"> <li>◆ How effective are the overall outcomes or effects of the project? What is its impact?</li> <li>◆ How reasonable is the cost-benefit ratio?</li> <li>◆ Should the programme be terminated? modified? Or continued?</li> <li>◆ How sustainable is the programme?</li> </ul> |

## 5.6 The Process of Developing an Evaluation Plan

Developing an evaluation plan for a project is a process of thinking out in advance the procedure to be followed and the resources to be employed, human and material, in order to obtain the information that is needed to appraise the worth or value of a programme (SEAMEO INNOTECH, 1997). The process involves identifying and describing in advance the data to be collected, the procedures to be used in gathering and processing the data, and a plan for the preparation and submission of reports. The result of the process is an action plan that will guide the evaluator in organizing, directing and controlling resources and activities so that the evaluation objectives will be achieved. The preparation of an evaluation plan should be a co-operative activity of the planners, clients, sponsors and evaluators of the project.

Figure 5.1 presents the steps in preparing a programme evaluation plan.

**Figure 5.1 Steps in Preparing an Evaluation Plan**



**Step One:** *State the objectives and indicators.* Just as in programme monitoring, the evaluation plan should have objectives that are specific, measurable, achievable, result-oriented and time-bound.

The objectives usually include the indicators and the programme evaluator's main task is to identify them. When the objective does not have explicit indicators, then the indicators have to be stated clearly in measurable terms.

- Step Two:** *Develop the evaluation design.* An evaluation design is a plan that dictates when and from whom information will be gathered during the course of the evaluation. The first and obvious reason for using a design is to ensure a well-organized evaluation study: the right people will take part in the evaluation at the right time. A design, however, accomplishes for the evaluation something more useful than just keeping data collection on schedule. A design is basically a way of gathering comparative information so that results from the programme being evaluated can be placed in a context for judging their contribution and worth.
- Step Three:** *Prepare a sampling strategy for making the evaluation.* A sampling strategy is drawn when the programme to be evaluated is a large one with many participants at diverse sites. The evaluator will have to take a sample of the people to be tested, interviewed or observed. The sites may also be assessed.
- Step Four:** *Describe the kinds of data to be gathered.* The objectives of the evaluation should determine the kind of data to be gathered. For example, if the objective is to determine whether or not an innovation can indeed significantly increase pupil achievement in mathematics, then it is necessary to obtain achievement scores in mathematics for two comparable groups.
- Step Five:** *Select and plan the construction/purchase of data-gathering instruments.* There are numerous evaluation instruments that may be used in collecting data at the field level. Some of them are readily available in research institutions and may be purchased in order to save time and effort.
- Step Six:** *Plan the collection of data.* Some of the questions to be answered in planning the data collection mechanism are:
- ◆ Who will collect the data?
  - ◆ When and from whom will data be collected?
  - ◆ How will the data be collected?
- Step Seven:** *Plan the data analysis.* The evaluation objectives and the indicators will provide guidance in determining the statistical treatment of the data.
- Step Eight:** *Estimate the cost of the evaluation.* The preparation of the evaluation budget is an important component especially if the evaluation activities will be financed from the programme budget. From the beginning, programme evaluators should be aware of the financial constraints on the services they provide.
- Step Nine:** *Plan the mechanism for reporting and disseminating evaluation results.* As early as the planning stage, the programme evaluator should determine what kind of report to submit and who shall receive the report.

### 5.7 Preparing a Logical Framework for a Project to be Evaluated

The essential information in the evaluation plan may be condensed into a sample table which presents a logical framework of the evaluation in a highly visual form.

The logical framework can serve several purposes. It gives the evaluator a total view of the entire evaluation job to be done. Without reviewing the entire evaluation proposal, he or she can at once have a visual picture of the components of the evaluation, the major activities to be performed and their meaningful relationship to one another.

The following is an example of a logical framework.

**Table 5.1 A Part of the Logical Framework for the Evaluation of the Social Development Programme of the Zamboanga del Sur Development Project**

| Areas of Evaluation | Evaluation Question   | Indicators                              | Evaluation Design Sample Scheme | Statistical Analysis  | Data to be Gathered                                      | Instrument to be Used    | Data Collectors                             | Schedule for Data Gathering |
|---------------------|---|---|---------------------------------|---|--|--------------------------|---|-----------------------------|
| Nutrition           | Is there improvement in nutritional status of children as a result of the social development programme? | Changes in height and changes in weight | One group pre-post-test design  | Partial correlation to control the effect of maturation<br><br>Comparison of results with height and weight norms | Measurements height and weight of children 3-6 years old | Child development record | Development team service members for health | Every 15 days               |

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## Chapter Six

### IDENTIFYING AREAS OF EVALUATION

**This chapter aims to familiarize practitioners of literacy and continuing education to enrich their competencies in identifying evaluation areas in literacy and continuing education programmes. Specifically, they will learn about:**

- \* *major areas of evaluation;*
- \* *variables for evaluating literacy and continuing education; and*
- \* *guidelines for identifying evaluation areas.*

## 6.1 The Need for Identifying Evaluation Areas

Identifying evaluation areas largely depends upon the purpose of evaluation. There cannot be a single set of criteria that would prescribe the areas to be considered for the evaluation of literacy and continuing education programmes. Even if two projects with similar objectives were taken for evaluation, the areas of evaluation would normally differ. For example, if the purpose of evaluation for one project is to assess the current mode of operation in order to further improve the system, the major thrust of the evaluation would be the assessment of inputs and the process of programme operations. In the case of another project, the purpose might be to know the end results of the project and its impact on the lives of the participants. In such a case, the evaluators would focus more on the accomplishments and outcomes of the project.

Although there are variations in areas of evaluation, some areas are commonly covered. The variations here are in degree of emphasis or focus on certain areas. In the following section, major areas of evaluation will be discussed.

## 6.2 Four Major Areas of Evaluation

Taking into account the focus and content of the evaluation process, we can identify four evaluation areas: context evaluation, input evaluation, process evaluation, and output evaluation. The following table defines the scope of these evaluation areas:

**Table 6.1 Major Evaluation Areas**

| Areas   | Scope   |
|---------|---|
| Context | Relative environment, conditions under which the literacy project is implemented, needs and opportunities, problems, concurrent systems |
| Input   | Availability and use of resources, designs for project implementation, strategies applied, input supply system                          |
| Process | Procedural records, defects and difficulties in providing inputs  |
| Output  | Output from the project, attainment of targets and objectives, continuation of output   |

Within the broader scope of evaluation under each area, there can be a number of options to cover. Selection of the options depends on the purpose and type of evaluation. Certain common options are mentioned below, classified into various evaluation areas.

### *Context Evaluation*

- ◆ National education policy
- ◆ Literacy situation in the community
- ◆ Socio-economic strata of the people
- ◆ Background of the project

- ◆ Project objectives
- ◆ National/organizational setting of the nonformal education system
- ◆ Implementation plan of the project
- ◆ Cultural context

### ***Input Evaluation***

- ◆ Organization of learning centre/physical infrastructure
- ◆ Teacher profiles
- ◆ Training of teachers
- ◆ Quality of project personnel
- ◆ Relevancy of curriculum
- ◆ Teaching-learning materials (texts and supplementary aids, both print and nonprint)
- ◆ Equipment used
- ◆ Types of supervision provided
- ◆ Adequacy of budget

### ***Process Evaluation***

- ◆ Teaching-learning process
- ◆ Community participation
- ◆ Local resource mobilization
- ◆ Linkage with other rural development agencies
- ◆ Supervision process
- ◆ Monitoring and feedback system
- ◆ Human resource management
- ◆ Logistics administration
- ◆ Financial management

### ***Output Evaluation***

- ◆ Coverage of people
- ◆ Types of people covered
- ◆ Type of literacy skills acquired
- ◆ Coverage of people in occupational education

A descriptive classification of variables for evaluation (Bhola, 1990) is shown in the following table:

**Table 6.2 Variables for Evaluation of Literacy Programmes**

| <b>Variables</b>                     | <b>Variations/Options</b>   |
|--------------------------------------|---|
| <b>Inputs</b>                        |   |
| Teachers                             | Particular education levels and social classes<br>Extent of field-work experience<br>Level of commitment to development work<br>Teaching competence and teaching experience<br>Direct appointment versus secondment from a parent department<br>Continuity versus turnover<br>Workload of teachers  |
| Learners                             | Educational background<br>Social class and value orientations<br>Commitment to development<br>Motivation to learn   |
| Teaching-learning facilities         | Teaching materials: quantity, diversity, quality<br>Materials and facilities<br>Indigenous versus imported materials<br>Instructional and duplication equipment<br>Characteristics of learning sites  |
| <b>Process</b>                       |   |
| Instructional/<br>Informational      | Conceptualization of teaching as knowledge transfer, skills training, behaviour modification, socialization, etc.<br>Integrated versus discipline-oriented curriculum development (i.e., instructional organization)<br>Teaching and learning styles<br>Substantive knowledge versus process emphasis<br>Presence versus absence of curriculum validation through needs assessment<br>Availability and non-availability of counseling and guidance services |
| Organizational/<br>Structural        | Organizational health status<br>Organizational capacity rating  |
| Distributive/<br>Maintenance-related | Quality of administrative support<br>Co-ordination with extension staff and services  |
| <b>Context</b>                       |   |
| Organizational                       | Organization culture<br>Institutional relationship (horizontal and vertical) with other organizations   |
| Environmental                        | Surroundings<br>General social climate in the country   |
| Outputs                              | Literate adults at various literacy levels<br>Trained development workers with various competencies<br>Emergent role identities<br>Differential experiences of trainers<br>Quality of radio programmes  |

### 6.3 Other Areas of Evaluation

**Outcome evaluation.** The evaluation of output is designed to determine the immediate effects of the project on the lives of the participants or in the community. At this stage, the immediate results from the project's output are measured in qualitative terms.

**Impact evaluation.** This evaluation effort focuses on long-term changes that have taken place in the lives of the people or in the community as a result of the project implementation. It consists of comparing the situation after the project was implemented with the situation prevailing before the project began. The impact can be on the lives of individual participants or on the community as a whole.

**Cost-benefit analysis.** This is conducted to determine the unit costs of the project for achieving results. Money spent for providing literacy or continuing education and benefits derived from this expenditure at individual and national levels are analyzed through this evaluation. The analysis may relate to the output, outcome or impact of the project, depending on the purpose of the evaluation. Costing is also used as an important indicator for deciding further expansion or replication of the project.

**Continuation.** The implication of a literacy and continuing education project is no doubt far-reaching. But what is equally important for measuring the success of any project is to see to what extent the output or outcome of the project is sustainable. Will there be any risk of neoliterates becoming illiterate again or other project benefits dwindling away because of the lack of follow-up activities? In addition, it is important to see whether certain project activities (a community awareness media campaign, for example) continue to have an impact even after the project is completed.

**Equity.** The equal participation of people from various levels in the literacy and continuing education programmes is very important for measuring the impact of the project on the community. The participation of women or people from socially depressed communities, for example, is an important area of evaluation.

### 6.4 Guidelines for Identifying Evaluation Areas

In order to ensure effective evaluation, it is essential to identify specific areas of evaluation before developing the evaluation plan. The measurable indicators for each area should also be developed. The indicators help in drawing up specific questions to be answered in the evaluation. Further, they should reflect the expectations of the project manager or the person requesting the evaluation. Here are some guidelines for identifying evaluation areas:

- ◆ Study the objectives and expected outcomes of the literacy programme. The best strategy is to focus on clearly defined programme objectives. There is a need to break down these objectives into concrete small targets or elements.
- ◆ Identify variables for measurement of performance. The variables should cover all major areas of evaluation, i.e., context, input, process and output.

- ◆ Analyze the variables within the broad project framework and identify specific queries to be addressed during the evaluation. Formulate questions for the measurement of the variables and work out the possible evaluation indicators.
- ◆ Develop a matrix of variables. It would show the relationship between the objectives of the project and the variables set for evaluation. It would be a set of terms of reference for evaluation planners that would guide them in designing the evaluation scheme.

