

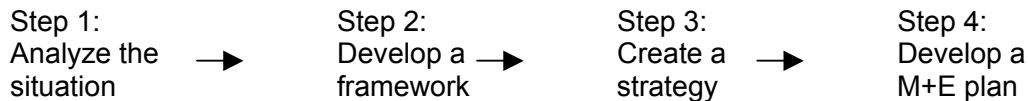
PART4 RESEARCH FOR TELECENTER PLANNING AND OPERATIONS¹

1. INTRODUCTION

In the development of your telecenter you will have to deal with several project development stages: project design, implementation, and evaluation.

Where do you start? The first step is to answer the question “Where are we now?” It involves the collection and analysis of information on the current situation in the community where a telecenter is being considered or already exists. This step is also known as a needs assessment.

The four steps of project design:



The next step – developing a framework – answers the question “Where do we want to go?” In this step you will develop a clear purpose and goals for your telecenter and define what you hope to achieve.

Next, you will need to create a strategy for your telecenter answering the questions “How do we get there?” This step will help to identify where in a community the telecenter should be located; what kind of hardware and software are needed; what kind of training should be offered; what kind of and how many staff to hire; what services to offer; how much to charge for the services; how to get volunteers from the community involved in managing the telecenter, etc.

Finally, you must develop a Monitoring and Evaluation system (M+E) that will be able to answer the question “How will we know when we get there and how are we doing?” This step will help to assess how well the telecenter is functioning and whether it is meeting the needs of the community.

1.1. What is this module about?

In this module we will focus on the first and last steps in the project cycle described above. Keep in mind that stages 2 and 3 are mostly covered in Module 5 (Strategies for Sustainability). First, we will answer the following questions regarding needs assessments and M+E:

- What are needs assessment and M+E systems?

¹ This is adapted from Module 3 of Royal D. Colle and Raul Roman, *A Handbook for Telecenter Staffs*. The full *Handbook* is available at <http://ip.cals.cornell.edu/commdev/handbook.cfm>.

- Why are they important?
- Why is participation so crucial in the processes?
- How do they fit into the larger context of project development and implementation?

We will then identify and describe some of the tools that are useful for conducting needs assessments and M+E. Various resources (books and websites) for further exploration of these topics are provided at the end of the module.

1.2. Participation, Needs Assessment, Monitoring and Evaluation

Participation

Of all the lessons learned over the past five decades of development practice perhaps the most important one is the need for participation of the proposed beneficiaries in any development effort. Beneficiary communities are in the best position to know what their needs are, what their resources are, and what direction they want to go. When these communities are involved in the various phases of a project – from needs assessment, to project design, to project implementation, to M+E – that project is far more likely to address their felt needs and they are far more likely to feel “ownership” of the project. On the other hand, if people from outside of the community control the entire process, the project is unlikely to address the genuine needs, or attract the attention, of the beneficiaries. As a result it will lack success and sustainability.

As you consider establishing and maintaining a telecenter in your community, consider this need for community involvement and ownership.

Needs Assessment

A needs assessment (or, “Where are we now?”) should always be the first step when designing a project. Taking the time to involve representatives of all potential telecenter users in deciding on its services will result in a telecenter that is used and supported by the community. The community should be equal partners in the needs assessment process and therefore assume equal responsibility for analyzing, planning, providing information, interpreting findings, and carrying out action strategies. It is very useful to form a steering committee that is made up of community representatives who can help you to facilitate the needs assessment process. Careful planning will help ensure that the right information is collected and in the most efficient way.

There are two main ways to approach a needs assessment – a strength-based approach, and a problem solving approach. Both, of course, involve stakeholders in the processes (those people who will be affected and who will influence the telecenter: community members; community organizations; schools; government officials; telecenter managers; telecenter volunteers; donors, etc.).

Strength-based approaches or “appreciative inquiry” emphasizes the positive attributes of the community and looks at what has worked well in the past. It motivates people and focuses on repeating successes. Information gathering begins by discovering what is working at the present time, what resources are already available in the community, and what assets exist for bringing about positive change. By thinking of and exploring what is good and successful, communities develop commitment, confidence, and energy for new efforts.

The *problem-solving approach* begins with communities analyzing their conditions and identifying problems that they want to change. In addition to uncovering and defining problems, the community attempts to diagnose the causes of these problems and to explore potential solutions. The approach you use – whether strength-based or problem-focused – will help determine the kinds of questions you ask when collecting information.

The three most common ways of collecting information are document reviews, interviews, and observations. Most practitioners recommend at least two or three sources for identifying needs. This is known as “triangulation” and helps to increase the quality of your research. Documents may include government development plans, sector-specific documents from the various government ministries, project or annual reports from various non-government or donor organizations, and other articles or reports. These documents can provide extensive information on various issues, needs, or problems in a country or region.

Interviews, observation, and various other participatory tools help to narrow the scope of issues that are important to the community. Simply spending time with community members and observing can provide a wealth of relevant information. For example, observing visitors at health clinics may suggest what groups do not get health services. Interviews with visitors may also reveal the range of health problems in the community, and for future reference, suggest information and communication resources that might support preventive medicine. It is important to know in advance what you want to learn and to keep records of what you observe. Note, also, that needs of communities will likely change over time and therefore needs assessments should be an ongoing process.

The tools for conducting needs assessments will be described in detail in section 2 of this module.

Monitoring and Evaluation (M+E)

Monitoring is an ongoing process that answers the question “How are we doing?” It tells us whether we are achieving the objectives of the project and can help us to improve the design or implementation of the project. Evaluation is generally done at a particular point in time – perhaps in the middle or at the end of a project – and can be done with the assistance of an external evaluator. It generally answers in greater depth the question, “What differences can we see as a result of our efforts?” It addresses the overall “value” and long-term impact of the project. M+E are tools – they are a means to an end and not ends in themselves.

The advantages of involving stakeholders in the various steps of the M+E process (planning, data collection, analysis, and using the results) are:

- providing more relevant and better quality information;
- the results more likely to be used by stakeholders;
- greater ownership of the project by stakeholders; and
- participants develop M+E skills.