**Table 6.3 A Sample Matrix Showing the Relationship between Project Objectives and Evaluation Variables**

| Project Objectives   | Areas of Evaluation   |
|--|---|
| Provide basic literacy to all illiterate adults 15-45 years old  | <ul style="list-style-type: none"> <li>▪ Graduation rate</li> <li>▪ Socio-economic background of learners</li> <li>▪ Participation rate of women</li> <li>▪ Level of literacy attained</li> <li>▪ Changes in literacy rate in the area</li> <li>▪ Effects of literacy on the life of the people and the community</li> </ul>  |
| Improve the skills of learners in community water management   | <ul style="list-style-type: none"> <li>▪ Extent to which the participants acquire the skills to handle the water problem locally</li> <li>▪ Types of skills acquired</li> <li>▪ Are skills transferable and sustainable</li> <li>▪ Whether there is scope for further improvement of skills</li> <li>▪ Are the acquired skills in use</li> <li>▪ Effects resulting from skills development</li> </ul> |
| Provide competencies for practical application of literacy skills in relation to meeting basic needs of living | <ul style="list-style-type: none"> <li>▪ Focus on training in functional literacy and de-emphasizing literacy learning for its own sake or as an independent activity</li> <li>▪ Integration of literacy training with production based/income generation activities</li> </ul>   |

## Chapter Seven

### **DEVELOPING THE EVALUATION DESIGN AND MANAGING THE EVALUATION WORK**

**This chapter aims to enable the planners and practitioners of literacy and continuing education programmes to:**

- \* *gain skills in developing the various components of the evaluation design, including: the conceptual framework of the evaluation, methodology, tools/instruments, sampling techniques, data collection, analysis of data, roles and responsibilities, costs and training; and*
- \* *understand the processes involved in managing evaluation work.*

## 7.1 The Evaluation Design

After identifying the areas of evaluation, the next task is the development of the evaluation design. In general, the goal of an evaluation effort is to assess programme performance when it begins, during implementation, and when it is over. An evaluation design covers the following:

- ◆ objectives of the evaluation;
- ◆ methodology;
- ◆ tools/instruments;
- ◆ sampling;
- ◆ data collection;
- ◆ analysis of data;
- ◆ roles and responsibilities of various persons involved in the evaluation;
- ◆ cost/budget; and
- ◆ orientation/training of evaluators.

The evaluation should be planned and conducted in anticipation of the needs of various interest groups, so that their co-operation may be obtained and possible attempts by any of these groups to interfere with the evaluation work may be prevented. Some questions that need to be addressed in preparing the evaluation design are:

- ◆ What existing data will be used and how will they be obtained?
- ◆ Who will collect new data?
- ◆ Who will have oversight and management responsibility for data collection?
- ◆ How often will data be collected?
- ◆ How often will the data be reported?
- ◆ Will data be gathered from all programme participants or only a sample?
- ◆ If there is a sample, how will it be selected?
- ◆ How will findings be reported? To whom? In what format? When? How often?
- ◆ How will results be used?

Programme evaluators should make an outline of an evaluation design which is the same for all types of evaluation, whether context, input, process or output and impact evaluation.

The following are some examples of evaluation designs:

### **Example 1 – *Evaluation of Learning Outcomes: Learner Evaluation***

In literacy and continuing education programmes, one of the areas for serious consideration is the literacy level or competencies of the learners who participate in literacy or continuing education classes. The procedures of learner evaluation are as follows:



1. The goals or objectives of the literacy and continuing education programme should be clearly understood. The programme is a means to change the programme beneficiary from a passive to an active learner. The learning focus includes not only literacy skills, but also the importance of problem-solving skills and social awareness. The broad objectives of the programme may be:

- ◆ to develop literacy and numeracy skills and apply these skills in everyday life; and
- ◆ to determine the indicators of literacy skills, namely:

**reading skills:** Read correctly simple passages of about 5-6 sentences in a minute, or approximately 10-20 words and figures (1-1,000).

**writing skills:** Copy a minimum of 10 words per minute, take down dictation at a speed of at least 7 words per minute.

**numeracy skills:** Calculate 1-3 digit figures involving simple addition, subtraction, multiplication and division. Demonstrate a practical knowledge of metric weights and measures, as well as multiplication tables up to 10.

**application of literacy skills:** Read simple printed texts, such as captions, signboards, posters or newspaper; write simple letters; fill in forms; follow instructions on labels for fertilizers, pesticides, medicines, etc.

2. Design the evaluation plan including time frame and cost. There are four phases in learner evaluation:

**Initial phase.** This phase identifies the literacy level of the learner at the time he or she joins the programme. The evaluator can use word-picture cards or simple word cards.

**Concurrent.** This phase is carried out on a continuous, ongoing basis for diagnostic or improvement purposes. This evaluation can be based on the lessons being taught.

**Terminal evaluation.** This phase will be carried out at the completion of the programme to find out the degree of learning competencies gained by the learner at that time.

**Evaluation of literacy retention.** This phase will determine the degree to which the learner has retained literacy skills after programme completion.

3. Choose the sampling strategy.
4. Design and select the tools and techniques for data collection. Learner evaluation can be both formal and informal. It becomes formal when questionnaires and performance tests are designed and used to assess the progress made by learners. It is informal if the methods used are semi-structured and flexible. There are various methods that can be used for measurement, namely interview, analysis of records/notebooks, observation, or group discussion.
5. Analyze the data after gathering the information about learner performance, namely the scores of literacy skills tests, information about using literacy skills in daily life and other needed data.

6. Prepare a report informing the learner about his or her literacy skills level. When learners receive feedback about their progress, they will be encouraged to improve their literacy skills and will have a higher motivation to participate in the literacy programme. Additionally, the evaluation results can serve as a basis for expanding the programme to new clients. If any weak points are identified, new strategies and approaches may be devised.

### Example 2 – Evaluation Design on the Improvement of Instruction

At the beginning, several questions should be asked to identify problems with instruction and to suggest revisions. For example:

- ◆ What are your biggest problems with the instruction?
- ◆ If you could change one thing in this lesson, what would it be?
- ◆ Are there any sections that seem too difficult? Too easy?
- ◆ Do you have any suggestions for improving the materials?
- ◆ Are there any topics that require more explanation? More practice?
- ◆ Do the examples relate to your real-world experiences?

The questions may focus on specific areas of intervention or perceptions of learners. Examples are given in Table 7.1.

**Table 7.1 Samples of Questions with Specific Focus**

| Environment  | Worth  |
|--|--|
| Could you study this at home or in class?<br>Could you use this without help?        | Would this learning help you do your job better?<br>What new topics did you learn? |
| Interest and Acceptance  | Perceptual Aspects   |
| Did you feel bored or challenged?<br>Would you use this?                             | Can you easily see the screen?<br>Can you hear everything?                         |
| Revision - General   | Revision - Specific  |
| If you could change one thing, what would it be?<br>Who do you think could use this? | How would you redesign the feedback?<br>What should the menu contain?              |

Table 7.2 shows an example of a specific evaluation instrument for recording learner comments.

**Table 7.2 Learner Comments**

|   |                               |
|---|-------------------------------|
| ▪ Learner name: _____                       | Background: _____             |
| <b>Unit 1</b>                               |                               |
| ▪ Learner comments                          |                               |
| Page/screen _____                           | Comments: _____               |
| ▪ Evaluator questions                       |                               |
| Questions _____                             | Answers _____                 |
| ▪ Aspects to observe/record                 |                               |
| Aspect _____                                | Observation/performance _____ |
| ▪ Debriefing questions                      |                               |
| Questions _____                             | Answer _____                  |
| ▪ Unanticipated outcomes and comments _____ |                               |

## 7.2 Evaluation Designs Which Include the Four Areas of Evaluation

A matrix of an evaluation design which includes the four areas of evaluation discussed in Chapter Six is as follows:

**Table 7.3 Example of an Evaluation Design  
with the Four Areas of Evaluation**

| Context                                | Input   | Process  | Output/Outcome  |
|--|---|--|---|
| Environment<br>criteria/<br>indicators | Resources<br><br>Learner data<br>Staff/instructor data<br>Financial data<br>Curriculum data<br>Other data | Activities<br><br>Learner tasks and<br>interaction<br>Staff/instructor tasks<br>and interaction<br>Extra-setting tasks/<br>interaction<br>Other data | Changes, results<br><br>Learner data<br>Staff/instructor<br>data<br>Financial data<br>Curriculum data<br>Other data |
| Environmental<br>constraints           | Resource<br>constraints<br>(resource provision)   | Process constraints  | Environmental<br>constraints  |
| Environmental<br>constraints           | - Input constraints   | - Process constraints  | Output constraints<br>Learner objectives<br>Instructor<br>objectives<br>Other objectives                            |

The following case study presents the processes and time frame for evaluating the development and implementation of a functional literacy curriculum in Thailand.

### **An Evaluation of the Development and Implementation of a Functional Literacy Curriculum in Thailand**

The Northern Regional Nonformal Education Centre in Thailand carried out a project known as *The Development of a Functional Literacy Curricular Programme in Northern Thailand*.

The project objectives were to:

- ◆ revise the earlier functional literacy curriculum and learning materials;
- ◆ train regional and provincial non-formal education personnel in curriculum development and project management;
- ◆ improve training models, strategies and training manuals for volunteer teachers and related personnel; and

- ◆ create a working network between the regional and provincial non-formal education centres.

An evaluation design was developed in order to assess project performance vis-a-vis its objectives, as well as to determine the strengths and weaknesses of the project's procedural design and implementation. The following table describes the case study design.

| Programme Objectives  | What is Evaluated  | Evaluation Objectives  | Evaluation Methods   | Time Required |
|---|--|--|--|---------------|
| Evaluate the models and strategies in the development and management of the functional literacy curriculum and learning materials | <b>CONTEXT</b>   |  |  |               |
|   | The relevant environment of the ongoing programme, i.e.<br>* the curriculum and learning materials and their performance;<br>* the effectiveness of programme management | Assess to what extent the current curriculum and learning materials are congruent with today's social, cultural and economic changes.<br><br>Determine the effectiveness of programme management as well as problems occurring in its implementation                               | Document analysis (reports of research meetings and expert interviews)<br><br>Comparison of content presented in the materials with current conditions in the society  | 6 months      |
|   | <b>INPUT</b>   |  |  |               |
|   | The inputs required in the development of the curriculum materials and the programme implementation  | Consider the objectives of the new programme in terms of its importance and responsiveness to the problems found in the context evaluation<br><br>Analyze the potential costs and the benefits of one or more procedural designs and select the most suitable and feasible design. | Document analysis<br><br>Organization study (manpower resources, budget allocation, management system, etc.)<br><br>Interviews with experts in programme planning and methodology, curriculum and materials development<br><br>Analyze possible alternatives and their costs | 3-4 months    |

Source: *ATLP*.

| Programme Objectives   | What is Evaluated  | Evaluation Objectives  | Evaluation Methods   | Time Required    |
|--|--|--|--|------------------|
|  | <p><b>PROCESS</b></p> <p>Programme implementation</p> <ul style="list-style-type: none"> <li>* Activities</li> <li>* Programme management</li> </ul> | <p>Monitor the programme</p> <p>Assess the programme activities in terms of its objectives, procedures and effectiveness</p> <p>Determine the strengths and the weaknesses of the implementation and provide information for remedial decisions</p> <p><i>Note:</i><br/>Programme activities will include:</p> <p>Workshop to develop curriculum and materials</p> <p>Training of volunteer teachers</p> | <p>Interview/questionnaires (respondents are programme staff/administrators, teacher trainers, volunteer teachers and other involved personnel)</p> <p>The interview should focus on:</p> <ul style="list-style-type: none"> <li>* Expected processes</li> <li>* Expected quality</li> <li>* Actual processes and quality</li> </ul> <p>Compare the expected and actual outcomes</p> <p>Identify the gaps and problems and propose alternative solutions</p> | <p>12 months</p> |
| <p>Periodically follow up on implementation of the curriculum</p>  | <p><b>PRODUCT</b></p> <p>The programme product</p> <p>The immediate programme achievements</p> <p>The programme achievements in the long run</p>     | <p>Assess programme success</p> <p>Evaluate learner achievements and skills and assess the acquisition of desired behaviours according to the programme objectives</p>   | <p>Achievement tests</p> <p>Interviews</p> <p>Questionnaires</p> <p>Qualitative evaluation approaches</p> <p>Case studies</p>  |                  |
| <p>Determine the effectiveness of the curriculum, learning materials and the curriculum management</p> <p>Study the programme impact on learners and their communities</p> | <p>The programme impact</p>  | <p>Assess the effectiveness of the programme during the implementation period and after the project is completed</p> <p>Determine the programme impact on learners and their communities</p>   |  |                  |

### 7.3 Sampling

If the project to be evaluated is a large one with many participants at diverse sites, it will not be easy to evaluate everyone or to look at every site. With much effort, the evaluator can reach each participant with a highly-focused questionnaire, containing a few or no open-ended questions. This would enable the evaluator to gain an overview of perceptions, but might not provide in-depth data on the subject matter. If the evaluator needs more insights into a particular group's perceptions, he or she will need to select a **sample**.

A **sample** is a portion or subset of a larger group called a population. The **target population** consists of the institutions, persons, problems and systems to which or to whom the evaluation findings are to be applied or generalized.

Some examples are:\*

#### Example 1

**Target population:** All teacher training programmes in the district or province.

**Programme:** Continuous Quality Improvement: An intervention to monitor and change the quality of teacher training. One index of quality is the performance of students on reading and math tests administered throughout the district or province.

**Sample:** Five teacher-training institutions will be selected to try out the Continuous Quality Improvement experiment. After 1 year, for all participating teacher trainees, a 10 per cent sample of student performance in reading and math will be taken.

**Comment:** This evaluation aims to evaluate all teacher-training programmes in the province. Five will be selected for a Continuous Quality Improvement programme. To appraise the program's quality, the evaluator will sample 10 per cent of the students to assess their performance in reading and math. The findings are to be applied to all teacher-training programmes in the province.

#### Example 2

**Target population:** All students needing remediation in reading

**Programme:** Options for Learning

**Sample:** Five schools in three districts; within each school, 15 classes; for each class, at least 20 students who need remediation in reading.

**Comment:** Students who need assistance in reading are the targets of the programme. The evaluators will select five schools in three districts, and within them, 15 classes with at least 20 students in each. The findings are to be applied to all students who need special aid in reading.

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\* Arlene Fink, *Evaluation for Education and Psychology*, California: Sage Publications, 1995.

The sample results provide estimates of what the result might be if the whole population was surveyed. Therefore, there is need to select a sample very carefully.

There are several different methods used to select a sample and the choice of method depends on the circumstances. The most common sampling strategies are:

### Probability Sampling

This is considered the best way to ensure the validity of any inferences made about programme effectiveness. In probability sampling, every member of the target population has a probability of being included in the sample.

There are four kinds of probability sampling.

1. **Simple random sampling.** In simple random sampling, every subject or unit has an equal chance of being selected. Because of this equality of opportunity, random samples are considered relatively unbiased. This technique makes use of a table of random numbers, a lottery procedure or the rolling of a die.

**Example:** There are six teachers. We want to know with a reasonable degree of accuracy how they are using teaching aids. We do not have resources to monitor all six of them and decide to monitor only two. How many different pairs of teachers could be picked out if there were six of them? There are the following possibilities, lettering them A to F inclusive.

|    |    |    |    |    |
|----|----|----|----|----|
| AB | AC | AD | AE | AF |
| BC | BD | BE | BF |    |
| CD | CE | CF |    |    |
| DE | DF |    |    |    |
| EF |    |    |    |    |

There are 15 different examples we can choose. Write each of these 15 examples on a slip of paper and put all 15 into a box. Pull out a slip. Each slip has an equal possibility of being picked, i.e., 1 in 15, a random sample.

As the population size in evaluation is usually large, the number of different samples is also large. If the above sampling method is used, it will be too laborious. Statisticians have prepared a **Random Number Table** which can be found in practically all statistics books. With the help of this random table, a sample can be selected without any bias.



2. **Systematic sampling.** This method can be used in selecting a sample when the population is finite or when the random sampling technique may be too laborious to go through. An example of this method is as follows:

**Example:** An evaluator had a list of names of 3,000 students from which a sample of 500 was to be selected. In systematic sampling, divide 3,000 by 500.

$3,000 : 500 = 6$  Every sixth name would be selected.

An alternative would be to select a number by random, say by tossing a die. Suppose a toss came up with the number five, then the 5th name would be selected first, then the 11th name, 17th and so on until 500 names are selected.

3. **Stratified random sampling.** In this sampling technique, the population is divided into subgroups or strata and random sampling is used in each stratum. This helps in getting a more accurate representation of the sample. Examples of such strata are geographical location, age group, gender, and income level.
4. **Cluster sampling.** This is a variation of the simple random sampling technique and is particularly appropriate when the population is infinite, when the list of members of a population does not exist or when the geographic distribution of subjects is widely scattered.

### Non-probability or Convenience Sampling

1. **Convenience sampling.** In this method, samples are selected because they are available. Some members have a chance to be chosen, while others do not. As a result, the data collected from a convenience sample may not represent all the members of the target population. However, in some cases, appropriate statistical analysis may be used to make the convenience sample a representation of the target population.
2. **Deliberate or purposive sampling.** In this sampling technique, the sample is selected for some specific reason.

There is no fixed number or percentage of subjects that determines the size of an adequate sample. It may depend upon the nature of the population, objective of the study, or kind of data to be gathered and analyzed. However, the sample should be representative of the population. Normally, when the sample is larger, the more representative it will be of the population. But unnecessarily large samples will not be good samples. The best sample is that which is both economical and representative.

The following table can be used for determining sample size:

**Table 7.4 Table for Determining Sample Size from a Given Population**

| N   | S   | N     | S   | N       | S   |
|-----|-----|-------|-----|---------|-----|
| 10  | 10  | 220   | 140 | 1,200   | 291 |
| 15  | 14  | 230   | 144 | 1,300   | 297 |
| 20  | 19  | 240   | 148 | 1,400   | 302 |
| 25  | 24  | 250   | 152 | 1,500   | 306 |
| 30  | 28  | 260   | 155 | 1,600   | 310 |
| 35  | 32  | 270   | 159 | 1,700   | 313 |
| 40  | 36  | 280   | 162 | 1,800   | 317 |
| 45  | 40  | 290   | 165 | 1,900   | 320 |
| 50  | 44  | 300   | 169 | 2,000   | 322 |
| 55  | 48  | 320   | 175 | 2,200   | 327 |
| 60  | 52  | 340   | 181 | 2,400   | 331 |
| 65  | 56  | 360   | 186 | 2,600   | 335 |
| 70  | 59  | 380   | 191 | 2,800   | 338 |
| 75  | 63  | 400   | 196 | 3,000   | 341 |
| 80  | 66  | 420   | 201 | 3,500   | 346 |
| 85  | 70  | 440   | 205 | 4,000   | 351 |
| 90  | 73  | 460   | 210 | 4,500   | 354 |
| 95  | 76  | 480   | 214 | 5,000   | 357 |
| 100 | 80  | 500   | 217 | 6,000   | 361 |
| 110 | 86  | 550   | 226 | 7,000   | 364 |
| 120 | 92  | 600   | 234 | 8,000   | 367 |
| 130 | 97  | 650   | 242 | 9,000   | 368 |
| 140 | 103 | 700   | 248 | 10,000  | 370 |
| 150 | 108 | 750   | 254 | 15,000  | 375 |
| 160 | 113 | 800   | 260 | 20,000  | 377 |
| 170 | 118 | 850   | 265 | 30,000  | 379 |
| 180 | 123 | 900   | 269 | 40,000  | 380 |
| 190 | 127 | 950   | 274 | 50,000  | 381 |
| 200 | 132 | 1,000 | 278 | 75,000  | 382 |
| 210 | 136 | 1,100 | 285 | 100,000 | 384 |

(N= Population size; S = Sample size)

Source: H.S. Bhola, UNESCO Institute for Education German Foundation for International Development.

## 7.4 Evaluation Tools and Techniques

The tools discussed in Chapter Three can likewise be used as programme evaluation tools and instruments. In addition, this chapter focuses on techniques that may be used in the evaluation work at the learner's level, village level and district level. They can be quantitative or qualitative; a combination of the tools will help in cross-checking and in confirming information gathered.

A non-formal education programme evaluation requires informal, flexible, diversified methods of assessing growth and change. Assessment should be done systematically and carefully recorded in order to draw objective conclusions for eventual corrections and modifications in the programme. Some commonly used evaluation tools and techniques are:

| Techniques         | Tools   |
|--------------------|---|
| Test               | Assessment test                               |
| Observation        | Observation guide                             |
| Interview          | Interview guide                               |
| Community meetings | Structured interview guide                    |
| Documentation      | Diary, learner's record and audio-video tools |
| Survey             | Questionnaire, checklist                      |

**Test.** Classroom tests are necessary to check the learning achievements of learners. They are useful in helping learners to know their progress in learning. They can be either performance or assessment tests. Both are useful in making learners aware of their performance.

In **assessment tests**, the questions should be practical and applicable to the daily lives of the learners. Some samples are in Appendix III.

### *Initial evaluation:*

- Word-picture cards
- Simple word cards
- Writing words and figures on blackboard
- Matching words and pictures.

### *Periodic progress evaluation:*

- Group discussions
- Interviews
- Checklist items

### *Final evaluation:*

- How many sales did you make last week?
- What foods do your children like?

In a performance test, specific skills are measured. The learner/participant is given a task. The evaluator then assesses the quality of the performance or final product. A performance test requires trained observers/evaluators to ensure a fair appraisal of performance. This type of evaluation can be made more interesting by holding an exhibition upon graduation, or competitions within a district or at the national level. This activity helps to boost participant morale; the participant who is successful could serve as a model for other learners.

**Observation.** Observation is the *seeing* and *listening* at the actual place of a project, such as the community learning centre. It is very necessary especially at the learner's level where behaviour in the local environment, changes in attitude, and interactions in the community are some of the evidence of progress.

The purpose of the observation may be known or not by those observed and it may be structured, unstructured or open-ended. It provides an opportunity to collect first-hand information which was not anticipated before the evaluation. Information can be gathered by taking notes, photographs and video.

It is very important that evaluators agree on the focus and theme before going to the field. After gathering the information, they will have to discuss the observations before they draw conclusions. This method consumes a lot of time and labour, and the evaluators can influence the environment in the sense that the learners can act differently when they know they are being watched.

**Interview.** Interviews may range from informal and conversational to closed and highly structured. They allow for two-sided interactions and are very useful in collecting information from someone who has difficulty in reading. This method provides an opportunity for participants to give appropriate answers and for interviewers to learn something about the learner's growth, interests and development.

Although it provides the richest source of reliable information in the shortest time, it requires special skills in asking questions and in interpreting responses that are off the record. It is normally done together with other means of gathering information. An example of an interview guide is in Appendix III.

During the administration of the interview, the evaluator should:

- ◆ Observe how the learner reacts to the problems discussed in the class;
- ◆ Be sensitive/alert to learner attitudes toward the acceptance of new ideas;
- ◆ Analyze learner responses and questions; and
- ◆ Look for changes in behaviour.

**Community meeting.** This is a structured assembly of a large group of community residents and leaders that provides a forum for sharing and disseminating information (planning, monitoring and evaluating projects/activities), as well as making recommendations and decisions. In an evaluation exercise, a community meeting opens the process to more people and makes them committed to the project, thus leading to a greater co-operation especially during the collection of data.

It is best to inform the community of the meeting before the actual date. The meeting has to be well structured and planned to ensure that the objectives of the meeting are achieved. The meeting should start with a statement of objectives. It should be brief and geared to the concerns of those attending the meeting. When necessary, the meeting can be divided into small group discussions and a plenary session for sharing findings.

**Documentation.** Documentation may be in print or nonprint forms:

**Diaries and learner records.** A diary is a daily record of events that occur over a period of time. The record should focus on specific activities and the “what, who, when, why, and how” for these activities. Recording has to be done right at the beginning of the project. In keeping a group record, a member of the group has to be assigned to update the data.

The data in these records are hard evidence of programme progress and development. The information can be used by the learners/participants for their self-evaluation or by an outside evaluator such as the project supervisor at the village or district level.

The data are useful for monitoring and, eventually, for evaluation of the programme, especially in identifying major problem areas and noting changes and accomplishments. The documents in themselves can be learning tools for community members.

**Audio-video tools.** Audio-video tools can vividly document programme progress, outcomes, processes, activities and impact on participants and their communities. They carry emotional and intellectual messages and may reveal aspects of a project not generated in structured interviews or questionnaires. Audio-video tools can be used either to document aspects of a project or stimulate analysis related to interpreting project problems and impact. Events are recorded at the beginning of the project, during project implementation and after the project is over.

Audio-video documentation may be done by the participants themselves and used to identify and prioritize problems, as well as to set goals and determine ways to improve project activities. Audio-video tools should be used to cross-check and confirm the information gathered from other evaluation tools, such as community meetings and learner records.