Not all stakeholders will necessarily be involved with the entire M+E process and various stakeholders may be involved in different ways. It may be helpful to establish an M+E team from among the stakeholders. Selection of team members may depend on

their interests, skills, and availability, and can include members of the telecenter steering committee mentioned previously. The M+E team plans and implements M+E activities.

One of the most important ways for the community to be involved in M&E is determining appropriate *indicators* for measuring success. Indicators are markers that show progress and help to measure change. They are tools that help to answer M+E questions. There are both quantitative and qualitative indicators. Quantitative or numeric indicators show “how much” or “how many”, while qualitative indicators show how or why people think, feel, or behave in a particular way. For example, the users of the telecenter may decide on indicators that look at changes over time in:

- the number of people using the telecenter;
- the willingness of the community to volunteer to run the telecenter;
- the willingness of the community to pay for services.

If your telecenter is being used to disseminate information about agriculture then indicators for success may involve observing changes in agriculture practice, production, or marketing.

If one of the goals is to help increase literacy, then users of the telecenter may decide that an appropriate indicator is whether literacy among users is increasing or not. These are, of course, just a few examples. Final selection should be based on an indicator’s relevance to answering your M+E questions; its relevance to the activities of the telecenter; and the amount of expertise and effort needed to collect data. Ideally, final indicators should be relevant, specific, measurable, and observable.

A more detailed step-by-step description and the necessary tools for an M+E system will be provided in section 3 of this module.

2. NEEDS ASSESSMENT

The main purpose of a telecenter is to meet the needs of a community and, more directly, its information and communication needs. In order to serve a community, it is crucial to know their exact needs. And none is better able to assess these needs than the community itself. A needs assessment in the respective community must therefore be an initial step in the development and design of a telecenter.

The more participatory the needs assessment is conducted, the better it will be able to give a complete picture of the needs of the community.

The following are suggested steps for a telecenter needs assessment:

1. Identifying the users of the needs assessment: In the case of a telecenter, the users are both those who will act on the assessment – such as the manager, the volunteers, or a telecenter committee, as well as the users of the telecenter services.

2. Identifying uses: A needs assessment for a telecenter is most likely to be used for planning of telecenter services, which, in turn, relate to decisions about staffing, facilities and other aspects of the telecenter's operations.

3. Describing the context: What is the physical and social environment of the telecenter? Has the telecenter been operating for a long time? Is this an initial assessment or are you trying to verify the appropriateness of the telecenters services?

4. Identifying needs:

Descriptions of the circumstances/problems of the stakeholders. Suggestion of possible solutions to their needs and analysis of the likely effectiveness, feasibility, and utilization of these solutions.

5. Meeting needs:

Recommendations for actions based on the needs, problems, and solutions identified.

6. Communicating results and recommendations: Communicating the results to the stakeholders is an important element of the assessment.

Several techniques are suitable for a participatory needs assessment. The methods you use will depend on the particular situation within your community, your resources and the time frame.

The most important methods that will be described in some detail here are:

- Interviews
- Focus Groups
- Surveys

2.1. Interviews

Interviews are a widely used method for needs assessments, M + E, and in formal evaluations. Typically interviews take place in a face-to-face situation with one interviewer and one interviewee. There are several different types of interviews to be considered.

Open-ended or informal interviews: These interviews are free flowing and are conducted in a very conversational and informal manner. Open-ended interviews are useful for exploring ideas and hypotheses (assumptions). An example could be when an investigator (e.g. you as the telecenter manager) wants to learn about what is important to a particular community in the context of needs that might be provided by the telecenter. In this form open-ended interviews could be called “listening surveys.”

You could start an informal, open-ended interview by asking questions such as: "Please tell us about the community and its recent problems, and how you feel about them." You would listen carefully to the responses and follow-up with questions requesting clarifications, explanations or more details

Semi-structured interviews: These interviews are typically more structured than open-ended interviews. They generally consist of a series of open-ended questions asked in a pre-determined order. If an interviewee starts to cover a new area as a response to a question, then the interviewer keeps the flow going by asking relevant questions on his list of topics. Each question is followed with additional probes until the answer is explored in some depth.

A set of topics for an interview is called the "Interview Guide."

Example of an Interview Guide

- 1) Introduction by the interviewer
 - Who you are and what you are doing and why
 - Request to tape interview or to take notes
 - Assurance on confidentiality and anonymity
 - Purpose and length of interview
 - Reason for choice of interviewee
- 2) Questions about the interviewee's prior knowledge about the telecenter
- 3) Question about why or why not the interviewee is using/not using the services of the telecenter
- 4) Question about previous experiences with telecenters, computers etc.
 - Worries?
 - Fears?
- 5) Expectations/anticipations about the telecenter
- 6) Interests/activities that might affect the usage of the telecenter
- 7) Issues that might cause problems
 - Money
 - Telecenter access
 - Illiteracy
- 8) Any other issues related to the telecenter and the interviewees involvement with it
- 9) Demographic data such as age factors in the community, education, family size
- 10) Willingness to be interviewed again?
- 11) Thanks

Structured interviews: This type of interview is the opposite of the free-flowing, informal interview. Structured interviews allow little room for additional questions or probes. These interviews can be useful when the existing data base is already substantial and what is needed is a quick quantification of narrowly defined topics. (We will discuss this topic in more detail when we turn to surveys in section 2.3 below.) However, for an initial needs assessment, focus groups and semi-structured interviews are recommended.

2.2. Focus groups

A focus group is a type of semi-structured interview carried out in a group setting. The person running the group session - the facilitator - can be the telecenter manager, a team member or an outside consultant. The main role of the facilitator is to "guide" the

discussion. A focus group usually consists of 8-12 participants and a facilitator. Typically, the focus group runs 1-2 hours.

Benefits of conducting focus groups

- Additional insights are provided through the interaction of ideas and suggestions of the participants
- Focus groups can be used to gather information about people's beliefs, and to collect kinds of detailed data that are difficult to obtain through structured surveys.
- Focus groups involve more people more quickly than individual interviews.
- Focus groups do not require much training for the personnel conducting them.