**Survey.** Surveys are popularly used in baseline data collection. Information can be gathered through checklists or structured questionnaires. Surveys are inexpensive to administer and allow for more privacy on the part of the participants. Tabulation is easy but generation of responses is usually slow and respondents must be literate.

## 7.5 Collection of Data

**Choosing the method.** In every type of evaluation, some type of information-gathering techniques and processes are involved. There may be need for some observation, questioning, testing and interviewing. The most appropriate method of data collection should be selected based on the following questions:

- ◆ Will this method provide the needed information?
- ◆ Will this method be acceptable to the people involved?
- ◆ Does time permit the application of the method and the necessary analysis of the data?
- ◆ Are enough resources available to use this method?

***Managing the collection of data.*** Data collection may be quite difficult if not managed properly. While collecting data, the following guidelines should be followed:

- ◆ Collect only a moderate amount of data.
- ◆ Devise economical methods of gathering information; whenever applicable, use existing resources.
- ◆ Collect data in different ways for validation purposes.
- ◆ Collect data from different samples for a more realistic representation of the evaluation respondents.
- ◆ Develop a cordial relationship with the respondents. Building rapport is a very important part of data collection. Inform them of the objective of the study and collect data in a participatory manner.
- ◆ Before going to the field for collection of data, make sure that there are no festivals, weddings or important occasions on the day that actual evaluation is to be conducted. Moreover, natural calamities and other emergency situations may disturb the data collection process.
- ◆ Develop cordial relationships with the important persons in the field. They will help in introducing the evaluators to the people and explaining the purpose of the visit.
- ◆ If male data collectors get data from women, sometimes it may be difficult to generate accurate or honest responses. Therefore, the evaluation team should be composed of male and female members or an acceptable community member should be chosen to accompany the evaluators.
- ◆ The rules of conduct during the interview or field-work should be properly understood and observed by everyone in the data collection group.
- ◆ To generate the needed information, sometimes the evaluators may have to stay in the field for many days or have to make several trips to the field.
- ◆ Investigators who are assigned the task of data collection should be trained properly in the techniques of data collection before they go to the field. They should also be trained in administering the evaluation instruments.
- ◆ Usually, it is not easy to collect data from the pre-selected sample and the investigators have to make substitutions for the unavailable respondents or are forced to make do with smaller samples. In such cases, the investigator must keep an honest record of changes made in the sample so that appropriate judgement can be made at the time of interpreting the results.
- ◆ Instruments should be pretested before they are administered to the intended sample.

- ◆ Completed questionnaires and other records should be handled carefully. Data are precious and should be treated as such. The investigators should be given clear instructions about the system of returning completed questionnaires.
- ◆ Completed questionnaires and other forms should be marked and coded as soon as received.

## **7.6 Analysis of Data**

Once the data have been collected, the evaluator must analyze the findings and present them with recommendations for programme improvement. The presentation is usually in printed form but can be enriched by audio-video materials. Data analysis is a critical process because it leads directly to the formulation of conclusions and decisions by the programme planners and managers.

There are two components, namely **data processing** and **data analysis**. These two terms have substantial overlaps. Data processing makes the data ready for data analysis.

Data processing and data analysis can consist of the following activities:

- ◆ Categorize the data according to:
  - gender
  - occupation
  - age
  - group
  - educational background
  - other
- ◆ Conduct a quantitative analysis using:
  - descriptive mean
  - percentage
  - mean (averages)
  - standard deviation
- ◆ Conduct a deductive analysis with appropriate statistical procedures, such as
  - z-test
  - t-test
  - chi-square test
  - multiple regression test
  - others

Data analysis using statistical procedures helps to ensure more accuracy than relying on manual computations. Further, there is existing computer software to help in more speedy data analysis. For statistical formulas and other applications, programme evaluators can refer to any standard textbook on statistical analysis.

The basic strategy in data analysis is to classify the collected information, first with one variable and subsequently with several variables in terms of frequencies, cross tabulations,



and the calculation of basic statistical parameters. Statistical analysis makes use of indicators such as the mean, mode, median, variance and standard deviation.

Usually, once the data have been processed, they are analyzed with the following purposes kept in mind (Bhola, 1990):

- ◆ Relating data to preconditions and entry behaviours;
- ◆ Viewing data in context;
- ◆ Relating data to what is already known;
- ◆ Looking for correlations and causations;
- ◆ Re-examining the assumptions made in the design of the evaluation; and
- ◆ Looking at the limitations of the data.

The data analysis techniques in Chapter Three of this manual can also be used in the analysis activities of programme evaluation.

## **7.7 Evaluation Schedule**

If sufficient time is not provided to carry out key tasks or if it is scheduled when the people who need to be involved are heavily committed elsewhere, the evaluation cannot be conducted properly. An essential part of the planning process, therefore, involves the preparation of a realistic implementation schedule for the evaluation work. Sometimes, evaluation schedules become weak when:

- ◆ The evaluation plan is not discussed properly and in detail with the people whose co-operation is necessary for carrying out the task. It usually results in misunderstanding and, consequently, diminished commitment.
- ◆ Meetings are arranged when people are not available.
- ◆ Not enough time is given for reflection upon key issues, gathering necessary information, or taking action.
- ◆ Plans are not made according to the availability of secretarial or support staff.
- ◆ Insufficient time is allowed for respondents to return questionnaires and for non-respondents to be followed up.
- ◆ Over-ambitious interview schedules are arranged with a large number of interviews squeezed into a short period of time.
- ◆ Inadequate time is given to data gathering.
- ◆ Inadequate time is provided for analyzing the data.

Effective scheduling needs to take the following into account:

- ◆ Realistic estimates of time required to complete tasks.
- ◆ Availability of the members of the evaluation team.
- ◆ Sufficient time allowed at key stages in the process for taking stock of the issues and, if necessary, replanning the evaluation design.



Table 7.5 gives an example of a data-gathering and processing schedule.

**Table 7.5: Sample of a Data Gathering and Processing Schedule**

| Activity                              | Estimated time |
|---------------------------------------|----------------|
| Decide needed information             | 2 weeks        |
| Decide data-gathering method          | 0.5 weeks      |
| Decide evaluation method              | 0.5 weeks      |
| Determine sample                      | 0.5 weeks      |
| Design interview schedule             | 2 weeks        |
| Inform respondents/arrange interviews | 1 week         |
| Brief interviewers                    | 1 week         |
| Conduct interviews                    | 3 weeks        |
| Process data                          | 4 weeks        |
| Write report                          | 4 weeks        |
| Type and reproduce report             | 2 weeks        |
| Circulate report                      | 1 week         |
| Review report                         | 2 weeks        |
| Plan structure of feedback seminar    | 6 weeks        |
| Plan content of feedback seminar      | 3 weeks        |
| Advertise feedback seminar            | 3 weeks        |
| Run seminar                           | 0.5 weeks      |

Based on: *Managing Evaluation in Education*, Routledge, 1992.

If activities are realistically scheduled and people work with commitment, evaluation activities have substantial chances to succeed. However, scheduling should be dealt with more formally, especially in cases of complicated or large-scale evaluation.

## 7.8 Roles and Responsibilities

Management of evaluation is getting things done with and through others. It involves recruiting people who possess the knowledge, skills and commitment in order to achieve the desired evaluation objectives. This may involve managing a carefully selected team of people who will work together on day-to-day basis, or it may involve a team of people with whom the evaluator is already working. In either case, the nature of their involvement has to be well-planned. The degree of their involvement may vary at the various stages of evaluation.

The following concerns need to be addressed:

- ◆ Who is to lead the process and what should this involve?
- ◆ Who else should participate in the management process?
- ◆ To whom should those managing the process be accountable and how?
- ◆ To what extent will support be required from certain people?

Evaluation is a value-laden activity. While involving individuals and groups in the various aspects of evaluation, this concern should always be kept in mind. A major dimension of evaluation is soliciting the commitment of the programme management to take action as a result of the insights gained. The more open, shared, consultative and involving the process, the more possible it is to solicit commitment. Table 7.6 and Table 7.7 provide a framework for considering this issue and developing plans for the management of the evaluation activity.

**Table 7.6 Individual/Group Involvement in Evaluation**

|                                | Group | Individual/s |
|--------------------------------|-------|--------------|
| Leadership<br>Who<br>How       |       |              |
| Participation<br>Who<br>How    |       |              |
| Consultation<br>Who<br>How     |       |              |
| Accountability<br>Who<br>How   |       |              |
| External Support<br>Who<br>How |       |              |

**Table 7.7 A Sample Evaluation Process**

|   |      |
|---|------|
| Stage 1: Determining the focus<br>Who should be involved        | How? |
| Stage 2: Preparing plans<br>Who should be involved              | How? |
| Stage 3: Clarifying purpose<br>Who should be involved           | How? |
| Stage 4: Determining indicators<br>Who should be involved       | How? |
| Stage 5: Doing sampling<br>Who should be involved               | How? |
| Stage 6: Managing data gathering<br>Who should be involved      | How? |
| Stage 7: Analyzing data and reporting<br>Who should be involved | How? |

Source: *Managing Evaluation in Education*, Routledge, 1992.

## 7.9 Staff Orientation and Training

Orientation and training of personnel to be involved in evaluation are essential. These activities involve more than a cursory introduction to the evaluation manual. The training design for them should be developed properly, with attention given to the following:

- ◆ Training should be more skills-oriented.
- ◆ Collaborative planning should be carried out by those who will co-ordinate the orientation and training.
- ◆ Training should involve more than just introduction of the evaluation manual.
- ◆ Sufficient instructional materials should be made available to the trainees.
- ◆ Workshop, demonstration, role playing and simulation exercises should be the major training strategies.
- ◆ Trainees should learn how to write evaluation proposals, develop evaluation instruments, collect data, deal with respondents, make inferences, probe, draw insights, and make the appropriate recommendations.
- ◆ Data collection, processing and analysis should also be major topics during the orientation/training activities.

Evaluation personnel should be well versed with various evaluation techniques. In general, all personnel who are involved in the planning and management of evaluation should acquire the relevant knowledge and skills to do it. They should acquire specific competencies for the purpose, including:

- ◆ A clear understanding of the concept, objectives, scope, coverage and other pertinent information related to evaluation.
- ◆ Basic techniques of evaluation.
- ◆ Ability to write an evaluation proposal.
- ◆ Specific evaluation techniques to assess learner/neo-literate achievement level.
- ◆ Evaluation techniques to assess the various activities of literacy and continuing education programmes.
- ◆ Evaluation techniques to assess the strengths and weaknesses of the project and the factors responsible for them.
- ◆ Techniques of data collection, processing and analysis.
- ◆ Report writing and dissemination strategies.

The duration of training generally depends on the background and previous experience of the evaluation staff. Moreover, it would depend upon their degree of involvement in the evaluation process.

*Training of data collectors.* In most cases, **Level B** or **Level C** personnel will not be able to collect all data single-handedly. They will need the assistance of colleagues or other field workers for collecting and analyzing data. These field investigators must be adequately trained in the techniques of administering evaluation instruments and in

analyzing the evaluation results. They should undergo a well-planned orientation/training programme in order to adequately prepare them for the evaluation work.

## **7.10 Evaluation Costs**

Managing the costs of evaluation involves essentially three stages:

- ◆ identifying the resources required;
- ◆ assessing the costs involved in obtaining these resources; and
- ◆ ensuring that these costs will be met (budgeting).

Some of the resources needed to carry out an evaluation activity are:

- ◆ people (managers, field staff, analysts, etc.);
- ◆ various kinds of equipment, materials/services (e.g., designing/printing costs and postage for sending questionnaires or memos about a meeting or group discussion, computers, duplication, etc.);
- ◆ space for meetings, work stations; and
- ◆ vehicles and transportation expenses.

Some of these resources require additional financial programme expenditure. Cost analysis serves as a basis for budgeting. While budgeting, it is necessary to assess not only what resources are needed but also the strategies to ensure that these will be available at the right time.

## Chapter Eight

### REPORTING AND USE OF EVALUATION RESULTS

**This chapter aims to familiarize practitioners in literacy and continuing education programmes with strategies on reporting and using evaluation results, specifically:**

- \* *basic considerations in reporting evaluation findings;*
- \* *importance of and factors affecting use of these findings; and*
- \* *Database Management System.*

## **8.1 Basic Considerations in Reporting Evaluation Findings**

Pertinent data collected and analyzed need to be reported to groups or individuals who are concerned with the project at different structural and functional levels. Some basic considerations should be taken into account:

- ◆ The results of the evaluation must be communicated in a form and manner that are understandable to the intended users. Technical and statistical terms should be avoided or carefully defined.
- ◆ The recipients of the results should be given specific recommendations and suggestions. Anyone involved with or concerned about the evaluation results should be informed of both the appropriate and inappropriate uses of the results.
- ◆ The various concerned users have a right to know the results of evaluation. The evaluator's responsibility is to report the results and to help users to understand what they mean.
- ◆ The findings should be targeted to user interests at different levels.