Focus groups can be conducted at any point in a planning process. However, focus groups are particularly important in the evaluation process: as part of a needs assessment, during a program (monitoring), at the end of the program, or months after the completion of a program to gather perceptions on the outcome of that program.

For managing a telecenter, the uses of focus groups include:

- Obtaining general background information about a topic of interest (for example, the economic and social situation of a community, the community's information and communication needs, and other concerns that might be relevant to telecenter operations);
- Stimulating new ideas and creative concepts for telecenter services or the solution of existing problems (for example, low level of use of telecenter services);
- Anticipating the potential for problems with a new telecenter program, service or product.

Steps in conducting focus group interviews

Follow this step-to-step guide to ensure reliable results:

Step 1: Select the research team

Conducting focus groups requires a small team with at least a facilitator to guide the discussion and a note taker to write down (or record) participants' important comments. The facilitator should be a native speaker who can put the people at ease. The team should have substantive knowledge of the topic under discussion.

Step 2: Select the participants

First, identify the groups and institutions that should be represented in the focus group (such as community members, NGOs, government officials, partners, etc.). The selection of the participants will be determined by the objectives of the assessment. Separate focus groups can be held for each type of group (women, men, elders, political leaders, farm laborers, etc.) especially if the possibility of intimidation exists). Second, identify the most suitable people in each group. It is advisable to have a variety of people in the selection process to minimize the biases of individual preferences.

Each focus group should consist of 8-12 people to allow the smooth flow of conversation. Participants should be relatively homogenous; for example, they might be from similar socio-economic and cultural backgrounds.

Step 3: Decide on timing and location

Discussions usually last one to two hours and should be conducted in a convenient location with some degree of privacy. Focus groups in a small village arouse curiosity and can result in uninvited guests. Open places are not good spots for discussions.

Step 4: Prepare a discussion/interview guide

In order to structure the focus group discussion and to replicate discussions with different groups, it is necessary to prepare an interview guide.

Whenever possible, the interview guide should be developed in collaboration with all telecenter staff and possibly with some members of the community. The guide sets the agenda for the discussion. It should grow directly from the questions that you have regarding the role and operations of the telecenter. These questions should be clearly identified in the first steps of the needs assessment where you indicate the users and the uses of the assessment.

When formulating questions for the interview guide, you should consider two principles:

- Questions should be ordered from the more general to the more specific (for example, ask about the general situation within a community before you ask about a particular kind of problems or a problem-solving approach).
- Questions of greater importance should be placed early, near the top of the guide, and be asked earlier during the group session – while those of a lesser significance should be placed near the end.

If you find there is a conflict between these two principles, start with general questions, and move to specific questions and then back to a set of more general questions. The number of questions should be fewer than 10, ideally around five or six.

Types of questions

Questions should be phrased carefully. Certain types of questions impede group discussions. Avoid using questions that can be easily answered with "yes" or "no" because they do not help stimulate discussion. Be careful of *why?* questions that might put participants on the defensive and cause them to take "politically correct" sides on controversial discussions.

The questions should be unstructured and open-ended because this allows respondents to answer from a variety of dimensions, and to tell their story in their own words. These types of questions allow the participants to add details that can result in unanticipated findings.

Some examples of general open-ended questions include:

What do you think about the healthcare situation of your community?

What are the main difficulties in living in this community?

How have your lives changed during the last few years?

Where do you get new information about government programs?

Or more specific: What do you think about the new telecenter coming to the community?

How did you feel using the telecenter services?

What do you like best about the telecenter?

Step 5: Conduct the interview:

As a facilitator you should attempt to build rapport in the group. Often participants do not know what to expect from focus group discussions. It is therefore helpful to have the facilitator outline the purpose and format of the discussion at the beginning of the session, and set the group at ease. Participants should be told that the discussion is informal, everyone is expected to participate, and divergent views are welcome.

It is always a good idea to have group members introduce themselves and tell a little about themselves. This method can help "break the ice."

To keep the discussion flowing, the facilitator:

- Should practice the discipline of listening to others in group situations;
- Should memorize the questioning route;
- Should try to listen and think at the same time;
- And should be able to manage time, in particular, noting when a topic has been exhausted and further discussion will yield little new information and in that case pose a new question or end the session.
- Should control the discussion. In most groups a few individuals dominate the discussion. To balance out participation:
 - Direct questions to individuals who are reluctant to talk
 - Give non verbal clues (look in another direction or stop taking notes when an individual talks for an extended period)
 - Intervene, politely summarize the point, then refocus the discussion
 - Take advantage of a pause and say, "Thank you for that interesting idea, perhaps we can discuss it separately. Meanwhile with your consent, I would like to move to another item."

Step 6: Collect data

Tape recorder

Tape recorders are invaluable for focus group discussions; however, they are prone to pick up background noises. Set up microphones and the recorder prior to the focus group session, and make it visible to participants. As the facilitator, you should encourage participants to speak one at a time to avoid garbling the tape. It is a good idea to ask members of the group to identify themselves before they speak.

Note taking

The facilitator can attempt to make notes, or an assistant facilitator can try to capture exact phrases and statements made by participants. The consideration here is that the note taking should not interfere with the discussion. Notes should be complete and useable in the event the tape recorder stops working. It is advisable, regardless of the method of data collection, that the moderator makes field notes after each session to facilitate data analysis.

Generally, after each group discussion, the team should briefly summarize the information provided by the focus group's participants, the team's impressions, and the implication for the assessment..

Step 7: Analyze the focus group data

Analyzing the results is the most difficult part of a focus group. In particular, it is difficult to remain objective and refrain from making judgements when evaluating focus group results. Therefore, if possible have someone available to do the analysis before carrying out a series of focus groups. Either locate a local person with experience in analysing focus group results, arrange for someone of your team to be trained, or hire an outside consultant.