The ultimate objective of reporting evaluation findings is to ensure that the results serve as a basis for making informed decisions on whether to maintain, expand, scale down, or stop the programme intervention. The evaluation findings, conclusions and recommendations provide the policy makers and programme decision makers with the necessary information for drawing up plans of action.

## **8.2 Reporting Formats**

To make an effective presentation of evaluation results, it is useful to keep in mind the various forms of reporting. Although it may be in print or non-print form, the most common form of reporting is a written report. It serves at least two purposes:

- ◆ To provide an opportunity for the evaluators to organize their thinking, to draw conclusions, to weigh and consider the implications of the evaluation activities.
- ◆ To act as an instrument of communication between evaluators and audiences.

The essential objective of a written evaluation report is to make a comprehensive record of the evaluation activities, including the background and the context of the areas of evaluation; the evaluation process; evaluation design and tools; the results obtained; and the conclusions reached.

In general, an evaluation report should have the following main parts and sections:

- ◆ title page
- ◆ abstract
- ◆ general background
- ◆ the evaluation questions asked/other evaluation instruments
- ◆ assumptions
- ◆ procedures and methods used
- ◆ evaluation design

- ◆ conceptual analysis and definitions
- ◆ standards and criteria of success
- ◆ sample and units of response
- ◆ tools and instruments
- ◆ field-work procedures/processes/timetable
- ◆ findings
- ◆ discussion of results
- ◆ further evaluation and feedback needs
- ◆ bibliography
- ◆ appendices

An example of the contents of an evaluation report is as follows (Bhola, 1990):

## **The Implementation and Effects of the Kenyan Literacy Programme**

### **1. Research design and implementation**

- Background
- Objectives of the study
- Research design
- Research implementation
  - Selection of locations
  - Selection of respondents
    - ◆ The literacy learners
    - ◆ The control group
  - Preparation of research instruments
    - ◆ The learners' questionnaire
    - ◆ The teachers' questionnaire
    - ◆ The literacy test
  - Data collection
  - Data analysis

### **2. The Kenyan literacy programme**

- The national context
- The national literacy programme
- Literacy work before 1979
  - The national literacy programme of 1979

### **3. The location profiles**

- Geographical features
- Population
- Economic activities
- Socio-cultural characteristics
- Socio-economic services

- Self-help and local development
  - School education
  - The literacy programme
  - Summary
4. The literacy centres: characteristics and functioning
- Buildings used for literacy teaching
    - Original use
    - Materials used for the construction of literacy classrooms
      - ◆ Conditions of the teaching environments
  - Teacher characteristics
    - Categories
    - Gender
    - Age and marital status of teachers
    - Teachers' educational qualifications
    - Teachers' experience
    - Previous occupation of teachers
    - Second occupation
    - Ties with the local community
    - Teachers' attitudes and job satisfaction
  - Teaching/learning aids
    - Teaching aids
    - Learning aids
    - Records
  - Learning exposure
  - Content
    - Class projects
    - Guest lecturers
  - Centre committees
  - Average attendance
  - Summary
5. General characteristics of the literacy learners
- Gender
  - Age
  - Marital status
  - Number of children
  - Languages spoken by the learners
    - Mother tongue
    - Ability to speak Kiswahili and English



- Learners' religion
  - Learners' occupations
  - Summary
6. Learners' home environments
- Type of housing
  - Possession of books and magazines
  - Availability of audio-visual equipment
  - Exposure to the mass media
  - Summary
7. Educational experiences of learners
- Exposure to primary schooling
- Literacy classes before obtaining proficiency certificates
- Reasons for joining the literacy programme and benefits derived from it
- Duration and regularity of literacy class attendance
- Learning after the literacy certificate
- What adults would like to learn after the literacy certificate
  - Duration of literacy class attendance after the certificate
  - Participation in other types of course
  - Listening to the special DAI radio programme
  - Summary
8. Using literacy and numeracy skills
- Differences between locations
    - Reading
    - Writing
    - Calculating
  - Other types of difference
    - Gender
    - Speaking Kiswahili
  - Summary
9. Functional knowledge, attitudes and practices
- Measuring functional knowledge, attitudes and practices
  - Differences between the literates and illiterates.
    - Knowledge
    - Attitudes
    - Behaviour

- Differences among the literates
  - Location
  - Other differences (gender, age, year of certificate, primary school attendance and literacy class experience)
- Summary

#### 10. Literacy and numeracy skills acquired

Grading test results and setting performance standards (numeracy, reading, writing)

- Results for the whole sample (numeracy, reading, writing, relations between the three types of skills, global results)
- Differences between locations
- Other differences (gender, learning experience, year of literacy certificate)
- Summary

#### 11. Conclusions

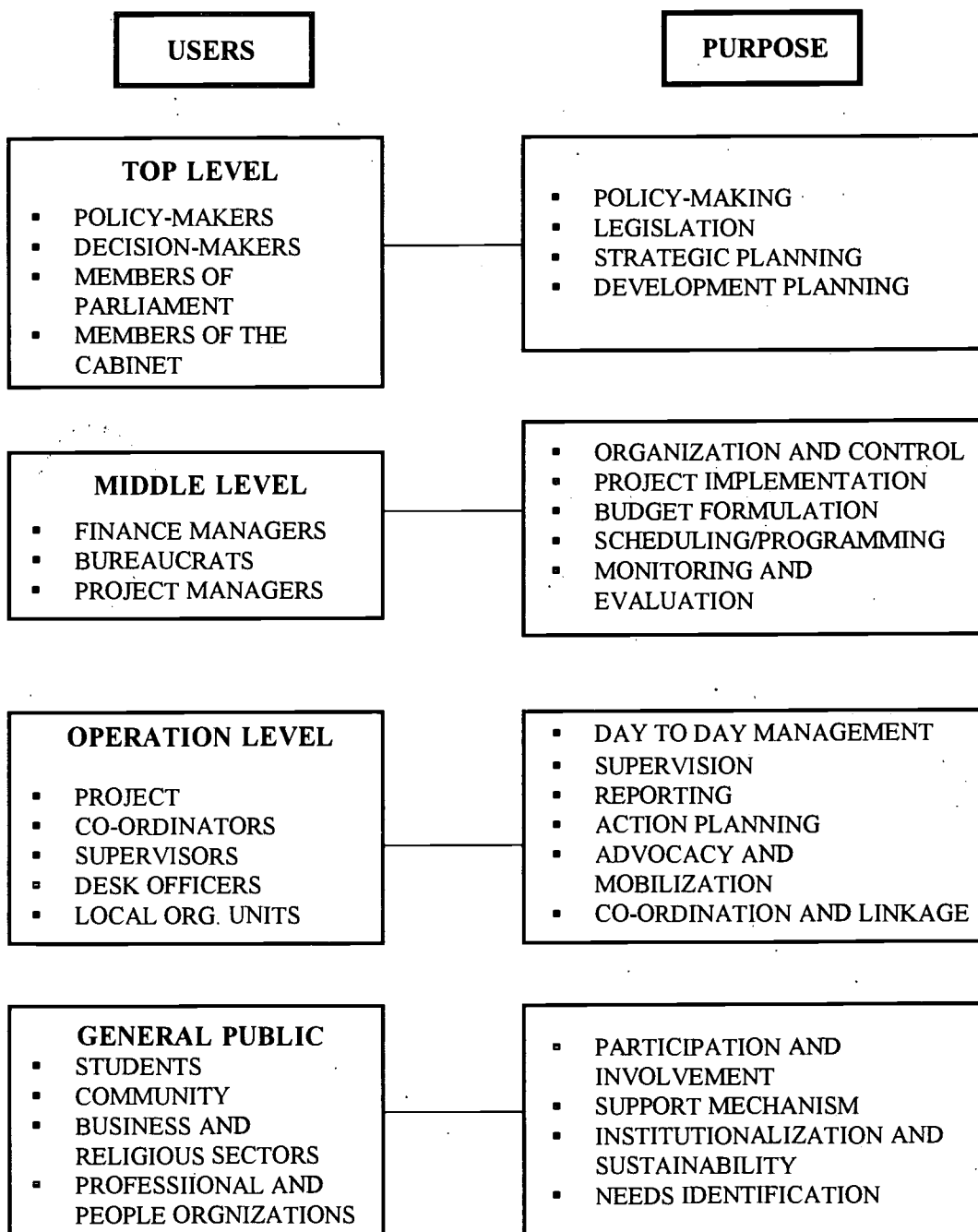
- The learners and their motivation
- The functioning of the literacy programme
- The effects of the literacy programme

A good evaluation report should contain the most important information necessary for a reader to understand the whole programme and the evaluation work. In other words, the audience should know exactly what was done and how, using what samples and what instruments, and what conclusions were drawn. The reader should also be able to draw independent and alternative conclusions based on the collected data.

### 8.3 Target Groups of Evaluation Reports

It is necessary to develop a plan for the dissemination of the evaluation findings. A central concern is to carefully study the audience's interests and needs. It is a fact that different publics have different concerns and levels of sophistication when it comes to understanding data. For example, the Board of Education at the district level could be less interested in the details of the evaluation experience but could be more interested in changes and improvements of the programme. Thus it is important to differentiate users and the purposes for which data are to be used. The figure below shows an example.

**Figure 8.1 Levels and Types of Users and the Purposes for which Data Are To Be Used**



## 8.4 Factors Affecting the Use of Evaluation Results

Evaluation is the systematic process of collecting and analyzing data in order to make decisions. Thus the results of evaluation can be used by a variety of groups or individuals for making decisions concerning the effectiveness and efficiency of a literacy or a continuing education programme. There is a considerable concern among evaluators about evaluation results being ignored. How useful results are obviously depends to a great extent on how they are used. If the results are viewed as being valuable sources of input and are studied carefully, they can lead to improved decision making at all levels.

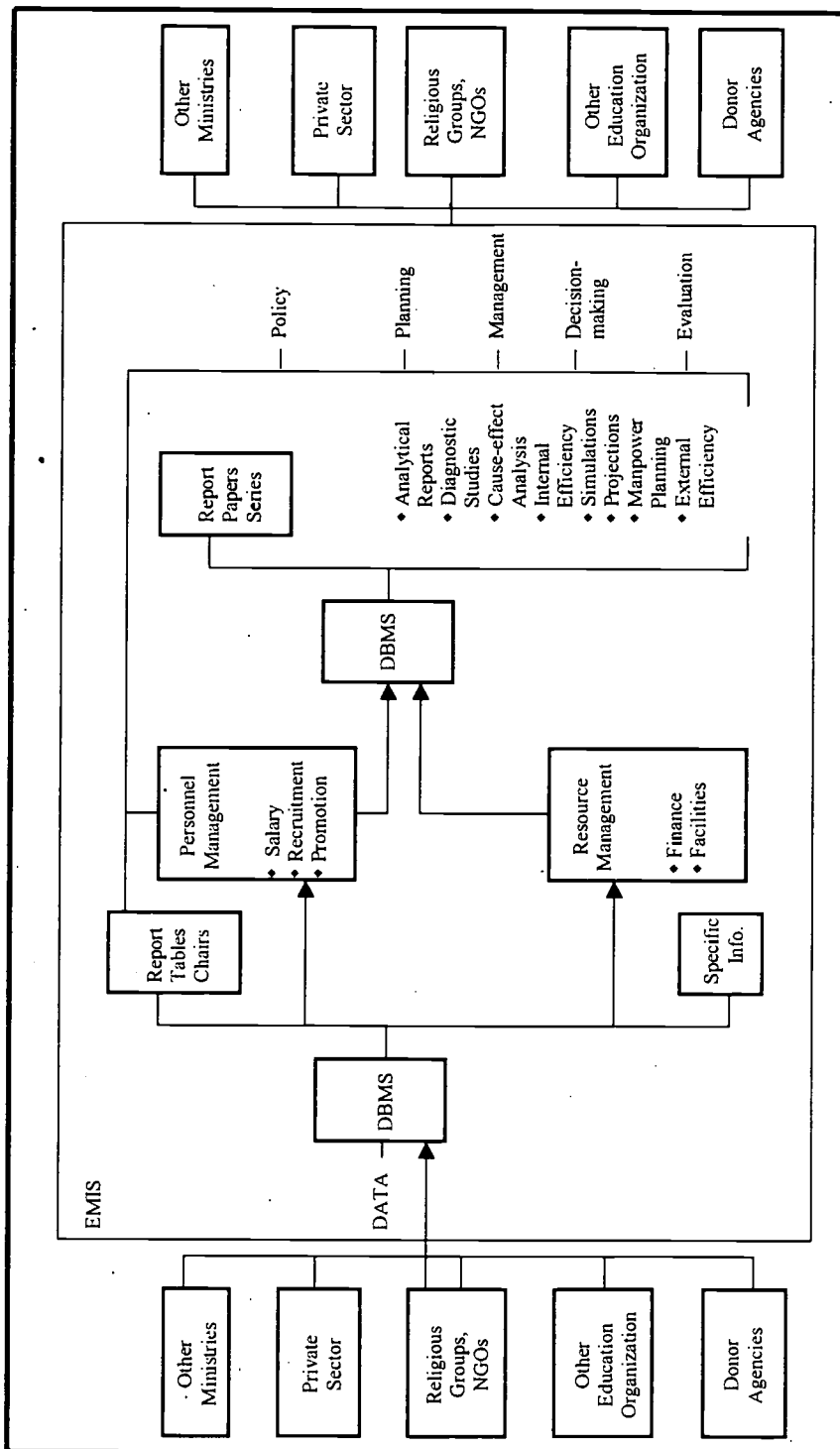
In reality, there are many factors that can affect the use of evaluation results, including the following:

- ◆ *Pre-existing evaluation constraints.* Even before an evaluation begins to take place, some events already roughly influence the scope and direction of the evaluation.
- ◆ *Orientation of the users.* The interests and attitudes of the users of evaluation are central. Potential users of evaluation results have many varied questions or concerns about the programme being evaluated. Thus the effective path to utilization is to produce information about matters of clear interest or concerns to users.
- ◆ *Evaluator's approach.* Each evaluator has his or her own evaluation styles and methods. The approach could exert a strong and guiding influence on the evaluation.
- ◆ *Information content and reporting.* A written report may be laden with evaluation information such as quantitative data, statistical analyses and conclusions about the programme. But there may be multiple evaluation reports, not simply a single report. There are many presentations that can also be considered reports in the sense of disseminating information. Therefore, the format in which the information is presented is also a significant influencing factor.

## 8.5 Database Management System

In order to give the users easy access to evaluation results and to help them use the evaluation information effectively, it is necessary to build a Database Management System (DBMS). The DBMS is responsible for the organized input, storage and retrieval of data. The role of a DBMS is described in Figure 8.2. Other pertinent information on an EMIS is discussed in Chapter Four of this manual.

**Figure 8.2 Role of the Database Management System within the General Structure of an EMIS**



## REFERENCES AND SUGGESTED LITERATURE FOR FURTHER READING

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Railey C.A. and D.L. Nuttall, 1994: *Measuring Quality, Education Indicators*. The Jalmer Press.

Windham D.M., 1992: *'Education for All' Indicators, A Proposed Framework, Manual, and Implementation Plan*. UNICEF, New York, USA.

# APPENDICES



## Appendix I

# SAMPLE FORMS FOR DATA COLLECTION IN MONITORING

## A. SAMPLE SURVEY QUESTIONNAIRE

The Literacy Coordinating Council (LCC) is currently conducting a mid-term evaluation of the Comprehensive Education and Community Development Programme (CECDP) – Valencia Project. The overall objectives are to know the status of the project and to identify factors which may affect its success and sustainability. One of our evaluation methodologies is this survey questionnaire.

You have been selected as one of the respondents of our survey. We will appreciate it if you can take time out to complete this questionnaire. Your answers will be kept **strictly confidential**.

### I. Socio-demographic Profile

1. Names (optional): \_\_\_\_\_
2. Age: \_\_\_\_\_
3. Sex:  M  F
4. Occupation (title/designation): \_\_\_\_\_
5. Average monthly income: \_\_\_\_\_
6. Length of residence in the area: \_\_\_\_\_

### II. Development of Programme Continuum

1. What is your official designation in the CECDP?

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2. Who appointed/designated you to the CECDP?

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3. How many months have you been involved in the project?

- 1 to 3 mos.
- 4 to 6 mos.
- 7 to 10 mos.
- 11 mos. - above

4. Please put a check (✓) mark before the statements which best describe the objectives of the project?

- increase agricultural productivity and income of rural farmers/families
- promote Valencia as a tourist destination
- reduce illiteracy
- serve as extension community (social laboratory) of the UP system
- serve as pilot area for educational innovations
- provide livelihood and entrepreneurship training
- set up barangay learning centers
- develop social consciousness among the people of Valencia
- organize community organizations

5. Do you think the program addresses the needs of Valencia?

- Yes                       No                       I don't know

5.1 What are some of the priority needs not addressed by the project, if any?

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6. CECDP is a model in "integrated" development programmes. Which of the following statements best describes an integrated approach? (Please choose one (1) only)

- The project has many components
- The project covers the entire community
- The project is linked with the national/municipal development plan
- The project has various interrelated components
- The project is parts of the Social Reform Agenda (SRA)

### III. Programme Clientele, Requirements and Resources

1. Do community members participate in the project?
  - Yes (Please proceed to No.2)     No (Please proceed to No.3)
  - I don't know
  
2. How do they participate?
  - attend (planning) meetings
  - give financial support
  - give free labour
  - give equipment/facilities/materials  
(please specify \_\_\_\_\_)
  - participate in surveys
  - attend trainings/seminars
  - join organizations formed by the project
  - others, please specify \_\_\_\_\_
  
3. In what other ways can community members participate in project activities? (Aside from those mentioned above)
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
  
4. What sectors of the community can still be mobilized to participate and support the project?
 

|  |  |
|--|--|
| <input type="checkbox"/> Youth           | <input type="checkbox"/> Professionals     |
| <input type="checkbox"/> Women           | <input type="checkbox"/> Business/Industry |
| <input type="checkbox"/> Church/Religion | <input type="checkbox"/> Academe/Schools   |
| <input type="checkbox"/> Local NGOs/POs  | <input type="checkbox"/> Local mass media  |

### IV. Development of Literacy/Training Materials

1. Are you familiar with the learning modules produced for this project?
  - Yes                                       No

2. If yes, what are the subject matters/topics of these modules? (Please enumerate)

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3. Please put a check (✓) mark before the statements which accurately describe the module development process.

- The modules are relevant to the needs of the community
- The modules are easy to read and understand
- The module lessons are practical (easy to apply)
- Intended beneficiaries use the module
- External agencies helped prepare the module
- The modules were written by local experts
- The modules can have a long life span

## V. Organization and Management

1. Please put a check (✓) mark to the statement which best describes the project's organizational structure.

- structure is still evolving
- well-defined with clear functions and responsibilities
- not defined at all

2. How would you describe the planning and decision-making process?

- top-down (centralized)
- participatory (decentralized)

3. What are the roles/contributions of the following agencies to the project?

Literacy Co-ordinating Council

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## Local Government Unit (Municipality of Valencia)

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## DECS – Division of Negros Oriental

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## University of the Philippines System

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4. Does the project provide you an opportunity to learn/acquire new knowledge/skills?

Yes                       No                       I don't know

5. If yes, in what areas?

- Community Development
- Rapid Community Assessment
- Monitoring and evaluation
- Planning
- Networking
- Conducting trainings/seminars/meetings
- Writing modules
- Social (community) mobilization and advocacy
- Integrated Development
- Social Reform Agenda
- Technology (in agriculture, environment, tourism, health, education, etc.)

Others, please specify

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6. Do you think CECDP is sustainable?

Yes

No

I don't know

7. What strategies can you suggest to ensure the sustainability of the project?

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Thank you for your co-operation.

| <b>B. WEEKLY SELF-EVALUATION SHEET <u>1ST WEEK</u></b> |                  |             |                |             |             |
|--|------------------|-------------|----------------|-------------|-------------|
| <b>WEAVING SKILLS DEVELOPMENT</b>                      | <b>Excellent</b> | <b>Good</b> | <b>Average</b> | <b>Fair</b> | <b>Poor</b> |
| Natta  |                  |             |                |             | ✓           |
| Somchit  |                  |             |                | ✓           |             |
| Pimpa  | ✓                |             |                |             | ✓           |
| Sukon  |                  |             |                |             |             |
| Nipa   |                  | ✓           |                |             | ✓           |
| Sakorn   |                  |             |                |             |             |
| Ubon   |                  | ✓           |                |             |             |
| Prapim   |                  |             | ✓              |             |             |
| Saengdee   |                  |             |                |             | ✓           |
| Supa   | ✓                |             |                |             |             |
| Payao  |                  | ✓           |                |             |             |
| Vanida   |                  |             |                |             | ✓           |
| Tanom  |                  |             |                |             | ✓           |
| Surat  |                  |             |                |             | ✓           |
| Porjal   |                  | ✓           |                |             |             |
| Srinuan  |                  |             |                | ✓           |             |
| Watana   |                  |             |                | ✓           |             |
| Pratoom  |                  |             |                |             | ✓           |
| Nongnuj  |                  |             |                | ✓           |             |
| <b>Total</b>   | <b>2</b>         | <b>4</b>    | <b>1</b>       | <b>4</b>    | <b>8</b>    |

Source: Patchanee Natpracha and Alexandra Stephens. *Taking Hold of Rural Life*. FAO of the U.N. Regional Office for Asia and the Pacific (RAPA) Bangkok 1990.

## C. PROBLEM STUDY QUESTIONNAIRE

The Problem Study Questionnaire included here was designed for use with women in rural areas and is reproduced in M. Bazany, *Work-Oriented Adult Literacy in Iran: An Experiment*, (Final Technical Report), Vol. III, Part IV.2, *Work-Oriented Adult Literacy Project (WOALP) Esfahan/Iran 1973*.

The instrument was designed by the Iran project for use in interviews to collect information on vocational and specific related interests of rural women to be the basis for preparing need-based materials for use in family planning programmes.

**Source:** Josef Muller and Anja Dietrich: *Dossier of Evaluation Instruments for Literacy Programmes* Center for Education Science and Documentation, Bonn Federal Republic of Germany 1989.

### Rural Areas

1. Name of the interviewed: \_\_\_\_\_ First name: \_\_\_\_\_
2. Age: \_\_\_\_\_
3. Marital status:  married  single  divorced  widowed
4. Number of children: \_\_\_\_\_  males  females
5. Literacy:  can sign his name  can read the Quoran  
 read a little  read and write a little  read and write
6. Main occupation: \_\_\_\_\_
7. Where do you work (location): \_\_\_\_\_
8. How many hours per day do you work in this job: \_\_\_\_\_
9. Do you have any other work besides this job:  yes  no  
 If yes, what is it: \_\_\_\_\_
10. Where is it (location)? \_\_\_\_\_
11. How many hours per day do you work in this job: \_\_\_\_\_
12. Are you interested in participating in any literacy class:  yes  no
13. Do you think you will be able to spare time to attend such a literacy class:  
 yes  no
14. If interested, what time of day would be most suitable for you: \_\_\_\_\_



15. If besides literacy some technical (vocational) skills would be taught, what skills would you be interested in: (e.g. modern agricultural techniques, cattle husbandry, poultry, welding etc.)
16. For what reasons would you like to learn these skills (the skills that the interviewee has indicated): \_\_\_\_\_
17. Do you think there is any other job in which you might earn more money:  
 yes       no
18. If yes, what type of job is it: \_\_\_\_\_
19. Do you plan to change your present job in the future:       yes       no
20. If yes, what type of job would you go to (take up): \_\_\_\_\_
21. Why do you want to change your present job? \_\_\_\_\_  
 \_\_\_\_\_
22. If some classes for men would be opened in your village, do you think the villagers would be interested:       yes       no       don't know
23. If some classes for women should be opened in your village, do you think the women would be interested:       yes       no
24. What kind of skills do you think should be taught to the villagers:  
 For men: \_\_\_\_\_ For women: \_\_\_\_\_  
 If interviewee is married: \_\_\_\_\_
25. How many of your children are going to school:  
 If answer is "none", why: \_\_\_\_\_  
 \_\_\_\_\_
26. Is your wife       literate       illiterate
27. If your wife is not literate, are you interested in sending her to a literacy class:  
 yes       no Why? \_\_\_\_\_  
 \_\_\_\_\_
28. If besides literacy, some skills are taught, what skills do you think your wife should learn: \_\_\_\_\_  
 \_\_\_\_\_
29. Do you think your wife herself would be interested in learning literacy combined with practical skills:       yes       no  
 If interviewee is a farmer: \_\_\_\_\_
30. How much land do you own (in hectares): \_\_\_\_\_