However, if you have to do the analysis yourself, the first step is to transcribe the sessions. This will provide a complete record of the discussion and will facilitate analysis of the data. The next step is to analyse the content of the discussion. Start with reading each transcript and highlight sections that correspond with the interview guide questions. Analyse each question separately. After reviewing all the responses to a question or topic, write a summary statement that describes the discussion.

In analyzing the results, you and your team should consider:

- **Words:** Weigh the meaning of words participants used. Can a variety of words and phrases categorize similar responses?
- **Framework:** Consider the circumstances in which a comment was made (context of previous discussions, tone and intensity of the comment)
- **Internal agreement:** Figure out whether shifts in opinion during the discussion were caused by group pressure.
- **Precision of responses:** Decide which responses were based on personal experience and give them greater weight than those based on vague impersonal impressions.

- The big picture: Pinpoint major ideas. Allocate time to step back and reflect on major findings.
- Purpose of the report: Consider the objectives of the assessment and the information needed for decision-making. The type and scope guide the analytical process.

Step 8: Write a report

Focus group reports typically are:

- (1) brief oral reports that highlight key findings;
- (2) descriptive reports that summarize the discussion;
- (3) analytical reports that provide trends, patterns, or findings and include selected comments.

Needs Assessment for Telecenters in India

For our telecenters in Kannivadi, India, we conducted a series of participatory rural appraisals (PRAs) among male and female small, marginal, and large farmers, and landless laborers. Through focus group exercises, we organized discussions with households in the off-farm sector also. Attention was paid to understanding the needs of various age groups. People involved in marketing activities were specifically targeted to understand the information needs on market linkages.

The PRAs conducted in the Kannivadi region gave us a picture about the patterns of information needs. Male farmers are interested in improved cultivation techniques in agriculture and horticultural crops, and market details of agricultural products. The women farmers expressed the need for information regarding weeding problems in agriculture, education of their children, and health care facilities. Both the men and women of the landless households demand information about job opportunities outside their hamlets, and information to start income generation activities that could enhance their annual income. Credit is the other information area the landholding farmers feel as the most important for strengthening the working capital during the initial months of the agricultural season to meet the input costs.

— P. Thamizoli and K. Balasubramanian, Information Management and Knowledge Empowerment: MSSRF Telecenters in South India, *The Journal of Development Communication*, December 2001.

2.3. Surveys

Surveys typically involve collection of a relatively small amount of information in standardized form from a relatively large number of people, usually, by means of a questionnaire. Surveys are particularly useful when your intention is to collect simple descriptive information about people.

Among the benefits of conducting surveys:

- Surveys can reach a wide number of people
- Allow respondents the time to think before they answer

- Can be answered anonymously
- Impose uniformity by asking all respondents the same questions
- Make data collection and comparison easier
- Can identify issues to investigate further
- Provide evidence of action, change and impact to support respondents perceptions
- Can be inexpensive

Possible challenges of survey research:

- The quality of responses depends highly on the clarity of the questions
- It is sometimes difficult to persuade people to complete and return questionnaire

When designing the questionnaire, you need to think about the following issues:

1. Overall survey size: How many community members/users do you want to include in the survey?
2. Acceptable number of questions: How many questions can the respondents conveniently answer given their time constraints?
3. Appropriate mixture of question types: What represents a useful and organizable mixture of open-ended and closed-ended questions?
4. Instructions provided to the respondent: How do you want the respondent to answer the questions overall, for each section and question?
5. Background information needed for respondents to understand: How much information do the respondents need in order to complete the survey and how do you give them this information? If you send the questionnaire to the individual household, you will need to write a cover letter; if you administer the questionnaire at the telecenter, you should give an oral introduction.
6. Purpose of the survey: What issues do you want to address in the survey and why?

Question Types

In general we differentiate between open-ended and closed-ended questions.

- Open-ended questions are often useful in conjunction with more constrained questions – the type we call closed-end (or structured).
- Closed-ended questions give the respondents a small number of choices from which they can select one or more answers.

- Combining this with space for the respondents to add comments if they want provides the best of both worlds.

If you know exactly what data you need, it is easiest to ask closed questions. It is also easier to extract data from closed questions during the subsequent coding and analysis phases of the survey.

Open-ended Questions

An open question usually has a series of lines (or a blank space) where the respondents write, in their own words, how they feel about the topic in the question. For example:

What issues do you think are the most important to improve the economic situation in your community in the next two years?

Closed-ended Questions

Closed questions provide a set of answers that the designer of the survey considers reflect the majority of potential responses. The simplest closed question offers a list of choices. For example:

What issues do you think are the most important to improve the economic situation in your community in the next two years? [Please tick one or more]

Access to markets

Development of micro-enterprises

E-commerce

Others (please specify):

There are different varieties of closed (or *structured*) questions, depending on the way in which the respondent is asked to place their answers. Usually they must tick a box or place a cross along a line. The following are examples of the most widely used structured question layouts.

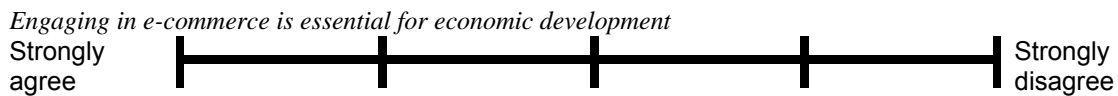
Ticking Boxes

YES

NO

NOT SURE

Scales (linear)



Scales (tabular)

Programs offered	Reaction		
	Like	Indifferent	Dislike
MS Word	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Internet Explorer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Netscape	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WordPerfect	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The most critical part of a survey, however, is to determine and formulate the questions. The following should provide a helpful set of suggestions for how this might be done:

1. The strength of survey design is asking people about the first-hand experiences: what they have done, their current situation, their feelings and perceptions. In order to take advantage of this strength **you should not:**
 - Ask about information that is not directly related to the respondents.
 - Ask a question such as “what if...”
 - Ask about why respondents think something is happening (interviews and focus groups are far more suitable to answer such questions).
 - Ask about solutions to complex problems.
2. Questions should be asked one at a time, avoid asking two questions in one.
3. Survey questions should be worded so that all respondents understand them.
 - Choose words in questions so that all respondents understand their meaning and all respondents have the same sense of what the question is asking.
 - If some words or terms are used whose meanings is potentially not understood by all, provide definitions of these words.
 - If what is asked is too complex to be included in a single question, ask multiple questions
4. All respondents should understand the kind of answer that constitutes an adequate answer to a question
 - Avoid questions that begin with: how, when, where, why, to what extent. Such questions do not specify the terms of an adequate answer
 - Specify the number of responses to be given to questions for which more than one answer is possible
5. Survey instruments such as questionnaires should be designed so that the tasks of reading questions, following instructions, and recording answers are as easy as possible for respondents and analysts

Adapted from: Fowler, F.J. 1998. *Design and evaluation of survey questions*. In L. Bickman and D.J. Rog (eds.). *Handbook of Applied Social Research Methods*. Thousand Oaks, California: Sage

3. MONITORING AND EVALUATION (M+E)

Before we go into the practical tools for conducting an M+E exercise or a formal evaluation, let us review the core concepts of Monitoring, Evaluation and Participation and their definitions and features:

Core Concept	Definition/Features
Monitoring	<ul style="list-style-type: none"> • Knowing where we are • Observing change • Kilometer check • Regular ongoing assessment • Routine reflection • Feedback
Evaluation	<ul style="list-style-type: none"> • Reflection process to look back and foresee • Assessment of achievements/impacts over a longer period • Learning from experience • Valuing • Performance review
Participation (in M&E)	<ul style="list-style-type: none"> • Shared learning • Democratic process • Joint decision-making • Co-ownership • Mutual respect • Empowerment

M. Estrella, *Learning from Change*, 2001

As we can see, monitoring and evaluation are necessary to assess the performance of a telecenter and to plan future activities and programs. The success of a telecenter often depends on these "direction setting" activities. The more participatory M+E activities are conducted, the more likely they will represent the real situation and opinions of the telecenters' stakeholders.

Participatory and Conventional Approaches to Monitoring and Evaluation compared:

	Conventional M+E	Participatory M+E
Who?	External experts	Stakeholders, including communities and project staff; outside facilitator
What?	Predetermined indicators, to measure input and outputs	Indicators identified by stakeholders, to measure process as well as outputs or outcomes
How?	Questionnaire survey, by outside evaluators, distanced from project	Simple, qualitative or quantitative methods, by stakeholders themselves
Why?	To make project and staff accountable	To empower stakeholders to take corrective action

This section of the module will now provide a step-by-step guide to participatory monitoring and evaluating of a telecenter. Issues that will be covered are:

- The creation of a M+E team
- The development and implementation of a M+E plan
- The tools necessary for developing and implementing the M+E plan.

3.1. Creating a M+E team

The monitoring and evaluation of the progress of a telecenter may be conducted by the telecenter manager alone. However, if time and resources permit, it is advisable to form a team. This will allow for an enhanced learning progress and a more objective steering of the M+E process. Since M+E is most successful if done in a co-operative way, it is advisable to form a diverse team of stakeholders. A team could consist, for example, of a telecenter manager, a volunteer working at the telecenter, and three community members who are also users of the telecenter services.

The most important tasks for the M+E team are:

- To develop the M+E plan
- To facilitate stakeholder participation in the M+E process leading to focus groups, train volunteers in data collection skills, etc.
- To assure that the data collection is proceeding according to the M+E plan
- To provide feedback to – and answer questions of – the stakeholders
- To identify training, technical assistance and other resources that may be needed
- To make the M+E results available to – and to maintain a dialogue with – the stakeholders.

3.2. Developing and implementing an M+E plan

The monitoring and evaluation of your telecenter must be adequately planned to be an effective tool towards the sustainability of the center. The plan needs to identify

what information/data are needed and why, how the M+E data will be collected and by whom, as well as to answer the question: *how will the results will be used?*

To help make these decisions and to ultimately develop a sound M+E plan, the most useful tool is a “Participatory Monitoring and Evaluation Planning Worksheet.” The telecenter manager can use this tool to work with stakeholders to identify and organize key issues related to M+E. There are two ways of using with the Worksheet.

- The telecenter manager can complete the Worksheet her/himself and then take it to the M+E team and other stakeholders to refine and complete it.
- Start working together with the M+E team and other stakeholders on a blank worksheet.

The first alternative might be somewhat more time efficient; however, involving appropriate stakeholders in M+E from the start provides excellent opportunities to bring stakeholders together, initiate a discussion and complete the worksheet.

The following section will explain the steps for completing the Worksheet and developing the M+E plan. The information used in these steps will come from the findings of a previous needs assessment.

The first step will be to revise the **purpose, goals,** and **objectives** of the telecenter that have been determined based on the needs assessment.

- The **statement of purpose** describes broadly the desired impact the telecenter will have on the lives of the stakeholders. It should be as clear as possible.
- The **goals** describe the results that come from achieving of the purpose of the center. The goals are long-term, challenging but realistic.
- The **objectives** are defined for each goal and describe the major activities that will be conducted related to the telecenter, and the changes in knowledge, skills, and behavior that are expected to occur as a result of these activities within a particular timeframe.

The following is an example of one of the many possible goals, its objectives and results for a telecenter.

Goal:	Community members will be able to communicate more effectively with people and organizations in other places.	
Objective/Activity:	Objective/Desired Result:	
The telecenter will conduct training sessions on Tuesday and Thursday afternoons on how to use word processing programs and how to create and use an email account.	This will result in establishing contact with other communities that have a similar problem set, access to experts and...	

Note that this is directly linked to the section *How to Write a Business Plan* that you can find in Module 5.

3.2.1. Identification of information needs

The next step will be to determine what information the telecenter manager and other involved stakeholders need to monitor and ultimately to evaluate the progress in achieving the above mentioned goals and objectives.

It will take some time and effort to generate good, useful M+E questions and meaningful indicators (for some suggestions of indicators see Appendix 2 in this module and the box below), but these questions and indicators are essential for the success of the M+E process. The questions/indicators should be:

- Clear and precise
- Necessary to make decisions on the project (avoid asking for information that is not essential, but just “nice to have”)
- Providing new information
- Limited in number (it is better to ask key questions that will be answered well than a lot of questions that will be answered poorly).
- Measurable or observable.

Addressing the following questions (see box below) will ensure that the telecenter manager and the M+E team obtain the data they need and avoid unnecessary data collection and wasted time.

<p>What do we want to find out?</p>	<p>What are our M+E questions regarding the achievement of this goal and/or objective?</p>	<p>Typically questions would relate to the “process” of the implementation like:</p> <ul style="list-style-type: none"> • What activities have been implemented? • Have they been implemented as planned? • If yes, how? If no, why? <p>Or questions monitoring the outcome or effects of the activities like:</p> <ul style="list-style-type: none"> • What are the outcomes or changes that occur as a result of an activity? • Was this outcome desired?
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	<p>What are our indicators for determining how we are doing in reaching this goal?</p>	<p>Indicators can be quantitative (how much/how many?) or qualitative (how and why?), direct or indirect. Examples of indicators are:</p> <ul style="list-style-type: none"> • Number of persons attending training sessions • Their interpretation of the usefulness of the training • Usage of telecenter services • Appropriateness of the offered services
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Working together with the users of the telecenter and community members on identifying questions and indicators will help the telecenter manager and the M+E team to come up with meaningful and relevant issues, since no one is better able to determine positive and negative effects of an activity in a community than the community itself.

To get the community's input, you can conduct focus groups or individual interviews. "Brainstorming" during a community meeting or a project workshop is also a very useful and effective exercise. A good way to start a brainstorming exercise is to ask the participants a question like _____ (*fill in the blanks with topics that are relevant for your telecenter*):

What do you think would tell us that _____ is happening?
 What do you think would tell us that the telecenter has been successful in achieving _____?

You could also provide a list of indicators to stimulate thinking and identification of different indicators. However, *it is essential to first agree on and identify the goals and objectives* that will be measured by these indicators at the beginning of the interviews or brainstorming sessions.

Once the data collection has started, it is essential that the selected M+E questions and indicators be reviewed on a periodic basis. Some of the questions might not be as relevant as initially thought; the answers may be too hard to obtain, or the stakeholders may come up with better indicators. If this happens it is necessary to redefine the M+E plan.

3.2.2. Data Collection

So once the questions and indicators for the data collection are determined, the data collection methods, the timeframe and the persons collecting the data need to be chosen.

Choosing the data collection method greatly depends on the data needed, the data sources, the M+E resources and the M+E participants (see tables later in this section).

The decision on who is going to collect the data is another critical aspect of a telecenters M+E plan. The telecenter manager will probably be the best person to conduct a baseline survey (unless there are resources to hire a consultant). For all other methods, the selection of data collectors may depend:

1. Who is most knowledgeable about the activity under investigation?
2. Who has the most interest in obtaining the data?
3. Who is most familiar with the data sources (stakeholders, users, etc.)?
4. Are the potential collectors likely to be objective?
5. Are the potential collectors trusted by the data sources?

We suggest that telecenters might develop profitable partnerships with nearby college and universities to use students in some of these data collection and processing activities. Students in a variety of studies such as community development, extension, communication, sociology and other disciplines might be good helpers, and, at the same time, gain valuable experience for their school programs. They can be rewarded with free use of some telecenter services, or arrangements might be made with school officials for these kinds of activities to count toward the requirements in the students' academic courses.

All data collectors need to be clear about the goals, objectives and the activities of the telecenter. They also need to understand the underlying questions and indicators they are about to investigate. And they need to be trained in the methods they are using for data collection. Methods like focus groups, interviews and oral surveys probably need some practice before starting the actual data collection.

Factors that need to be considered in deciding when to collect the data include:

1. The length of time it will take to collect the necessary data
2. Climate, seasons, and weather (harvest for example might be a very unsuitable time to start data collection)
3. Time period during which the data collectors are available
4. Availability of the respondents
5. Finding the best suitable time in regard to other activities and events of the telecenter.

Following are two charts summarizing some of the issues related to carrying out the data collection.

<p>How will we find out?</p>	<p>What data collection methods will we use?</p>	<p>Among others, these are some of the data collection methods suitable for the purpose of a telecenter:</p> <ul style="list-style-type: none"> • Focus group discussions (see: section on needs assessment) • Group or community meetings • Individual interviews • Surveys • Tests of knowledge and skills • Creative expressions like drama, role-plays, songs and drawings
	<p>Who will collect the data and when?</p>	<p>The data collectors can be:</p> <ul style="list-style-type: none"> • Telecenter manager • M+E team • Community members • University students • Outside experts • Other stakeholders <p>Opportunities to collect data:</p> <ul style="list-style-type: none"> • Training workshops • Community meetings <p>Depending on the indicator observed, it may be useful to collect data:</p> <ul style="list-style-type: none"> • On a daily basis • At the beginning of a new activity, or • In regular time periods such as every two month or bi-yearly.

OVERVIEW OF SEVERAL DATA COLLECTION METHODS

Baseline data collection

A study describing the situation at the beginning of the telecenters activities (i.e. the baseline) is important to compare objectives with actual outcomes. Baseline data can, for example, provide information about IT usage of community members, the use of health or extension consultation services, knowledge of IT applications, etc.

The collection of baseline data is not very complicated and is best done by applying participatory tools like maps, activity schedules, and administration of basic questionnaires.

Creative expressions, such as drama, role-play, songs and drawings

Creative expressions are often culturally appropriate ways to communicate stakeholders' views and attitudes towards the telecenter and to illustrate the impact of the telecenter on the lives of community members.

Focus group discussions

See section on needs assessment.