31. How many plots do you have: \_\_\_\_\_

32. How much land do you actually cultivate: \_\_\_\_\_

33. How often do you usually plant and harvest per year: \_\_\_\_\_

34. What crops are you growing:

|    | <u>Type</u> | <u>Amount of hectares used</u> |
|----|-------------|--------------------------------|
| 1. | _____       | _____                          |
| 2. | _____       | _____                          |
| 3. | _____       | _____                          |
| 4. | _____       | _____                          |
| 5. | _____       | _____                          |
| 6. | _____       | _____                          |

35. Where do you sell your harvest? \_\_\_\_\_

## D. MONTHLY REPORT

**by Supervisor**  
**(To be filled by the Supervisor and sent to the Project Officer)**

Month ending: \_\_\_\_\_ Year: \_\_\_\_\_

Name of Supervisor: \_\_\_\_\_

1. Number of instructors/instructresses at the end of the month:  Male  Female
2. Instructors/instructresses who dropped out during the month

| Name of instructor/instructress                |   |                     |    | Reasons                              |
|--|---|---------------------|----|--------------------------------------|
|  |   |                     |    |                                      |
|  |   |                     |    |                                      |
|  |   |                     |    |                                      |
|  |   |                     |    |                                      |
| 3. Classes which discontinued during the month |   |                     |    |                                      |
| Name of Class                                  | M | F                   | MF | Reasons                              |
|  |   |                     |    |                                      |
|  |   |                     |    |                                      |
|  |   |                     |    |                                      |
|  |   |                     |    |                                      |
| 4. Report on Attendance                        |   |                     |    |                                      |
| Comments: _____                                |   | Action taken: _____ |    | Proposals for remedial action: _____ |
|  |   |                     |    |                                      |
|  |   |                     |    |                                      |

5. Materials needed (please specify): \_\_\_\_\_

6. Instructors received Honorarium up to the month of: \_\_\_\_\_  
 Comments: \_\_\_\_\_

7. Any other comments: \_\_\_\_\_

Date: \_\_\_\_\_ Signature of Supervisor: \_\_\_\_\_

**by Instructor**  
**(To be completed by Instructor and submitted to Supervisor)**

1. At the end of the month of: \_\_\_\_\_ Year: \_\_\_\_\_
2. Village: \_\_\_\_\_
3. Name of Instructor: \_\_\_\_\_
4. Group name \_\_\_\_\_
5. Number of learners at the end of the month:  Male  Female
6. Total number of lessons held per month: \_\_\_\_\_
7. Number of learners who absented the whole month:  Male  Female
8. Number of learners who discontinued:  Male  Female
9. Average monthly attendance: \_\_\_\_\_
10. Equipment required: \_\_\_\_\_
11. Number of days supervisor visited class: \_\_\_\_\_  
Number of days extension agents visited class: \_\_\_\_\_
  - a) Agriculture extension agent: \_\_\_\_\_
  - b) Health extension agent: \_\_\_\_\_
  - c) Home economics worker: \_\_\_\_\_
  - d) Others (name): \_\_\_\_\_
12. Last lesson taught at the end of the month: \_\_\_\_\_
13. What was done to reduce learner drop-out? What was done to bring back drop-outs to the class? \_\_\_\_\_
14. Comments: \_\_\_\_\_
15. When was the last Honoraria paid: \_\_\_\_\_
16. Literacy Committee Chairman's comments: \_\_\_\_\_
17. Chairman's Signature: \_\_\_\_\_ Date: \_\_\_\_\_
18. Instructors Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## Appendix II

### SAMPLE FORMS FOR REPORTING INFORMATION ON MONITORING

#### A. MONTHLY REPORT

Province and district: \_\_\_\_\_ Year: \_\_\_\_\_ Instructor: \_\_\_\_\_  
 Month: \_\_\_\_\_ Supervisor: \_\_\_\_\_  
 Group No.: \_\_\_\_\_

\*\*\*\*\*

#### A Statistics

- a) Number of sessions planned, held: \_\_\_\_\_
- b) Number of registrations in the batch: \_\_\_\_\_  
 Number additional registrations: \_\_\_\_\_  
 Number of registrations at the end of the month: \_\_\_\_\_
- c) Number of absences by sex and age:

| Men   |       |      | Women |       |      | Total |
|-------|-------|------|-------|-------|------|-------|
| 15-24 | 25-45 | - 45 | 15-24 | 25-45 | - 45 |       |
|       |       |      |       |       |      |       |

- d) Number of absences by cause:

| W | H | T | F | D | C | N | Total |
|---|---|---|---|---|---|---|-------|
|   |   |   |   |   |   |   |       |

**Cause-of-absence code:**

- W = Work
- H = Health
- T = Travel, emigration, seasonal migration
- F = Traditional holidays or festivals
- D = Domestic reasons, children, etc.
- C = Climate, bad weather
- N = Unidentified, etc.

**B. Visits by Supervisor**

During the month (dates): \_\_\_\_\_

Total number of visits since the beginning of the courses: \_\_\_\_\_

**C. Teaching Material Received**

Individual (type and quantity): \_\_\_\_\_

Collective (type and quantity): \_\_\_\_\_

For instructor's use (type and quantity): \_\_\_\_\_

Audio-visual (type and quantity): \_\_\_\_\_

**D. Assistance Received**

Foodstuffs (quantity): \_\_\_\_\_

Overtime: \_\_\_\_\_

Working hours: \_\_\_\_\_

Fertilizers, pesticides, seeds, plants, etc.: \_\_\_\_\_

Other: \_\_\_\_\_

**E. Budget**

a) Salaries: \_\_\_\_\_

b) Bills settled (maintenance, neating, electricity, cleaning materials, etc.)

## B. MONTHLY SUMMARY REPORTS

Project Name: \_\_\_\_\_

Project Location: \_\_\_\_\_ Month: Sep./97

## L.D.1. Average Attendance of Learners in Class

| Average Attendance        | Programme   |     |               |     |               |     |            |       |       |       |                |       |
|---------------------------|-------------|-----|---------------|-----|---------------|-----|------------|-------|-------|-------|----------------|-------|
|                           | Pre-Primary |     | Early Primary |     | Second Chance |     | Adolescent |       | Adult |       | All Programmes |       |
|                           | no          | %   | no            | %   | no            | %   | no         | %     | no    | %     | no             | %     |
| 80% and above             | 0           | 0.0 | 0             | 0.0 | 0             | 0.0 | 23         | 92.0  | 52    | 69.3  | 75             | 75.0  |
| 70 - 79 %                 | 0           | 0.0 | 0             | 0.0 | 0             | 0.0 | 2          | 8.0   | 20    | 26.7  | 22             | 22.0  |
| 60 - 69 %                 | 0           | 0.0 | 0             | 0.0 | 0             | 0.0 | 0          | 0.0   | 1     | 1.3   | 1              | 1.0   |
| 50 - 59 %                 | 0           | 0.0 | 0             | 0.0 | 0             | 0.0 | 0          | 0.0   | 0     | 0.0   | 0              | 0.0   |
| Below 50%                 | 0           | 0.0 | 0             | 0.0 | 0             | 0.0 | 0          | 0.0   | 2     | 2.7   | 2              | 2.0   |
| <b>Total</b>              | 0           | 0.0 | 0             | 0.0 | 0             | 0.0 | 25         | 100.0 | 75    | 100.0 | 100            | 100.0 |
| <b>Average Attendance</b> |             |     |               |     |               |     | 22.1       |       | 20.2  |       | 20.7           |       |

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Project Name: \_\_\_\_\_

Project Location: \_\_\_\_\_

Month: June/97

**L.D.3. Grades Achieved by Learners**

| Learner Grades | Programme   |     |               |     |               |     |            |     |       |       |                |       |
|----------------|-------------|-----|---------------|-----|---------------|-----|------------|-----|-------|-------|----------------|-------|
|                | Pre-Primary |     | Early Primary |     | Second Chance |     | Adolescent |     | Adult |       | All Programmes |       |
|                | no          | %   | no            | %   | no            | %   | no         | %   | no    | %     | no             | %     |
| Grade A        | 0           | 0.0 | 0             | 0.0 | 0             | 0.0 | 0          | 0.0 | 17    | 68.0  | 17             | 68.0  |
| Grade B        | 0           | 0.0 | 0             | 0.0 | 0             | 0.0 | 0          | 0.0 | 4     | 16.0  | 4              | 16.0  |
| Grade C        | 0           | 0.0 | 0             | 0.0 | 0             | 0.0 | 0          | 0.0 | 4     | 16.0  | 4              | 16.0  |
| Grade D        | 0           | 0.0 | 0             | 0.0 | 0             | 0.0 | 0          | 0.0 | 0     | 0.0   | 0              | 0.0   |
| Grade E        | 0           | 0.0 | 0             | 0.0 | 0             | 0.0 | 0          | 0.0 | 0     | 0.0   | 0              | 0.0   |
| Grade F        | 0           | 0.0 | 0             | 0.0 | 0             | 0.0 | 0          | 0.0 | 0     | 0.0   | 0              | 0.0   |
| Total          | 0           | 0.0 | 0             | 0.0 | 0             | 0.0 | 0          | 0.0 | 25    | 100.0 | 25             | 100.0 |

**L.D.4. Skills Achieved by Learners**

| Programme     | Total Learners | Skills  |      |         |      |       |      |                |      |                |      |
|---------------|----------------|---------|------|---------|------|-------|------|----------------|------|----------------|------|
|               |                | Reading |      | Writing |      | Maths |      | Functional Kn. |      | Practical App. |      |
|               |                | no      | %    | no      | %    | no    | %    | no             | %    | no             | %    |
| Pre-Primary   | 0              | 0       | 0.0  | 0       | 0.0  | 0     | 0.0  | 0              | 0.0  | 0              | 0.0  |
| Early Primary | 0              | 0       | 0.0  | 0       | 0.0  | 0     | 0.0  | 0              | 0.0  | 0              | 0.0  |
| Second Chance | 0              | 0       | 0.0  | 0       | 0.0  | 0     | 0.0  | 0              | 0.0  | 0              | 0.0  |
| Adolescent    | 0              | 0       | 0.0  | 0       | 0.0  | 0     | 0.0  | 0              | 0.0  | 0              | 0.0  |
| Adult         | 25             | 20      | 80.0 | 20      | 80.0 | 19    | 76.0 | 20             | 80.0 | 18             | 72.0 |
| Total         | 25             | 20      | 80.0 | 20      | 80.0 | 19    | 76.0 | 20             | 80.0 | 18             | 72.0 |



## Appendix III

### SAMPLE EVALUATION TOOLS

#### A. EVALUATION INSTRUMENT

*(Excerpts from an Evaluation Instrument of  
a Literacy Programme in Malawi)*

**BOM LA MALAWI**  
Government of Malawi

**SUKULU ZAKWACHA**  
National Adult Literacy Programme

**MAYESO A OPHUNZIRA**  
Learner assessment (Tests)

**LAR/1**

Learner Assessment Reading, Section 1

**Dzina la Ophunzira**  
Name of learner

**Mwamuna/Mkazi**  
Male/Female

**Dzina la kalasi**  
Name of centre/class

**KUWERENGA**  
Reading

**(Agwiritse Ntchito m'phunzitsi pochonga mawu ndi ziganizo zowerengedwa molondola)** This is used by the instructor when marking/ticking words and sentences correctly read.

|  |                               |   |   |                               |
|--|-------------------------------|---|---|-------------------------------|
| <b>A. Munda</b><br>garden/field  | <b>fetereza</b><br>fertilizer | <b>ukhondo</b><br>hygiene/<br>cleanliness | <b>chikondwerero</b><br>celebration/<br>festivity | <b>nkhokwe</b><br>grain-store |
| <b>B. Mwana wagwa panjinga.</b><br>A Child has fallen from a bicycle.  |                               |   |   |                               |
| <b>Kafumbwefumbwe waononga chimanga.</b><br>Weevils have spoiled maize.  |                               |   |   |                               |
| <b>C. Munthu waukhondo amayamba wasamba m' manja asanadye chilichonse</b><br>A clean person washes hands before eating anything. |                               |   |   |                               |
| <b>Amatero pofuna kupewa matenda osiyanasiyana.</b><br>He/she does so as to prevent different diseases.                          |                               |   |   |                               |

**Kuwerenga ndi kuyankha mafunso**

Reading and answering questions.