Interviews

See section on needs assessment

Site logs

Site logs are a form of documentation that provides an opportunity for the telecenter manager to reflect on her/his work and to pass on relevant information to other people involved in running the telecenter. A site log should contain the following information:

- A daily or weekly report of activities
- A list of local contacts and resources
- Copies of M+E reports
- Specific information such as survey forms, etc.
- Other relevant documents

A site log is not only relevant for continuous M+E efforts but also provides valuable background information for new team members or the telecenter manager.

Surveys

Surveys are commonly conducted by developing a questionnaire. The questionnaire makes a systematic collection of people's self-reported information possible. Survey questions are either closed-ended questions, where the respondent has several answer options, or open-ended questions where the respondents answer in their own words. Surveys can be conducted by the telecenter manager and/or the M+E team by interviewing respondents, or the respondents can read and write the answers to the questionnaires themselves. Oral or written questionnaires can be administered to participants in training programs conducted by the telecenter, to users of the telecenter services, and to other groups associated with the telecenter. *See the earlier section in this module related to needs assessment.*

Tests or observations of knowledge and skills

Tests for knowledge and skills can be used to assess what users of the telecenter may have learned from using the services and training offered by the telecenter

3.2.3. Using M+E results

The purpose of a telecenter M+E plan is to provide the stakeholders with a better understanding about the progress of the center, its ability to meet the needs of the community, and the appropriateness of the services offered, in order then to make informed decisions regarding the future operation of the telecenter. To guarantee the functionality of M+E it is also important to determine how the data are going to be used and in what form.

Appropriate stakeholders will be more likely to invest in participating in the data collection if they will be receiving and using the results. Sharing the results with the stakeholders further helps to create a demand for the results and increases the likelihood that the data will be used appropriately.

What will be done with the results?	Who will use the findings of the data collection, and how?	<p>All stakeholders, especially the M+E participants, should have access to the results. However, the information should be meaningful for them – in an appropriate, clear and not too technical language.</p> <p>The data should be used to:</p> <ul style="list-style-type: none">• Improve the operation of the telecenter• Revise the telecenter project plan• Revise M+E plan• Compare objectives and outcomes
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	<p>How will the stakeholders be informed about the results?</p>	<p>Media through which stakeholders can be informed about M+E results include:</p> <ul style="list-style-type: none"> • Progress reports • Updated activities list • Drawings and photographs <p>This can be done at:</p> <ul style="list-style-type: none"> • Community meetings • M+E workshops • Participatory planning meetings <p><i>Accomplishments should be included in the presentation of the results as a motivation for further participation. Stakeholders should be involved in the presentation and discussion of the results.</i></p>
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The previous section aimed at giving an overview about the M+E process. The next short section will add some more detailed comments on formal evaluation that may be conducted at a particular point of time within the operation of the telecenter.

3.3. Formal Project Evaluations

There will be times during which a formal evaluation of the telecenter is necessary and appropriate. For example:

- After 6 months or a year after the opening of the telecenter (mid-project) with the goal of verifying that the project is on track, and to make necessary adjustments
- Any time if there are significant problems or when major circumstances have changed, such as a change in the management or a lack of progress in reaching certain objectives (not enough users, training participants, etc.)
- At the end of a particular project such as a training course series, including an examination of extending or replicating the project.

The reasons to conduct an evaluation differ but are most likely one of the following:

- To **find out** if the needs of the telecenter users are being met
 - What should be the focus of a new training series?
 - Is the telecenter reaching the target group?
 - Are the services we provide actually what the users need?
- To **improve** the program
 - How can we make the program better (e.g. in meeting needs)?
- To **assess** the program
 - Is the telecenter effective (e.g. in reaching planned goals)?
 - What happens to the users as a result of using the services of the telecenter?

- Are the services worth continuing or expanding?
- To **assess** the efficiency of the telecenter
 - How do the costs of running the telecenter compare with the benefits it provides?
 - Are some services more efficient than others?

The most useful tool to conduct an evaluation is a “Statement of work” (SOW). A SOW states the background, issues, tasks, schedule, and the intended outcomes of an evaluation.

The following points provide a set of guidelines for the preparation of a SOW.

3.3.1. Statement of Work for a formal telecenter evaluation

Background

Provide sufficient background information to describe the content of the evaluation. Include a summary of the telecenter to date, including the starting date, the development from the establishment of the center or since the last evaluation, accomplishments and difficulties. Cite any special circumstances such as a change in management, and unexpected problem, or the need to make a decision.

A background summary could read like the following:

The telecenter XX has been established in the year 200x funded by The center is operated by the manager Mrs./Mr. ... and 5 volunteers that work on a part-time basis. Since the establishment the number of users has risen from ... to ... Currently about 50 users frequent the center daily and we have conducted 12 basic computer literacy courses. Since the center has been operating for a year now, we would like to evaluate how the center is doing – if we are reaching our goals – in order to plan the next business year.

Objectives

State what should be accomplished as a result of this evaluation:

- The products of the evaluation, e.g. a *written report* and a *verbal briefing* for the various stakeholders. A *planning session* on how to implement the results of the evaluation in an action plan might further be required.
-
- The questions to be answered by the evaluation. These may include questions on what progress has been made in achieving the goals and objectives of the telecenter, whether the current programs meet the needs of the users, where problems are occurring and what the solution might be.

Note: It might be useful to have the help of an outside evaluator to formulate specific evaluation questions.

Principal Tasks

List the specific tasks required to meet the evaluation objectives. This list could include the following:

- Formulation of a specific evaluation plan including the specific evaluation questions, the methods for collecting and analyzing the data, a responsibility matrix, and a timetable.
- Examination of project documents.
- Meetings and focus groups with volunteers, users, community partners and other stakeholders.
- On-site observations.

Work Schedule

The work schedule should include the start and ending dates as well as the total number of working days. To be more precise it can be useful to specify the number of days allotted for each principal activity.

Responsibility Matrix

The Responsibility Matrix should indicate the overall evaluation coordinator. The matrix further lists other people involved in the evaluation as well as their primary responsibilities as well as who reports to whom.

3.3.2. Evaluation report

An effective evaluation report covers the essential issues and aspects of the evaluation exercise. It guides those who must implement or make decisions about the project, and informs interested outsiders, e.g. funding partners.

The following could represent a simple format for the report:

Title Page

- Include the name and the location of the telecenter, date of the evaluation, and the name, working title, and affiliation of each evaluation team member.

Table of contents

I. Executive summary

- Include the most important information from each section of the report and highlight the major findings and recommendations. This section should be 1-3 pages long.

II. Introduction and background

- Describe the background of the evaluation including a brief description of the telecenter and its history and the circumstances that led to the decision to conduct a formal project evaluation.
- State the objectives of the evaluation, major questions that should be answered, products to be delivered, and decisions to be made.

III. Methods

- Describe the methods used to collect and analyze the data. If you are using a questionnaire, or a login sheet or other instruments include these as appendices to the report.
- Cite activities, evaluation participants, interviewees, (if extensive, the list should also be added as an appendix), documents and/or other resources used. (Add key documents to the report if feasible).

IV. Findings

- Present factual information that you have obtained such as responses to a questionnaire, statistics (e.g. number of training courses conducted, number of individuals trained). These

data should be given without interpretation. This section should be concise, focusing on the information most relevant to the SOW.

V. Analysis

- Interpret the quantitative and qualitative data obtained, sketching out major trends or issues revealed.
- Compare actual with anticipated results
- Note any constraints or problems encountered (e.g. absence of baseline data, inadequate sampling). Discuss the effect these problems had on satisfying the SOW and how they might have affected the evaluation outcome.

Note: In some cases it might make sense to combine the findings and analysis sections to avoid extensive repetitions.

VI. Conclusions and Recommendations

- Summarize the lessons learned and resulting recommendations.

VII. Action Plan

- Summarize the actions and who will conduct them and when as a result of the findings of the evaluation.

VII. Appendices

- Include additional detailed information such as charts or listings, maps, photographs, etc.

Summary

- Monitoring an evaluation results are much more likely to be used if those who can use the results are involved in the planning and implementation stages of M+E.
- Successful monitoring and evaluations – those that make a difference – almost always are cooperative efforts.
- It may not be possible to involve all stakeholders at all stages of M+E planning and implementation, however, input should be sought from representatives of a broad spectrum of community groups, and particular attention should be placed on reviewing the results with all concerned stakeholders.
- M+E efforts should provide an opportunity for “collaborative learning” for all stakeholders involved. Participants learn from each other in an open and supportive environment.

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Larson, P. and D.S. Svendsen. 1996. *Participatory Monitoring and Evaluation: A Practical Guide to Successful ICDPs*. Washington, D.C.: World Wildlife Fund – US.

McMillan, J. 1998. Need analysis: process and techniques. In: L. Beckman and D.J. Rog (eds.), *Handbook of Applied Social Research Methods*. Thousand Oaks, California: Sage.

Robson, Colin. 1999. *Small Scale Evaluations: Principles and Practice*. Thousand Oaks, California: Sage.

U.S. Peace Corps. 2000. Programming and Training Booklet 2: *How to Design or Revise a Project*.

U.S. Peace Corps. 2000. Programming and Training Booklet 4: *How to Assess a Project*

World Bank. Impact Evaluation Web Site: www.worldbank.org/poverty/impact/index.htm

Appendix I:

Blank M+E Participatory Planning Worksheet

Goal:		
Objective/Activity:		Objective/Desired Result:
What do we want to find out?	What are our M+E questions regarding the achievement of this goal and/or objective?	
	What are our indicators for determining how we are doing in reaching this goal?	
How will we find out?	What data collection methods will we use?	
	Who will collect data and when?	
What will be done with the results?	Who will use the findings of the data collection, and how?	
	How will the stakeholders be informed about the results?	

Adapted from the US Peace Corps' Programming and Training Booklet 4, *How to Assess a Project*

Appendix II

Possible outcomes	Related indicators
Students will use computers to supplement classroom learning	<ul style="list-style-type: none"> • Ratio of computers to students • # of students trained in using computers • # of students participating in World Wide Schools, and other activities with students in other countries
Business owners will be able to use the internet to gather up-to-date market information and to transact business	<ul style="list-style-type: none"> • # of business owner frequenting the telecenter in a regular basis • # of business owners that can identify web sites that provide relevant information • # of business owner that use email to communicate with retail customers and suppliers
Health care workers will be able to accurately assess the health needs of their target communities	<ul style="list-style-type: none"> • # of health records stored in a database • # of health care workers accessing database records for use in planning meetings
Health care workers in all districts will be able to communicate with each other	<ul style="list-style-type: none"> • # of health workers using email • # of health workers registered in listservs

Appendix III

Resources available on the Internet:

www.pactpub.com/PMEpdf.html

Participatory Monitoring, Evaluation and Reporting: Online Manual. This manual explains why participation is important and how to achieve effective stakeholder participation; the role of monitoring in sustaining progress toward better organizational effectiveness; how evaluation helps an organization to assess its capacity; and the critical role of reporting in keeping stakeholders informed.

www.ids.ac.uk/eldis/eldis.html

ELDIS, the Electronic Development and Environment Information System. Based at the Institute of Development Studies, ELDIS is a directory and gateway to development information resources with a focus on participatory M&E. It also has an excellent *What's New Page* that is updated daily. Includes links to other sites.

www.wkkf.org/publications/evalhdbk/default.htm

Kellogg Foundation, very well written handbook on evaluation for non-profit organizations.

www.mande.co.uk/news/htm

MandE News, provides on a variety of monitoring and evaluation subjects.

www.mapnp.org/library/evaluatn/fnl_eval.htm

Numerous short papers on a variety of monitoring and evaluation subjects.

www.unitedway.org/outcomes

United Ways Outcome Measurement Resource Network, US based but useful guidance and tools including an online resource library.

www.worldbank.org/poverty/impact/index.htm

Impact Evaluation Web Site of the World Bank. This website aims at disseminating information and providing resources for people and organizations working to assess and improve the effectiveness of projects and programs.