**Matenda otsegula m'mimba ndioopsa makamaka kwa ana.**

Diarrhoeal diseases are very dangerous especially for children.

**Mwana atadwala matendawa tingachitepo kanthu tisanapite naye kuchipatala.**

When a child suffers from such diseases we can do first aid for going to hospital with the child.

**Njira yake nayi: Titenge lita imodzi yamadzi ophitsa.**

The method is as follows: We should have one litre of boiled water:

**Tithire suga wokwana zitsekelo za fanta kapena za kokakola zisanu ndi zitanu.**

Add 8 Fanta or Coke bottle tops full of sugar.

**Tithirensa mchere wokwana chitsekelo chimodzi.**

Also add salt one bottle top full.

**Tizimumwetsa mwanayo kawirikawiri mpaka atamaliza litayo patsiku.**

We should give the child as often as possible until the solution is finished in a day.

**Tikatero tithandiza kubwezera madzi amene akutayika postsegulapo.**

If we do this, we help the child to regain fluids lost or being lost as a result of the purging/diarrhoea.

1. **Kodi m'madzi opatsa mwana wotsegula m'mimba tithiremo zinthu ziti?**  
What things should we add to water which is given to a child with diarrhoea?

2. **Nanga zinthuzo zikhale zochuluka motani pa lita imodzi?**  
How much should each of the things be?

3. **Nchifukwa ninji mwana otsegula m'mimba tizimpatsa madzi oterewa?**  
Why should we give a child with diarrhoea such water?

**BOMA LA MALAWI**  
Government of Malawi

**SUKULU ZAKWACHA**  
National Adult Literacy Programme

**MAYESO A OPHUNZIRA**  
Learner assessment (Tests)

**LAR/2**

Learner Assessment Writing, Section 2

**Dzina la Ophunzira**  
Name of learner

---

**Mwamuna/Mkazi**  
Male/Female

---

**Dzina la kalasi**  
Name of centre/class

---

**LEMBETSO**  
Dictation

|  |
|--|
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|  |
|  |

**BOMA LA MALAWI**  
Government of Malawi

**SUKULU ZAKWACHA**  
National Adult Literacy Programme

**MAYESO A OPHUNZIRA**  
Learner assessment (Tests)

**LAR/3**

Learner Assessment Arithmetic, Section 3

**Dzina la Ophunzira**

Name of learner \_\_\_\_\_

**Mwamuna/Mkazi**

Male/Female \_\_\_\_\_

**Dzina la kalasi**

Name of centre/class \_\_\_\_\_

**MASAMU**

Arithmetic

|                |                |                |                |
|----------------|----------------|----------------|----------------|
| $9 + 5 =$      | $12 + 4 =$     | $14 + 16 =$    | $11 + 22 =$    |
| $5 - 3 =$      | $15 - 7 =$     | $64 - 34 =$    | $17 - 7 =$     |
| $9 \div 3 =$   | $12 \div 4 =$  | $88 \div 8 =$  | $9 \div 9 =$   |
| $3 \times 4 =$ | $7 \times 2 =$ | $2 \times 1 =$ | $7 \times 7 =$ |

1. **A Phiri ali ndi mbuzi 3, ng'ombe 5 ndi nkumba 8.**

Mr. Phiri has 3 goats, 5 cattle and 8 pigs.

**Kodi a Phiri ali ndi ziweto zingati?**

How many animals (livestock) has Mr. Phiri?

\_\_\_\_\_

2. **Paulo chaka chatha adapeza matumba 4 a chimanga.**

Paul got/harvested 4 bags of maize last year.

**Chaka chino anathira fetereza ndipo anapeza matumba 8.**

This year he had applied fertilizer and so he has harvested 8 bags.

**Kodi chaka chino anapeza matumba angati kuposa chaka chatha?**

How many bags more than last year has he harvested this year?

3. **A Banda adali ndi matumba a chimanga amene adagulitsa K 13.00 thumba lililonse, mbatata matumba 6 amene adagulitsa K 2.00 thumba lililonse, ndiponso matumba 4 a nyemba omwe adagulitsa K 30.00 thumba lililonse.**

Mr. Banda had bags of maize which he sold at K 13.00 per bag, 6 bags of potatoes which he sold at K 2.00 per bag, and also 4 bags of beans which he sold at K 30.00 per bag.

- a) **Kodi pa matumba 10 a chimanga a Banda adapeza ndalama zingati?**

How much money did Mr. Banda make out of 10 bags of maize? .

---

- b) **Nanga pa matumba a chimanga 10, a mbatata 6, a nyemba 4, adapeza ndalama zingati zonse pamodzi?**

How much money altogether did he make from 10 bags of maize, 6 bags of potatoes, and 4 bags of beans?

---

- c) **Akadakhala kuti a Banda sanalime mbatata akadapeza ndalama zingati?**

If Mr. Banda had not planted/grown potatoes, how much would he have got?

---

- d) **Pa ndalama zonse zomwe adapeza adachotsapo K. 100.00 zomwe adakagula makasu.**

Out of all the money he realised, he used K 100.00 to buy hoes.

**Nanga zomwe zidatsala ndi zingati?**

What was his balance?

---

*(Excerpts from the CECDP Evaluation Instrument)***I. Degree to which Activities have been Completed  
According to Work Plan**

| Activities in Work Plan  | Completed<br>A | Partially<br>Completed<br>B | Not<br>Completed<br>C | Reasons<br>for<br>Item C |
|--|----------------|-----------------------------|-----------------------|--------------------------|
| 1. Curriculum Development<br>No. types of modules<br>No. of modules prepared<br>No trained<br>Subject areas<br>No. being utilized  |                |                             |                       |                          |
| 2. Resources/Manpower<br>Actors/Materials<br>Local gov't officials<br>Barangay officials<br>School officials<br>Students   |                |                             |                       |                          |
| 3. Development, Planning and<br>Organization of Management,<br>Technical and Consultants<br>Available development plan<br>Available community profile<br>Available plan of technical profile |                |                             |                       |                          |
| 4. Capability Building/Training<br>Availability of trained personnel<br>Availability of local trainers   |                |                             |                       |                          |
| 5. Implementors/Beneficiaries/NGO/<br>Technical<br>Local officials<br>Barangay officials<br>Community people   |                |                             |                       |                          |
| 6. Documentation/Reports/Information<br>Progress reports<br>Regular reports<br>Brochures, etc.   |                |                             |                       |                          |
| 7. Monitoring and Evaluation<br>Task Force for M and E<br>Independent team   |                |                             |                       |                          |

## II. Benefits derived from the Programme Activities

| Category  | Fully<br>(A) | Partially<br>(B) | No Benefit<br>(C) | Reasons<br>for<br>Item (C) |
|---|--------------|------------------|-------------------|----------------------------|
| <p>1. <b>Agriculture</b></p> <p>Increase productivity<br/>Increased income<br/>Use of modern farming techniques</p>   |              |                  |                   |                            |
| <p>2. <b>Literacy</b></p> <p>Increase no. of literates<br/>Increase no. of literacy trainers<br/>Increased skills</p>   |              |                  |                   |                            |
| <p>3. <b>Health and Other Social Services</b></p> <p>Increased no. of mothers accessing<br/>the social services<br/>Increased immunization of<br/>children<br/>Reduction of morbidity and<br/>mortality</p> |              |                  |                   |                            |
| <p>4. <b>Eco-Tourism</b></p> <p>Development of new tourist sites<br/>Increased livelihood opportunities<br/>Greater sustainable development</p>   |              |                  |                   |                            |
| <p>5. <b>Actors</b></p> <p>CECDP Valencia<br/>LCC<br/>UP-ERP<br/><br/>DECS Division Office</p>  |              |                  |                   |                            |

### III. Programme Effectiveness (Degree to which Project Has Achieved Immediate Objectives)

| Immediate Objectives   | Fully Achieved (A) | Partially Achieved (B) | Not Achieved (C) | Reasons for Item (C) |
|--|--------------------|------------------------|------------------|----------------------|
| <p><b>Progress/Performance</b></p> <p>1. Reduction of illiteracy in Valencia by 50 per cent</p> <p>2. Availability of functional Barangay Learning Centres in 21 out of 24 Barangays by end of 1997 through Barangay cluster, etc.</p> <p>3. Increase Agricultural Productivity and Rural Income in Valencia</p> <p>4. Established eco-tourism sites</p> <p>5. Promotion/development of social consciousness among community</p> |                    |                        |                  |                      |

**Source:** Evaluation Instrument of the *Comprehensive Educational Community Development Programme (CECDP)*, Valencia, Negros Oriental, Philippines. The evaluation was conducted by the Technical Working Group of the Literacy Co-ordinating Council of the Philippines in 1997.



## B. QUESTIONNAIRE: SAMPLE

An example of a questionnaire used by an interview in a group setting.

Region: \_\_\_\_\_ Group's Name: \_\_\_\_\_  
 District: \_\_\_\_\_ Facilitator: \_\_\_\_\_  
 Village: \_\_\_\_\_ Date: \_\_\_\_\_

1. Age of members: \_\_\_\_\_
2. Sex of members:  Male  Female
3. Is this group a church group?  Yes  No
4. Has this group elected group leaders?  Yes  No
  - 4a. If yes, who are they? \_\_\_\_\_  Male  Female
5. When did this group start?  
 \_\_\_\_\_
6. How many members did the group have at the beginning?  
 \_\_\_\_\_
7. How many members have left?  
 \_\_\_\_\_
8. How many of the present members began with the group?  
 \_\_\_\_\_
9. How often do you meet?  
 \_\_\_\_\_
10. About how many members come to meetings?  
 \_\_\_\_\_
11. Which literacy lessons have you covered?  
 \_\_\_\_\_
12. Do you have a full-time facilitator?  Yes  No
  - 12a. How often do you see him? \_\_\_\_\_
  - 12b. How much time does he spend with you? \_\_\_\_\_
  - 12c. What do you do with him? What do you talk about with him?  
 \_\_\_\_\_

13. Do you have a volunteer facilitator?  Yes  No
- 13a. How often do you see him? \_\_\_\_\_
- 13b. How much time does he spend with you? \_\_\_\_\_
- 13c. What do you do with him? \_\_\_\_\_
14. Does the Village Development Committee know about your group?  Yes  No
- 14a. How do they know? \_\_\_\_\_
- 14b. What do they think about your group? \_\_\_\_\_
15. Have you begun any self-help projects?  Yes  No
- 15a. What are they? \_\_\_\_\_
- 15b. Did you finish it/them?  Yes  No
- 15c. If yes, how is it being  No  Other \_\_\_\_\_
- 15d. If not completed, why not? \_\_\_\_\_
- 15e. Did you have any problems with this project? \_\_\_\_\_
- 15f. Who worked on it?  Male  Female
- 15g. Who thought of the idea?  Male  Female
16. Do you have any other community project? \_\_\_\_\_
17. How can you prevent malaria? \_\_\_\_\_
18. How can you prevent crop disease? \_\_\_\_\_
19. How much power would you say you have to improve your life?
- much
  - quiet a bit
  - some
  - very little
  - none
20. How do you think rural people can gain power to improve their lives?
- \_\_\_\_\_
21. How can you prevent your children from getting malnutrition?
- \_\_\_\_\_

22. When should you begin to give solid food to a baby?

3 mos.

6 mos.

1 year

18 mos.

23. What do you do if your child gets diarrhea? \_\_\_\_\_

24. Do you think you can improve your income?  Yes  No

If yes, how? \_\_\_\_\_

25. What do you think can be done to improve the condition of feeder roads?  
\_\_\_\_\_

Prepared by  
World Education Inc. Monitoring Workshop Report, p. 54-6.

Source: Daniel Santo Pietro (ed) *Evaluation Source Book*. American Council of Voluntary Agencies for Foreign Service Inc. Second Impression, 1983.

## Appendix IV

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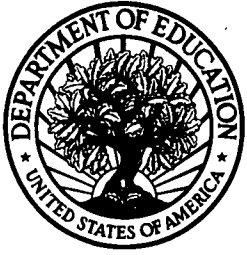
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